Appendix B: Traffic

Grand Avenue Project

EIR Traffic Study

May 30, 2006

Prepared by

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with

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Table of Contents

List of Tables

List of Figures

1. Introduction

This report documents a transportation and traffic impact analysis for the proposed Grand Avenue Project on Bunker Hill in downtown Los Angeles. The Project Site consists of five non-contiguous parcels located in the Bunker Hill Urban Renewal Project Area; the Grand Avenue right-of-way between 5th Street and Cesar Chavez Avenue; and the Los Angeles Civic Mall, between Grand Avenue and Spring Street. The location of the Project Site is shown in Figure 1-1.

1.1 The Proposed Project

The Project consists of the following three components, as shown in Figure 1-2: (1) the development of five parcels, covering four blocks, and known as Parcel Q, Parcel W-1, Parcel W-2, Parcel L, and Parcel M-2; (2) the creation of a 16-acre Civic Park within the Civic Mall that connects the Los Angeles City Hall to Grand Avenue; and (3) streetscape improvements along Grand Avenue between 5th Street and Cesar Chavez Avenue.

The proposed development of the five Project parcels totals approximately 3,600,000 square feet, and comprises the following two options of land use types and maximum unit quantities:

Project with County Office Building Option

- 2,060 residential units (1,648 condominiums and 412 apartments)
- 275 room hotel
- 1,130,000 square feet of commercial space

The commercial space would include retail, restaurants, a food market, health club, a small event facility (about 250 seats), and approximately 681,000 square feet of office space in a potential County Office Building.

Project with Additional Residential Development Option

In this Project Option, the potential County Office Building would be replaced with a residential tower of 600 residential units (480 condominiums and 120 apartments). All other Project elements would remain the same. This Project Option would comprise:

- 2,660 residential units (2,128 condominiums and 532 apartments)
- 275 room hotel
- 449,000 square feet of commercial space

The commercial space would include retail, restaurants, a food market, health club, and a small event facility (about 250 seats).

A complete description of the Proposed Project is contained in Chapter 4 of this report.

1.2 Study Scope

The scope and methodology for this study was determined in conjunction with the City of Los Angeles Department of Transportation (LADOT), including the geographic coverage of the analysis, and analytical assumptions and methodologies (see Appendix D - LADOT Traffic Study Methodology Memorandum of Understanding). The study follows the guidelines for traffic studies established by LADOT.

In order to address the time periods of the highest combined volume of Project traffic and background street traffic, the analysis addresses the following time periods:

- A.M. peak hour
- P.M. peak hour

The analysis addresses the following scenarios:

- Existing Conditions
- Future Without Project Conditions (Cumulative Background)
- Future With Project Conditions
- Potential Project Traffic Impacts
- Proposed Project Mitigation Measures

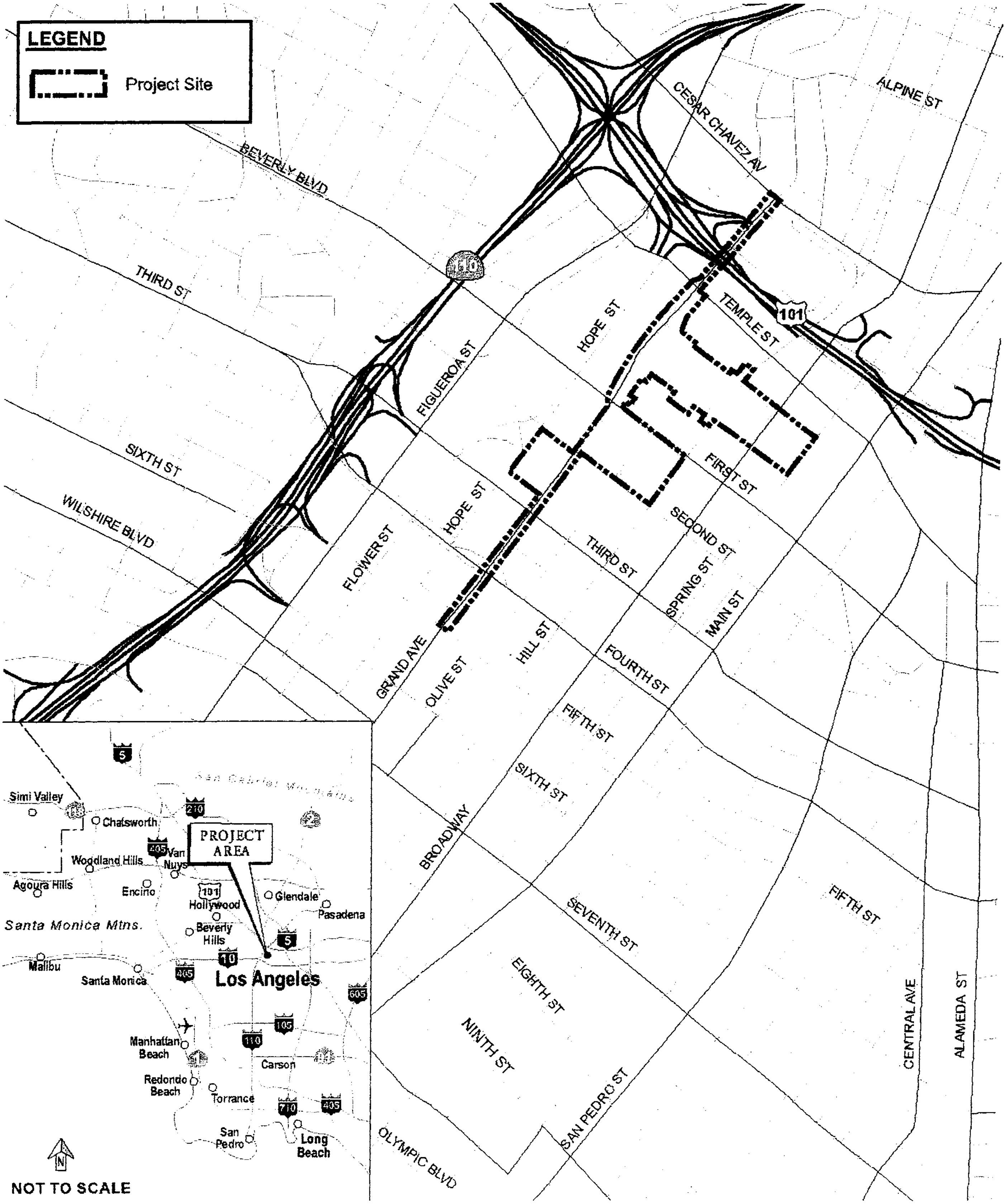
The analysis assumes completion of the Project by 2015, which is the year addressed by the Project impact analysis.

The analysis addresses potential Project impacts on a broad range of transportation issues, including traffic circulation, parking, transit, and a Congestion Management Plan evaluation.

The analysis addresses a total of 32 intersections in an area generally bounded by the US-101 Hollywood Freeway to the north, the SR-110 Pasadena Freeway to the west, 6th Street to the south, and Spring Street to the east, as described more fully in Chapter 2.

1.3 Organization of this Report

The remainder of this report is organized as follows. Chapter 2 describes the existing transportation conditions in the area of the Project. Chapter 3 addresses future conditions (year 2015) without the Project and sets the future cumulative baseline for analysis of Project impacts. Chapter 4 provides a description of the proposed Project and its transportation characteristics, including trip generation, distribution of Project trips, and proposed parking supply. Chapters 5 and 6 analyze potential transportation impacts of the Project, including traffic, parking, transit, and a Congestion Management Plan evaluation, for the Project with County Office Building Option and Project with Additional Residential Option respectively.. Chapters 7 and 8 evaluate the proposed Project parking supply against both the requirements of the Los Angeles Municipal Code and estimated parking demand, for each Project Option. Chapters 9 and 10 identify and discuss proposed transportation mitigation measures for each Project Option respectively. Chapter 11 discusses Project Alternatives, and Chapter 12 lists persons/organizations contacted, and references.



Source: PCR Services Corporation

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Figure 1-1
Proposed Project Site

Grand Avenue Project

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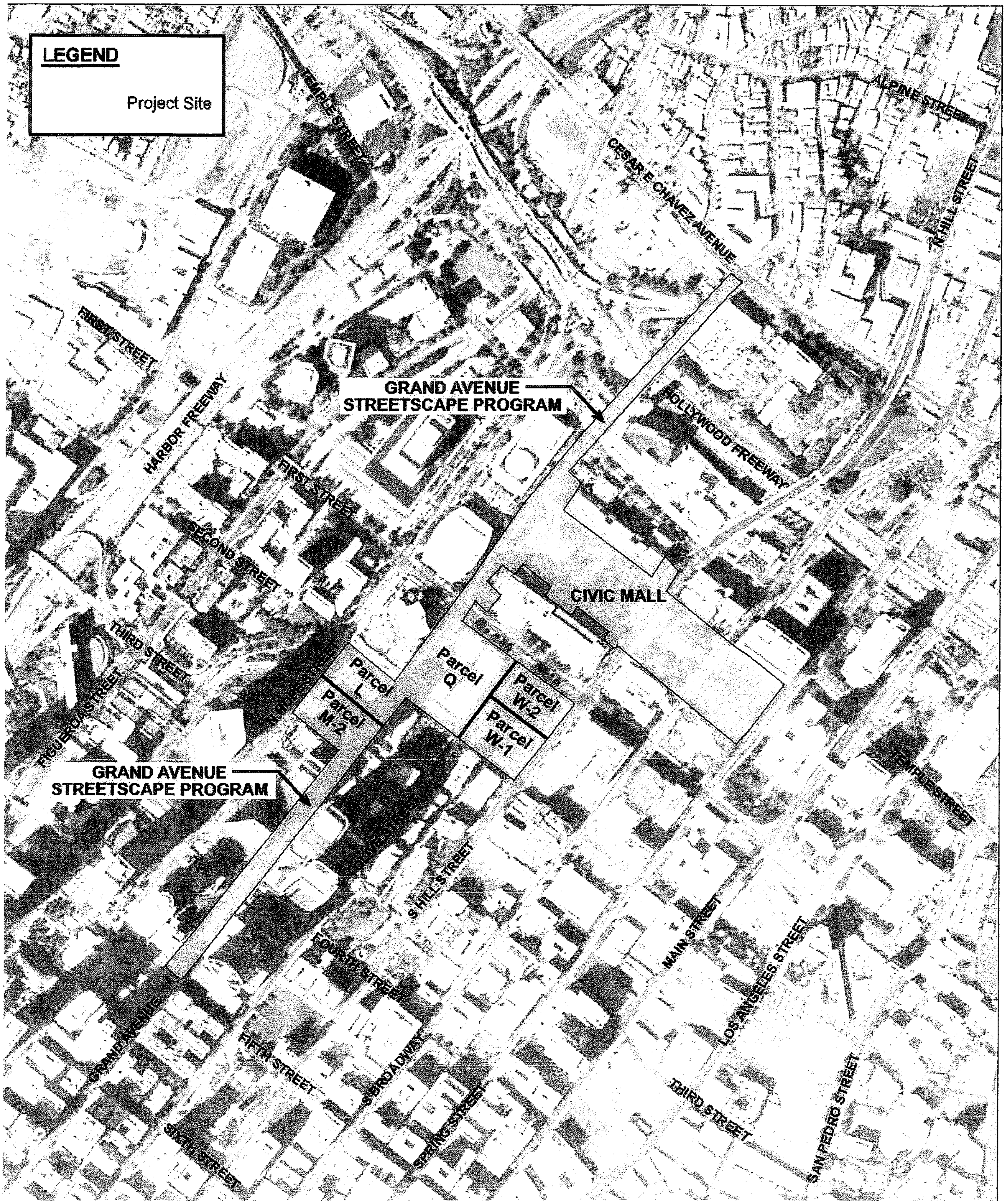

Source: PCR Services Corporation

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Figure 1-2
Proposed Project Site and Components

2. Existing Conditions

A comprehensive data collection and assembly effort was undertaken to develop a detailed description of existing transportation conditions within the study area. The assessment of existing conditions includes a description of the street system, the traffic volumes on those facilities, the operating conditions of key intersections, and a description of the existing transit service.

Located at the center of the metropolitan Los Angeles region, downtown Los Angeles is a regional transportation hub, served by the Harbor, Hollywood, Glendale, Pasadena, Golden State, San Bernardino, Pomona, Santa Ana, and Santa Monica Freeways; as well as commuter rail, subway, light rail, and bus transit services.

2.1 The Street System

The Project site is extremely well served by a grid system of local streets, major regional freeways and numerous freeway on-and off-ramps. The grid system of surface streets provides connections to adjacent areas of downtown, local areas beyond downtown, and to the freeway system serving downtown. This system of streets and highways provides for many different travel routes into and out of the area of the Project.

Regional Roadway Access

The primary regional access to the Project area is provided by the Hollywood/Santa Ana (US-101) Freeway and the Harbor/Pasadena (SR-110) Freeway. The Hollywood/Santa Ana Freeway runs in an east-west direction north of the Project site, while the Harbor/ Pasadena Freeway runs north-south to the west of the Project site. These two facilities also provide access to the Glendale (SR-2) and Golden State (I-5) Freeways to the north, to the San Bernardino (I-10) and Pomona (SR-60) Freeways to the east, to the Santa Ana (I-5) Freeway to the south, and to the Santa Monica Freeway (I-10) to the west.

There are a total of ten freeway off-ramps and eight freeway on-ramps serving the area of the Project. The key freeway ramps that provide the principal access to the Project site are as follows (see also Figure 1-1):

US-101 Hollywood/Santa Ana Freeway

- Eastbound off-ramp at Hope Street & Temple Street
- Eastbound on-ramp at Hope Street & Temple Street

- Westbound off-ramp at Grand Avenue
- Westbound on-ramp at Grand Avenue to US-101 (westbound)
- Westbound on-ramp at Grand Avenue to SR-110 (northbound and southbound)

- Eastbound off-ramp at Broadway
- Westbound on-ramp at Broadway
- Westbound off-ramp at Spring Street

SR-110 Harbor/Pasadena Freeway

- Northbound off-ramp at 6th Street
- Southbound off-ramp at 6th Street

- Northbound on-ramp at 5th Street
- Southbound on-ramp at 5th Street

- Northbound off-ramp at 4th Street
- Southbound off-ramp at 4th Street

- Northbound on-ramp at 3rd Street
- Southbound on-ramp at 3rd Street

- Southbound on-ramp at 2nd Street

- Northbound off-ramp at Hope Street and Temple Street from the northbound SR-110 to eastbound US-101 connector road.

The Local Street System

The area of the Project is well served by an extensive system of arterial and local streets (see Figure 2-1). Because of the quite significant grade differences of the Bunker Hill area, the existing street system on Bunker Hill is quite complex. Some of the streets are either discontinuous or do not connect directly into the street grid that occurs in the rest of downtown. In other cases some streets are grade separated, one street is a two-level street, and two of the streets in the downtown grid run in tunnels under Bunker Hill.

The principal north/south streets in the immediate Project area are Hope Street, Grand Avenue, Olive Street and Hill Street. Hope Street and Grand Avenue both connect to the freeway system to the north of the Project site. Olive Street does not extend further north than First Street. Hill Street extends north into Chinatown, and while it does not provide connections to the Hollywood Freeway, it does provide connections to the Pasadena

Freeway north of Chinatown. Between just north of Upper 2nd Street and 4th Street, Grand Avenue has both an upper level (which is the principal street but with no driveway access to buildings) and a lower level (which serves parking garages and as a secondary distribution system).

Grand Avenue, Olive Street and Hill Street are the main streets that connect south into the central part of downtown. Hope Street is a local street that runs only as far south as Fifth Street.

The principal east/west streets are Temple Street, 1st Street, and 4th Street. 2nd Street and 3rd Street pass under Bunker Hill in tunnels between Hill Street and Flower/Figueroa Street and so do not provide direct access to Bunker Hill buildings. Upper 2nd Street is a local east-west street on the surface and in the Project area is discontinuous. A new connection of Upper 2nd Street between Grand Avenue and Olive Street is planned for construction in the next two years. Upper 3rd Street is a local street on the surface, between Hope Street and Grand Avenue only. 4th Street is a one-way eastbound street that is largely grade separated through Bunker Hill but which does connect directly to Lower Grand Avenue, and via ramps to Hope Street. General Thaddeus Kosciuszko (GTK) Way is a local street providing connections to Lower Grand Avenue.

The key streets in the immediate vicinity of the Project site are described as follows:

North-South Streets

<u>Grand Avenue</u> – This is a Modified Major Class II Highway running in the north-south direction. It is a two-way street in the Project area (north of 5th Street). South of 5th Street, Grand Avenue is one way southbound. Grand Avenue between Temple Street and 1st Street has 3 lanes in each direction with a central left-turn lane. Curb parking is not permitted at any time on either side of the street. Grand Avenue south of 1st Street has 2 lanes in each direction with left-turn lanes at the intersections and a raised median south of 2nd Street. Curb parking is generally permitted south of 2nd Street on both sides of the street.

<u>Grand Avenue (Lower)</u> – This is a local street located beneath Grand Avenue that runs from north of General Thaddeus Kosciuszko Way south to 4th Street. It is 60' wide and has 2 lanes in each direction with a central left-turn median.

<u>Olive Street</u> – This is a Secondary Highway running south from 1st Street, to the east of Grand Avenue. There are 2 lanes in each direction and a central left-turn lane. The roadway is 66' wide. There is generally no parking allowed north of General Thaddeus Kosciuszko Way except for a small stretch on the east side between General Thaddeus Kosciuszko Way and Upper 2nd Street.

Hill Street – This is a Secondary Highway running north-south at the east of the Project area. This is a two way street that generally provides three southbound lanes and two northbound lanes with a central left-turn lane. The roadway width is generally 66 feet. Parking is generally not allowed on Hill Street in the study area, although there is a passenger loading zone and on-street parking on the west side in front of the County Court House and the County Administration Building. Parking is also permitted on the east side between 2nd and 1st Street except in the p.m. peak period (4-7 p.m.).

Hope Street – This is a Secondary Highway running north-south through the Project area. To the north, Hope Street terminates at Temple Street and the US-101 Freeway ramps. To the south, Hope Street runs though Bunker Hill to 4th Street and also connects back to Grand Avenue before 5th Street. North of 1st Street, Hope Street is 60' wide and has two lanes in each direction with a central left turn lane. Parking is generally allowed except on the east side of the street at the south end of the block. Passenger loading zones are located mid-block on each side of the street. South of 1st Street, Hope Street is a one-way northbound street between 2nd Street and 1st Street, which merges with Flower Street (one-way southbound) at 1st Street. South of 2nd Street, Hope Street is a two-way street.

East-West Streets

Temple Street – This is a Major Class II Highway in the Project area that runs east-west. Temple Street is generally 56-63' wide with 2 lanes in each direction and left-turn lanes at intersections. Parking is not allowed on either side of the street.

1st Street – This is a Major Class II Highway that runs east-west through the study area. 1st Street is 80 ft wide and has 3 lanes in each direction with left-turn lanes at intersections. Parking is generally allowed on both sides of the street between Grand Avenue and Olive Street with peak hour restrictions.

Upper 2nd Street – This is a local street that is discontinuous in the Project area. To the west it connects Hope Street and Grand Avenue, and is 54' wide and has 2 lanes in each direction with left-turn lanes at intersections. To the east 2nd Street also extends as a one-way street west from Hill Street to Olive Street. A new connection of 2nd Street between Grand Avenue and Olive Street is planned for construction in the next two years.

2nd Place/General Thaddeus Kosciuszko Way – This local street runs east-west from Flower Street to Olive Street. It provides access to Lower Grand Avenue. It is 60' wide between Hope Street and Lower Grand Avenue and has 2 lanes in each direction with left-turn lanes at intersections. Parking is allowed on both sides of the street on this stretch. Between Lower Grand Avenue and Olive Street, the roadway is 44' in width with no parking allowed on either side of the street.

2.2 Study Intersections

A total of thirty two study intersections were identified for analysis, as shown in Figure 2-1. This study area and these analysis locations were determined, in conjunction with LADOT, to be those where the vast majority of trips associated with the Project would be focused and through which many of the Project trips would travel before dispersing to multiple routes – and therefore those locations where potential traffic impacts were most likely to occur.

The intersections identified for analysis are as follows:

- Figueroa Street / 3rd Street
- Figueroa Street / 5th Street
- Figueroa Street / 6th Street
- Temple Street / I-110 Off-Ramp
- Hope Street / Temple St. (US-101 Ramps)
- Hope Street / 1st Street
- Hope Street / General T. Kosciuszko Way
- Flower Street / 3rd Street
- Flower Street / 5th Street
- Flower Street / 6th Street
- Grand Avenue / US-101 / I-110 Ramps
- Grand Avenue / Temple Street
- Grand Avenue / 1st Street
- Grand Avenue / Upper 2nd Street
- Grand Avenue / 5th Street
- Olive Street / 1st Street
- Olive Street / Upper 2nd Street
- Olive Street / 4th Street
- Olive Street / 5th Street
- Olive Street / 6th Street
- Hill Street / Temple Street
- Hill Street / 1st Street
- Hill Street / 2nd Street
- Hill Street / 3rd Street
- Hill Street / 4th Street
- Hill Street / 6th Street
- Broadway / Temple Street
- Broadway / 1st Street
- Broadway / 2nd Street
- Broadway / 4th Street
- Spring Street / 1st Street
- Spring Street / 2nd Street

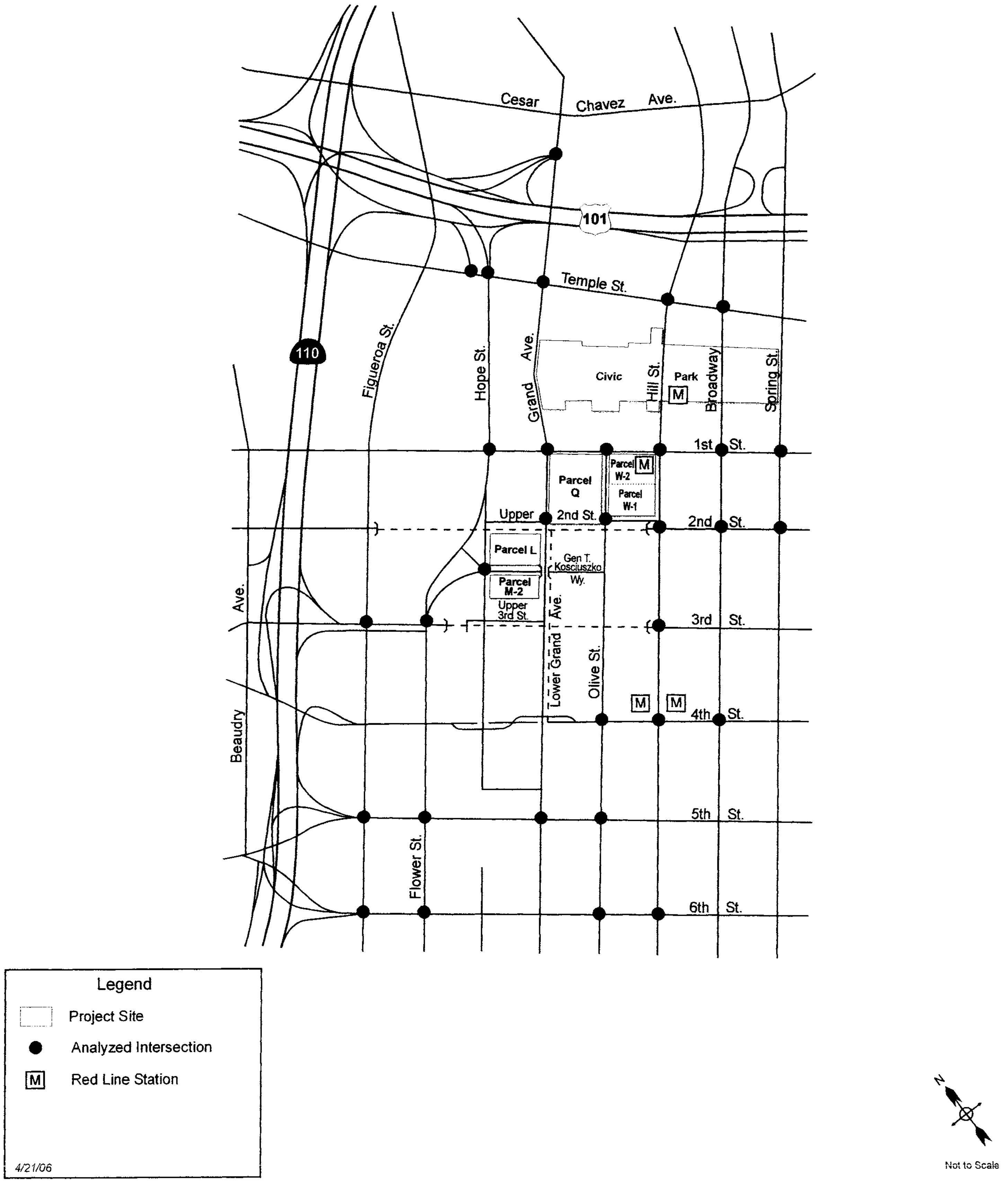

Figure 2-1
Project Site Location and Analyzed Intersections

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All these intersections are signalized. The existing lane configurations at these thirty two analyzed intersections are shown in Figure 2-2.

2.3 Existing Intersection Conditions

Existing Traffic Volumes

New traffic counts were conducted at all thirty two intersections to obtain existing turning movement counts. The traffic counts were conducted in September and October of 2005, for both the A.M & the P.M. peak periods (7:00am -10:00am, and 3:00pm to 6:00pm respectively). The peak hour is the highest volume hour within the peak period. While it varies somewhat between specific locations, the count data indicates it generally occurs between 8:00am and 9:00am for the A.M. peak hour, and between 5:00pm and 6:00pm for the P.M. peak hour. The existing peak hour traffic volumes are illustrated in Figures 2-3 and 2-4 for the A.M and P.M peak hours respectively.

Level of Service Methodology

Level of Service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F, with each level defined by a range of volume/capacity (V/C) ratios. Table 2-1 defines the ranges of V/C ratios and their corresponding levels of service for signalized intersections. LOS D is typically recognized as the satisfactory service level in general urban areas, and LOS E is often recognized as the standard in downtown areas.

As required by LADOT, intersection analysis was conducted using the "Critical Movement Analysis (Planning Method)" as described in "Transportation Research Circular 212, Transportation Research Board, Washington D.C. 1980", to obtain volume/capacity (V/C) ratios for each intersection.

Existing Peak Hour Intersection Levels of Service

Table 2-2 summarizes the existing A.M. & P.M. peak hour V/C ratios and corresponding levels of service at the analyzed intersections, which are also illustrated in Figure 2-5.

A.M Peak Hour

All of the studied intersections currently operate at LOS C or better during the A.M. peak hour.

P.M Peak Hour

All of the studied intersections currently operate at LOS C or better during the P.M. peak hour, except for the intersection of Hope Street & Temple Street (US-101 On & Off Ramps) which operates at LOS D.

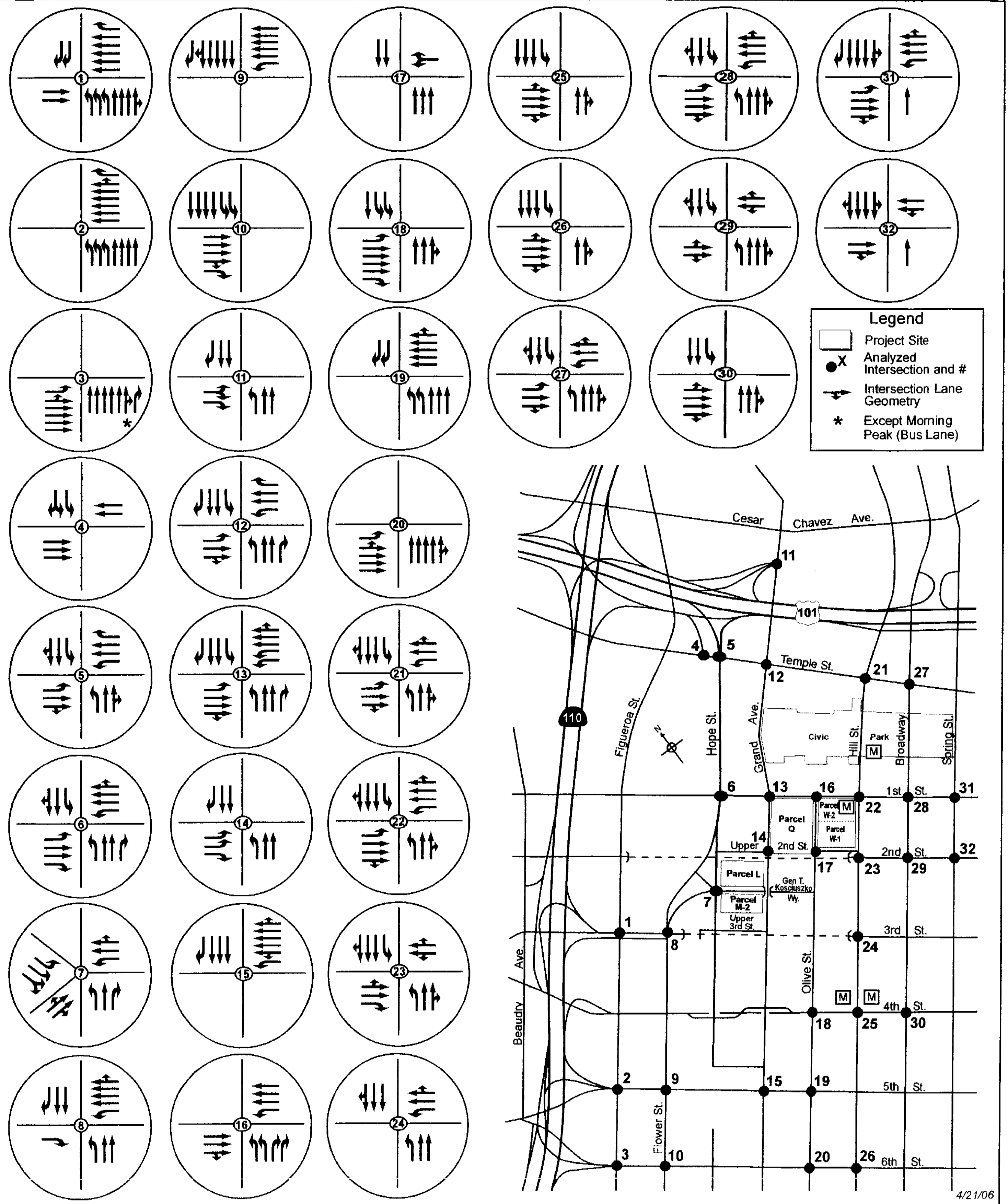

Figure 2-2
Configuration of Analyzed Intersections

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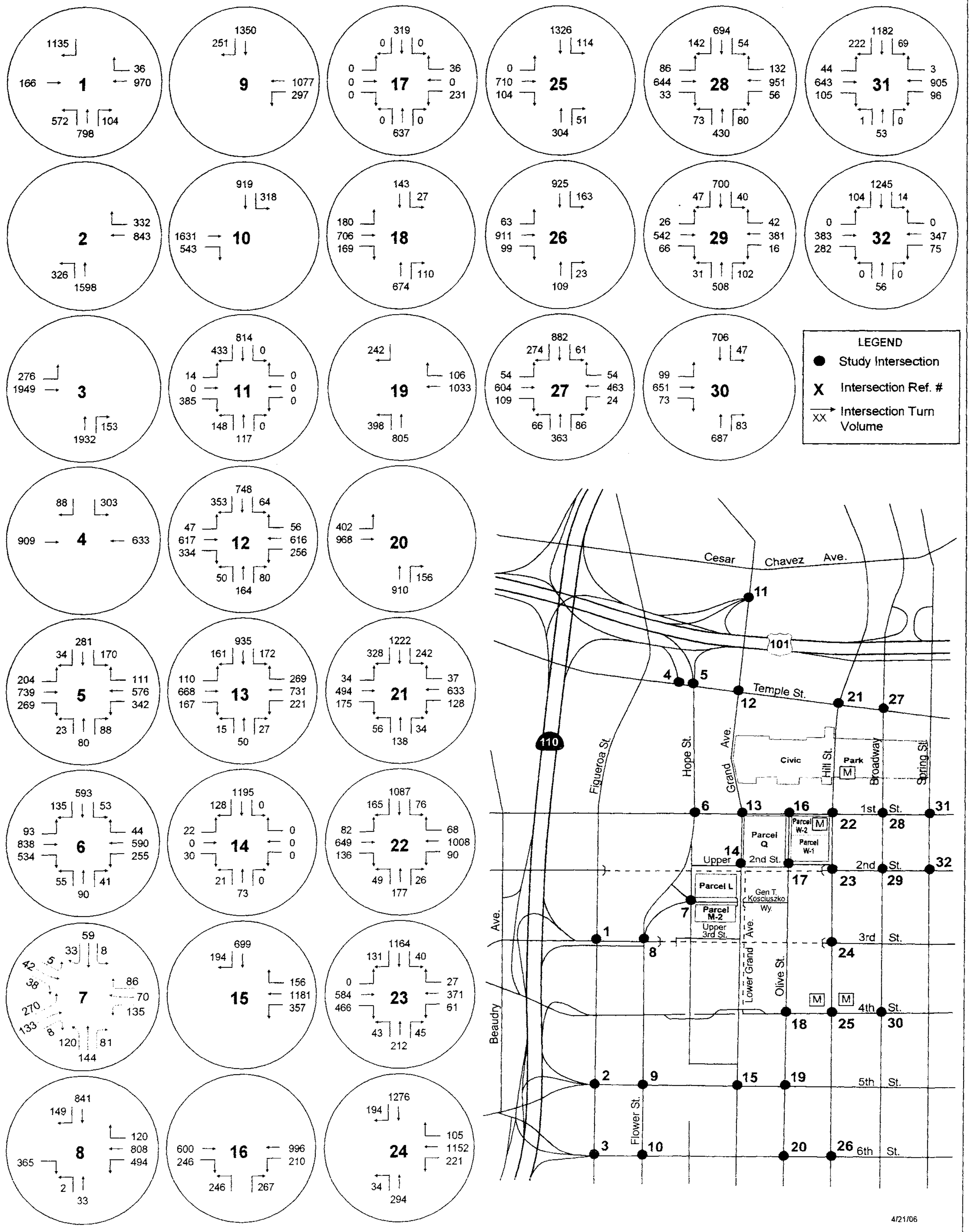

Figure 2-3
Existing Traffic Volumes - AM Peak Hour

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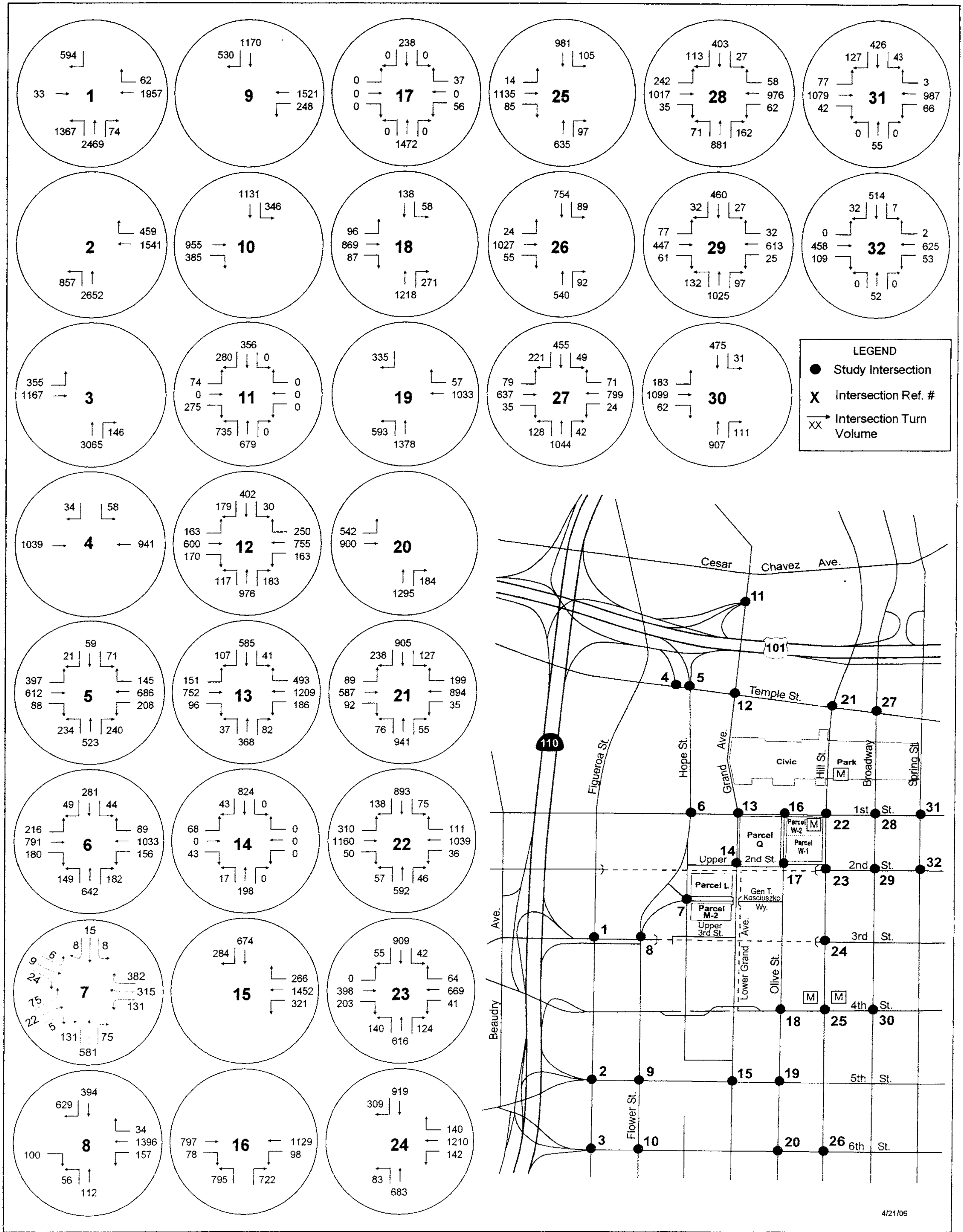

Figure 2-4

Existing Traffic Volumes - PM Peak Hour

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Table 2-1. Level of Service Definitions for Signalized Intersections

Level of Service	Description	Volume to Capacity Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	<0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 – 0.700
C	Good operation. Occasionally drivers may have to wait for more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 – 0.800
D	Fair operation. Cars are sometimes required to wait for more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 – 0.900
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901 – 1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	Over 1.00

Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, D.C., 1985 and *Interim Materials on Highway Capacity*, NCHRP Circular 212, 1982.

Table 2-2. Existing Conditions – Intersection Level of Service

Intersection	Existing Conditions			
	A.M Peak Hour		P.M Peak Hour	
	V / C	LOS	V / C	LOS
Figueroa St. / 3rd St.	0.674	B	0.800	C
Figueroa St. / 5th St.	0.382	A	0.627	B
Figueroa St. / 6th St.	0.483	A	0.480	A
Temple St. / I-110 Off-Ramp	0.346	A	0.341	A
Hope St. / Temple St. (US-101 Ramps)	0.750	C	0.811	D
Hope St. / 1st St.	0.792	C	0.601	B
Hope St. / General T. Kosciuszko Way	0.360	A	0.702	C
Flower St. / 3rd St.	0.571	A	0.380	A
Flower St. / 5th St.	0.373	A	0.391	A
Flower St. / 6th St.	0.421	A	0.348	A
Grand Ave. / US-101 / I-110 Ramps	0.525	A	0.790	C
Grand Ave. / Temple St.	0.758	C	0.699	B
Grand Ave. / 1st St.	0.607	B	0.687	B
Grand Ave. / Upper 2nd St.	0.404	A	0.294	A
Grand Ave. / 5th St.	0.353	A	0.445	A
Olive St. / 1st St.	0.419	A	0.542	A
Olive St. / Upper 2nd St.	0.299	A	0.364	A
Olive St. / 4th St.	0.299	A	0.489	A
Olive St. / 5th St.	0.489	A	0.612	B
Olive St. / 6th St.	0.309	A	0.371	A
Hill St. / Temple St.	0.645	B	0.785	C
Hill St. / 1st St.	0.595	A	0.717	C
Hill St. / 2nd St.	0.624	B	0.541	A
Hill St. / 3rd St.	0.718	C	0.727	C
Hill St. / 4th St.	0.402	A	0.483	A
Hill St. / 6th St.	0.359	A	0.425	A
Broadway / Temple St.	0.672	B	0.643	B
Broadway / 1st St.	0.615	B	0.630	B
Broadway / 2nd St.	0.493	A	0.547	A
Broadway / 4th St.	0.348	A	0.440	A
Spring St. / 1st St.	0.411	A	0.353	A
Spring St. / 2nd St.	0.466	A	0.296	A

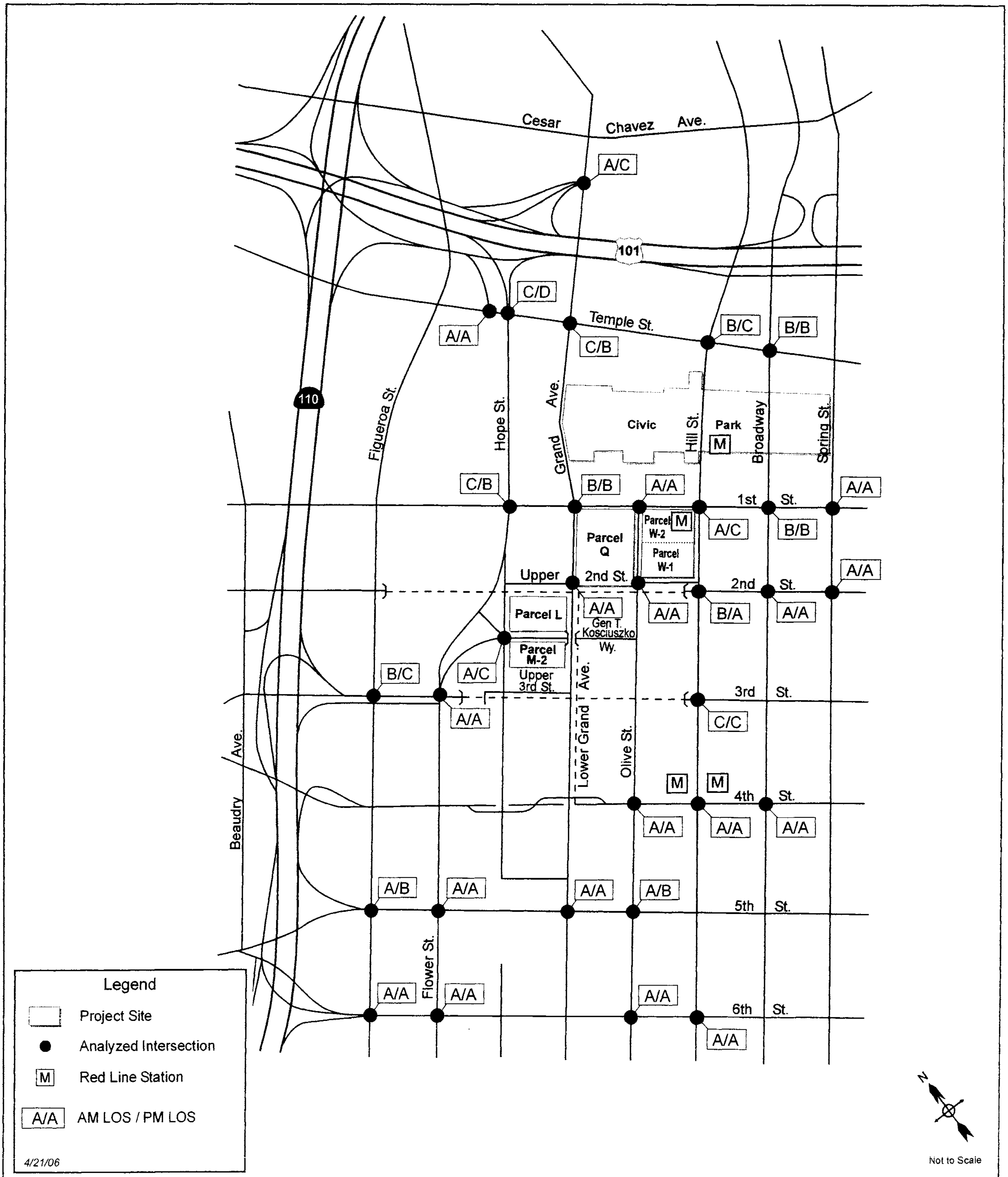

Figure 2-5
Intersection Level of Service - Existing Conditions

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2.4 Existing Transit Service

There is an extensive amount of existing transit service to the Project area, including both rail and bus transit, with transit service being provided by a number of operators.

Rail Service

Los Angeles Union Station, located approximately one half-mile northeast of the Project site, is the hub for the regional rail system in southern California that serves downtown Los Angeles, comprising:

- The Metrolink Rail system (commuter rail)
- The Metro Red Line (heavy rail - subway)
- The Metro Gold Line (light rail)
- Amtrak (local commuter and national passenger rail)

The Metrolink commuter rail system serves the greater metropolitan Los Angeles area with routes serving downtown Los Angeles from Ventura County, Antelope Valley/Palmdale, San Bernardino, Riverside, Fullerton/Riverside, and Orange County/Oceanside.

The Metro Red Line is a subway line that extends from Union Station through downtown and west to serve the Mid-Wilshire corridor, and then runs north to serve Hollywood and the East San Fernando Valley where it terminates in North Hollywood. Direct connections are provided at that location to the new Metro Rapid Bus Orange Line that runs to Warner Center in the West San Fernando Valley.

The Metro Gold Line is a light rail service connecting Union Station to Pasadena.

The Metro Red Line subway directly serves the area of the Project with the Red Line Civic Center Station, which has portals at the intersection of Hill Street and 1st Street (southwest corner – on the Project site), and on the east side of Hill Street midway between 1st Street and Temple Street – in the Court of Flags on the Civic Mall (also on the Project site).

To the south of the Project site the Red Line connects at the 7th & Flower Station to the Metro Blue Line light rail service from downtown to Long Beach. The Metro Blue Line also connects at the I-110/I-105 station to the Metro Green Line (light rail) which runs east-west from Norwalk to Redondo Beach.

Amtrak, the national passenger rail service, serves travelers to/from Los Angeles, as well as commuters to other Southern California regions including Orange and San Diego Counties.

Bus Service

Downtown Los Angeles is also well served by many local and regional bus routes which focus on downtown and connect to the entire metropolitan area\. Bus service in the study area is provided by a total of eight operators. These are Metro (LACMTA) local, limited and express service, Foothill Transit, Montebello Bus Lines, Antelope Valley Transit, Torrance Transit, Santa Monica Blue Bus, and LADOT (including the local downtown DASH shuttle routes, and the Commuter Express buses which provide service between downtown Los Angeles and the San Fernando Valley, West Los Angeles, East Los Angeles, and the South Bay area).

There are a total of about 58 bus routes/lines serving the Project area, as shown in Figure 2-6 and summarized in Table 2-3,. Typically bus routes run east-west along Temple Street and 1st Street, and north-south along Hope/Flower Streets, Grand Avenue, Olive Street and Hill Street. Adjacent to the Project area, bus routes also run along 5th and 6th Streets, and along Broadway and Spring Streets.

Along Grand Avenue, bus operations differ greatly north and south of 1st Street. North of 1st Street there are two DASH routes and two LADOT Commuter Express routes. These are DASH Route B and Route DD (weekends only), and LADOT Commuter Express Routes 409 and 423. Bus stops are located just north of 1st Street for DASH service. Considerably more bus routes use the section of Grand Avenue south of 1st Street, which functions as a key southbound entry corridor into downtown for a number of bus routes. These are DASH Routes B and DD; MTA Routes 14/37, 76, 78/79/376/378, 96, 442/444, 446/447, 484, 485, 487/489, 490 and 491; and Foothill Transit Routes 488, 492, and 494. The vast majority of these routes run westbound on 1st Street and southbound on Grand Avenue.

With the exception of DASH service there are no northbound bus routes operating on Grand Avenue between Fifth and 1st Streets (due to the steep grade between Fifth and Fourth Streets) and buses instead use Olive Street and Flower/Hope Streets on the northbound journey to exit downtown.

DASH bus stops are located on northbound and southbound Grand Avenue at 2nd Street, just north of 1st Street, and just south of Temple Street. A bus stop for numerous Metro and Foothill Transit Routes is located on southbound Grand Avenue just south of 2nd Street.

Olive Street functions as a key northbound corridor for a number of bus routes exiting downtown. These are MTA Routes 14, 37, 76, 78, 79, 96, 376, 442, 444, 446, 447, 484, 485, 487, 489, 490 and 491; and Foothill Transit Routes 488, 492 and 494; as well as Torrance Transit Routes T1 and T2; Montebello Transit Route 341, and Antelope Valley

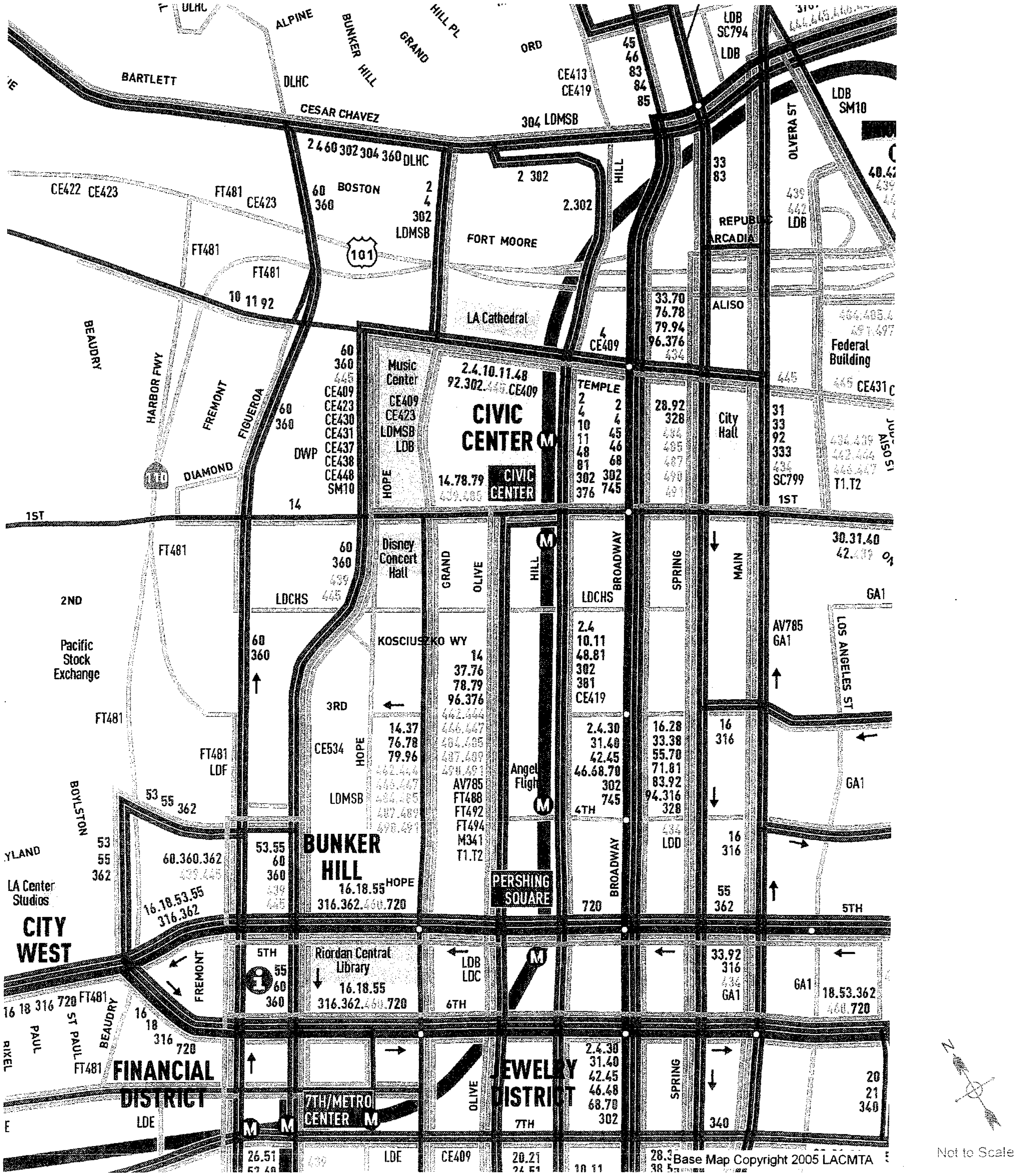

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Figure 2-6
Transit Routes in the Project Area

Table 2-3 Existing Public Transit Services Within Vicinity of Project Area

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Route	Description	Approximate Peak Period Headway (minutes)
Metro Bus Lines		
2	Sunset Bl.	5
4	Santa Monica Bl.	8
10	Melrose Ave. - Virgil Ave. - Temple St.	7
11	Melrose Ave. - Beverly Bl. - Temple St.	7
14	Beverly Hills - Beverly Bl.	12
30	W.Pico Bl. - East 1st St. - Floral Dr.	4
31	W.Pico Bl. - East 1st St.	4
33	Venice Bl.	10
37	Adams Bl.	12
40	Hawthorne Bl. - Crenshaw Bl. - M.L.King Jr. Bl.	10
42	La Tijera Bl. - LAX City Bus Center	13
45	Broadway - Mercury Ave.	6
46	Broadway - Griffin Ave.	6
48	Maple Ave. - S. San Pedro St.	7
60	Long Beach Bl. - Santa Fe Ave.	6
68	W. Washington Bl. - Cesar E. Chavez Ave.	7
70	Garvey Ave. (LA / El Monte)	7
76	Valley Bl. - Main St. (El Monte Bus Station)	9
78	Huntington Dr. - Main St. - Las Tunas Dr. (LA / S. Arcadia)	20
79	Huntington Dr. (LA / Arcadia)	20
81	Figueroa St.	10
96	Riverside - LA Zoo	20
302	Sunset Bl. Limited	10
360	Long Beach Bl. Limited	10
381	Figueroa St. Limited	10
439	Redondo Beach - LAX City Bus Center - Patsaouras Transit Plaza/Union Station Express	45
442	South Bay Galleria Transit Center - Hawthorne - Manchester - Patsaouras Transit Plaza/Union Station	25
444	Rancho Palos Verdes - Rolling Hills Estates - Torrance - Patsaouras Transit Plaza/Union Station Express	30
445	San Pedro - Artesia Transit Center - Patsaouras Transit Plaza/Union Station Express	35
446	San Pedro - Pacific Ave. - Wilmington - Carson - Patsaouras Transit Plaza/Union Station Express	60
447	San Pedro - 7th St. - Wilmington - Carson - Patsaouras Transit Plaza/Union Station Express	60
484	Cal Poly Pomona - La Puente - Valley Bl. - LA Express	13
485	Lake Ave. - Oak Knoll - Fremont - LA Express	15
487	El Monte - Santa Anita Ave. - Sierra Madre - San Gabriel Ave. - LA Express	18
489	Temple City - Rosemead Bl. - LA Express	18
490	Cal Poly Pomona - Walnut - Covina - Baldwin Park - Ramona Bl. - LA Express	20
720	Wilshire - Whittier Bl.	5
745	South Broadway	4
Antelope Valley Transit		
AV 785	Antelope Valley - Downtown Los Anegeles - Union Station	25
Foothill Transit		
FT 488	Glendora - West Covina - Downtown Los Angeles Express	30
FT 492	Montclair - Arcadia - Los Angeles Expressway via Arrow Highway	30
FT 494	San Dimas - Glendora - Downtown Los Angeles Express	30

Table 2-3 Existing Public Transit Services Within Vicinity of Project Area

4/21/2006

Route	Description	Approximate Peak Period Headway (minutes)
LADOT Commuter Express		
CE 409	Sylmar - Sunland - Tujunga - Glendale	15
CE 419	Chatsworth - Northridge - Granada Hills - Mission Hills	15
CE 423	Newbury Park - Thousand Oaks - Woodland Hills - Calabasas - Encino	15
CE 430	Pacific Palisades - Brentwood - VA Medical Ctr.	30
CE 431	Westwood - Palms	30
CE 437	Venice - Marina Del Ray - Culver City	22
CE 438	Redondo Beach - Hermosa Beach - Manhattan Beach - El Segundo	15
CE 448	Rancho Palos Verdes - Lomita - Wilmington - Harbor City	25
Montebello Municipal Bus Lines		
M 341	Montelbello to Downtown Los Angeles from Taylor Ranch Express	30
Santa Monica Municipal Bus Lines		
SM 10	Santa Monica - Los Angeles Freeway Express	15
Torrance Transit		
T 1	Torrance - Los Angeles via Gardena	30
T 2	Torrance - Los Angeles via South Bay Galleria Transit Center	60
LADOT - DASH		
LDB	Route B: Chinatown - Financial District	8
LDD	Route D: Union Station / South Park	5
LDCHS	City Hall Shuttle	6
LDMSB	Metrolink Shuttle Bunker Hill	7
Metro Rail Lines		
Blue	7th / Metro Center and Long Beach	5
Red	Union Station and North Hollywood - Union Station and Wilshire / Western	10
Gold	Union Station and Sierra Madre Villa	10
Metrolink Commuter Rail Lines		
Ventura County Line	Montalvo - LA Union Station	38
Antelope Valley Line	Lancaster - LA Union Station	31
San Bernardino Line	San Bernardino - Pomona - LA Union Station	20
Riverside Line	Downtown Riverside - LA Union Station	33
Orange County Line	Oceanside - Irvine - Anaheim - LA Union Station	20
91 Line	San Bernardino - Anaheim - Commerce - LA Union Station	45

Transit Route 785. Two bus stops are located on northbound Olive Street between 1st and 2nd Streets.

Along Hope Street, bus operations differ greatly north and south of First Street. South of First Street, Hope Street does not have any transit service – because bus routes use Flower Street. North of First Street a number of bus routes operate on Hope Street. These are

Metro Routes 60, 360 and 445; LADOT Commuter Express Routes 409, 423, 430, 431, 437, 438 and 448; and Santa Monica Blue Bus Route 10.

Bus routes using Hill Street include Metro Routes 2, 4, 10, 11, 48, 81, 302, 381, and LADOT Commuter Express Route 419. The Red Line subway also travels beneath Hill Street with stops at the Civic Center (station entrance at the south-west corner of First Street and Hill Street), and at Pershing Square (station entrance at the north west corner of 4th Street and Hill Street). Bus stops are located in both the northbound and southbound directions on Hill Street between 1st and 2nd Streets.

A bus stop is located on eastbound First Street between Grand Avenue and Olive Street and between Olive Street and Hill Street. Two bus stops are located on westbound First Street between Hill Street and Olive Street.

2.5 Existing Pedestrian Facilities

Existing pedestrian facilities in the area of the Project are primarily sidewalks, which are provided on all streets in the downtown. Pedestrian crosswalk signals are provided at all signalized intersections in the study area.

Off-street (mid-block) pedestrian connections exist through the Civic Mall between Grand Avenue and Spring Street, with mid-block signalized pedestrian crossings currently provided on Grand Avenue, Hill Street, Broadway and Spring Street between 1st Street and Temple Street.

Off-street (mid-block) pedestrian connections are also provided to the south of the Project site, between 3rd and 4th Streets and Grand Avenue and Olive Street, via pedestrian paths through the California Plaza development and alongside the Omni Hotel and the Museum of Contemporary Art (MOCA).

Pedestrian connections from the Metro Red Line Civic Center Station focus on the Civic Mall (from the mid-block portal on Hill Street between 1st and Temple), and on sidewalks from the portal at the southwest corner of 1st Street and Hill Street (northeast corner of Parcel W-1/W-2 on the Project site).

These pedestrian facilities provide connections throughout the Bunker Hill area to various destinations, including the Walt Disney Concert Hall, the Los Angeles Music Center, the County Civic Center buildings, the Cathedral of Our Lady of the Angels, the City Civic Center to the east, office towers and residential towers on Bunker Hill, and the office towers of downtown to the south.

2.6 Existing Parking Conditions

Off-Street Parking

There is a considerable amount of existing parking supply in the vicinity of the Proposed Project, with twenty-one off-site parking facilities in the area bounded by Hope Street and Flower Street on the west, Temple Street on the north, Spring Street on the east, and 4th Street on the south. Some of these facilities are surface parking lots but the majority are parking structures.

There are approximately 15,950 parking spaces in these twenty-one locations. These are shown in Figure 2-7 and are listed in Table 2-4. Of these approximately 1,100 are in surface lots and the remaining 14,850 spaces are in garages. Approximately 7,000 of the total 15,950 spaces are owned and/or operated by the County of Los Angeles. Of these 7,000 spaces, approximately 2,900 are reserved for County official business and employees and are not available to the general public. Approximately 6,900 of the total 15,950 parking spaces are located in major high-rise office towers on Bunker Hill. The vast majority of these parking spaces are generally occupied during the daytime business hours, although there are typically unutilized spaces in the Walt Disney Concert Hall garage and to a lesser extent the Music Center garage. During the evenings and weekends the reverse is true, with the Music Center and Disney Concert Hall garages being well used, but the vast majority of remaining parking being largely underutilized.

The Civic Mall

The County currently owns and operates 1,958 parking spaces in the Civic Mall, of which 1,609 are in subterranean garages and 349 are in surface parking. The westernmost garage (County Lot 18), between Grand Avenue and Hill Street has 1,274 parking spaces, with large helical parking entrance/exit ramps on both Grand Avenue and Hill Street. The middle section of the Mall between Hill Street and Broadway includes a subterranean garage (County Lot 10) under the Court of Flags with 646 parking spaces. However, since the Northridge earthquake, the lower two levels of this garage have not been used so the parking capacity is currently limited to 321 spaces. At the easternmost end of the Civic Mall is a 349 space surface parking lot (County Lot 11) off of Spring Street for the County Criminal Courts Building.

The Development Project Site

There are a total of 1,807 existing parking spaces currently located on the Project site. These are comprised of: (1) a total of 913 juror parking spaces and 149 County Courthouse visitor parking spaces currently provided by the County in the temporary parking structure in County Lot 17 on Parcel Q; (2) a total of 225 surface parking spaces currently provided by the County in County Lot 26 on Parcel W, and open to the general public for all uses; (3) a total of 145 parking spaces in two privately operated surface parking lots on Parcel W that are open to the general public for all uses; and (4) a total of 375 parking spaces in two privately operated surface public parking lots on Parcel L/M-2 that are open to the general public for all uses.

On-Street Parking

There is very little on-street parking supply in the area of the Project. On the streets immediately adjacent to the development parcels in the Project there are only a total of 33 on-street parking spaces. This on-street parking supply is generally metered, with a two-hour time restriction between 8am and 6pm., except for 1st Street when the time limits are 9am to 4pm. Based on site observations these spaces are typically well-used during the daytime.

To the north of the Project site, there is similarly very little on-street parking in the Civic Center area. To the south of the Project (south of 2nd Street), there is generally more on-street parking, with on-street metered spaces provided along Hope Street, Grand Avenue and Olive Street, all of which is typically well-used.

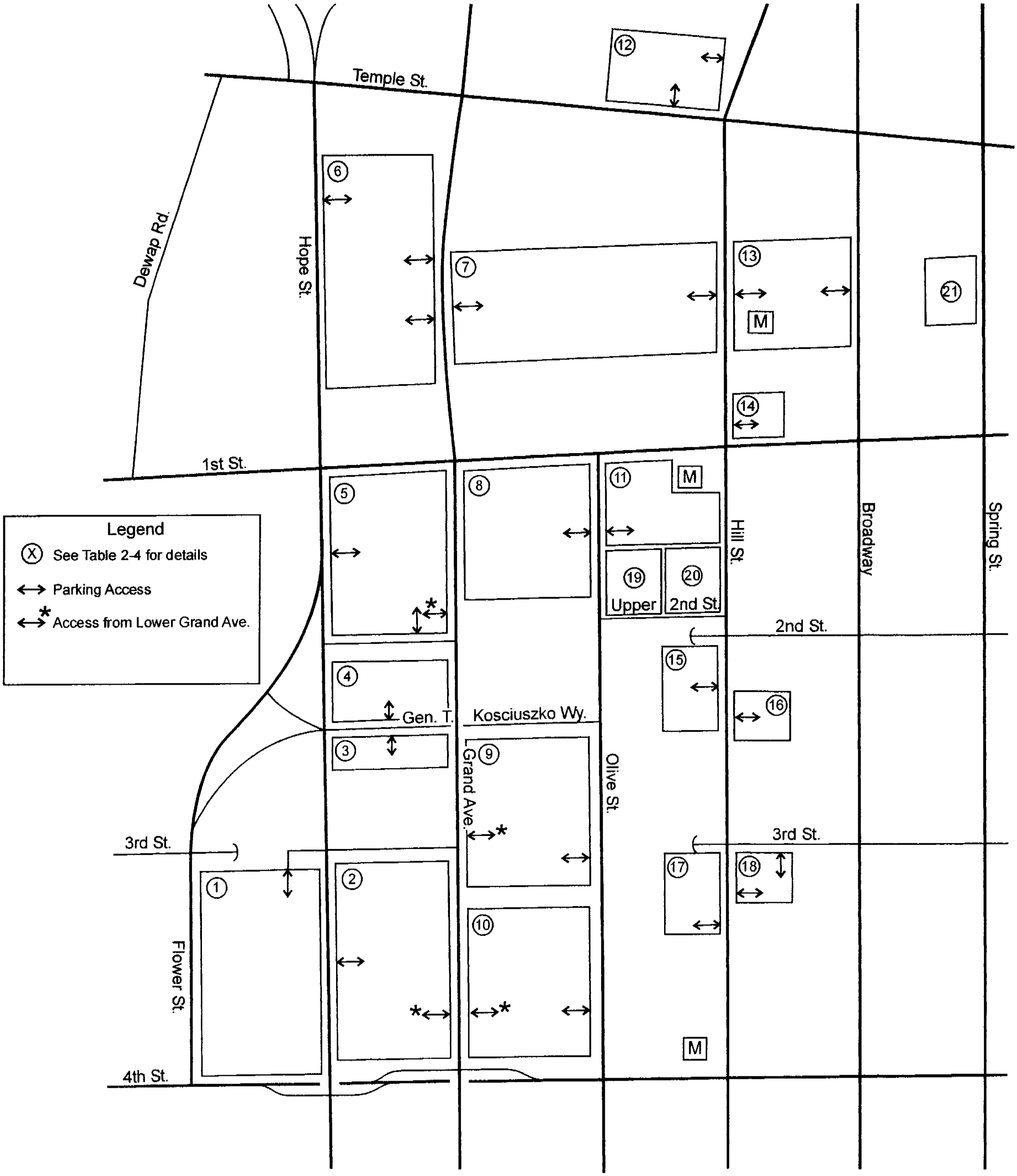

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Figure 2-7
Principal Off-Street Parking Facilities in Vicinity of Project

Grand Avenue Project

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Transportation Strategies & Solutions

Table 2-4. Principal Off-Street Parking Resources in Vicinity of Project (See Figure 2-7 for Locations)

No.	Facility	Garage/Lot	Location	Access	No. of Spaces	Users	Comments
1	333 South Hope B of A Office Tower	Garage Underground	Hope Street	3rd St, west of Hope. Flower Street.	2,145	Office employees & visitors. Public.	
2	Wells Fargo Center Office Towers	Garage Underground	Hope Street	Hope Street Lower Grand	2,331	Office employees & visitors. Public.	
3	Prestige Lot	Surface Lot	GTK Way	GTK Way	160	Public Lot	Will be replaced by Parcel M-2 development.
4	5-Star Lot	Surface Lot	GTK Way	GTK Way	215	Public Lot	Will be replaced by Parcel L development.
5	Disney Concert Hall (County Lot 16)	Garage Underground	Grand Avenue	2nd Street. Hope Street. Lower Grand.	2,288	Jurors. Public. Concerts.	1,730 self-park spaces 2,288 total spaces with tandem Tandem not currently used at any time. Daytime overflow juror parking from County Lot 17 (uses 250 – 300 spaces).
6	Music Center (County Lot 14)	Garage Underground County Lot 14	Grand Avenue	Grand Avenue Hope Street (Founders only)	1,203	Public. Events. Visitors to County Admin. Bldg and Courthouse.	Vehicle tunnel connection at lowest level under Grand Avenue to upper level of County Mall garage (County Lot 18). Music Center events sometimes overflow onto upper level of County Mall Garage.
7	Mall Garage (County Lot 18)	Garage Underground	Grand/Hill	Grand Hill (no entry after 4pm)	1,274	Permit Only County employees. Court employees. Judges. Visitors with permits.	No general public access. Evening access via Music Center Garage (overflow parking) to upper level. Evening egress from Music Center Garage to Hill Street.

Table 2-4. Principal Off-Street Parking Resources in Vicinity of Project (See Figure 2-7 for Locations)

No.	Facility	Garage/Lot	Location	Access	No. of Spaces	Users	Comments
8	County Lot 17	Garage Above-grade	Olive	Olive	1,062 (849 Usable)	Juror. Public.	Typically 913 (700 usable) juror spaces, and 154 public spaces. Will be replaced by Parcel Q development.
9	300 South Grand California Plaza & MOCA	Garage Underground	Lower Grand. Olive	Lower Grand (monthly only). Olive (visitor).	1,170	Public. MOCA. Office employees & visitors (Cal Plaza 1). Omni Hotel	
10	350 South Grand California Plaza	Garage Underground	Lower Grand. Olive	Lower Grand. Olive.	1,300	Public. Office employees & visitors (Cal Plaza II).	
11	County Lot 26	Surface Lot	Olive	Olive	225	Public	Will be replaced by Parcel W-2 development.
12	Cathedral of our Lady of the Angels	Garage Underground	Temple	Temple	750	Public. Cathedral employees. Cathedral visitors.	
13	Court of the Flags (County Lot 10)	Garage Underground	Hill - Broadway	Hill Broadway	646	Permit. Restricted use by employees, law enforcement, Grand Jurors.	
14	Hill Street @ First St	Garage Above Ground	Hill	Hill	42	Public	
15	Wells Fargo Center Employee Parking	Garage Above Ground	Hill	Hill	N/A	Private Wells Fargo Center employee parking – with shuttle. No visitor parking.	

Table 2-4. Principal Off-Street Parking Resources in Vicinity of Project (See Figure 2-7 for Locations)

No.	Facility	Garage/Lot	Location	Access	No. of Spaces	Users	Comments
16	222 South Hill	Garage Above Ground	Hill	Hill	35	Public	
17	Angelus Plaza Garage	Garage Above Ground	Hill	Hill	118	Public	
18	Grand Central Square	Garage Above Ground	Hill	Hill 3rd	480	Public Also residential.	
19	Private Lot	Surface Lot	Olive St. & Upper 2nd	Olive Street	83	Public	Will be replaced by Parcel W development.
20	Private Lot	Surface Lot	Hill Street & Upper 2nd	Hill Street	62	Public	Will be replaced by Parcel W development.
21	County Mall @ Spring Street (County Lot 11)	Surface Lot	Spring Street at County Mall	Spring Street	349	Public – for County Criminal Courts Building	Will be replaced by Civic Park.
Total Parking Spaces					15,938		

3. Future Conditions Without The Project

3.1 Introduction

In order to evaluate the potential traffic impacts of the proposed Project, it was necessary to first estimate and then analyze future traffic conditions without the Project. The year selected for this analysis was 2015 which is the expected year of completion of the proposed Project.

Future traffic forecasts were estimated by predicting two separate components of traffic growth in the study area.

The first component represents the ambient growth, that is a general growth in traffic volumes due to minor new developments in the Project Area, and regional growth and development outside the study area.

The second component of future growth in traffic volumes relates to specific development Projects in the study area that are reasonably probable - defined as in construction, approved, or under consideration through the formal planning process at a public agency - and that potentially could be in place by the year 2015 when the Proposed Project will be completed. The following section of this chapter describes the process of estimating traffic from these cumulative Projects.

3.2 Future Traffic Forecasts Without the Project

Ambient Traffic Growth

Regional growth forecasts from both the Southern California Association of Governments[1] (SCAG) and the Los Angeles County Metropolitan Transportation Authority[2] (LACMTA or Metro), have shown that the projected total growth in traffic on roadways in the Central City area of Los Angeles will average about 1% a year or less over the next twenty years.

Based on these forecasts, as well as LADOT experience (see Appendix D – LADOT Traffic Study Methodology Memorandum of Understanding), an ambient traffic growth rate of 1% per year was assumed to represent general growth in traffic volumes due to minor new developments in the Project Area, and regional growth and development

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[1] SCAG 2003 Regional Socio-Economic and Travel Demand Forecasts

[2] LACMTA, *2004 Congestion Management Program for Los Angeles County*, 2004

outside the study area. The existing traffic counts were therefore adjusted upward by a total of 10% to represent the ambient growth to the Project completion year.

Note that this is a conservative (worst case) approach, because the analysis also took into account traffic growth from specific development projects within the downtown – as described in the following section below. There is thus the possibility that the traffic growth from these projects is already included in the ambient growth projections. However, the 1% per year ambient traffic growth factor was applied in order to obtain a conservative (worst case) traffic projection and analysis.

Related Projects List

A list of proposed development projects (the related projects) in the area of the Proposed Project that could affect traffic conditions in the Project Area by adding traffic volumes to Study Area intersections was prepared based on information obtained from a variety of sources including the City of Los Angeles Department of Transportation, the City of Los Angeles Planning Department, the Community Redevelopment Agency, other studies and reports, and field verification and site observations. A total of 93 potential cumulative development Projects were identified for inclusion in this study. As defined earlier in Section 3.1, these related projects are in some stage of the approval/entitlement process, ranging from projects that are under construction to projects that have been approved but not constructed, to projects that are currently proceeding through the planning process. Small projects that generated less than 43 P.M. peak hour trips (the LADOT threshold for preparing a traffic study), for example the expansion of the Colburn School of Music, were excluded from this list – as they were considered to be accounted for in the ambient traffic growth factor discussed earlier in this section. It should be noted that some of the cumulative projects may in fact not be built by the time horizon of the Project. The future baseline forecast is thus a conservative (worst case) forecast.

These related projects are listed in Table 3-1, and their locations are shown in Figure 3-1. Forecast traffic from these projects was added to the street network in the study area to obtain traffic forecast for 2015 representing the background condition without the Proposed Project.

It should also be noted that, again for purposes of preparing a conservative worst case analysis, no potential street improvements or transportation mitigation measures that might be associated with any of the cumulative projects were included in the future conditions traffic analysis.

Related Projects Trip Generation and Distribution

Trip generation estimates for the related projects were prepared, as also shown in Table 3-1. These were generally taken from the environmental and/or traffic studies prepared for

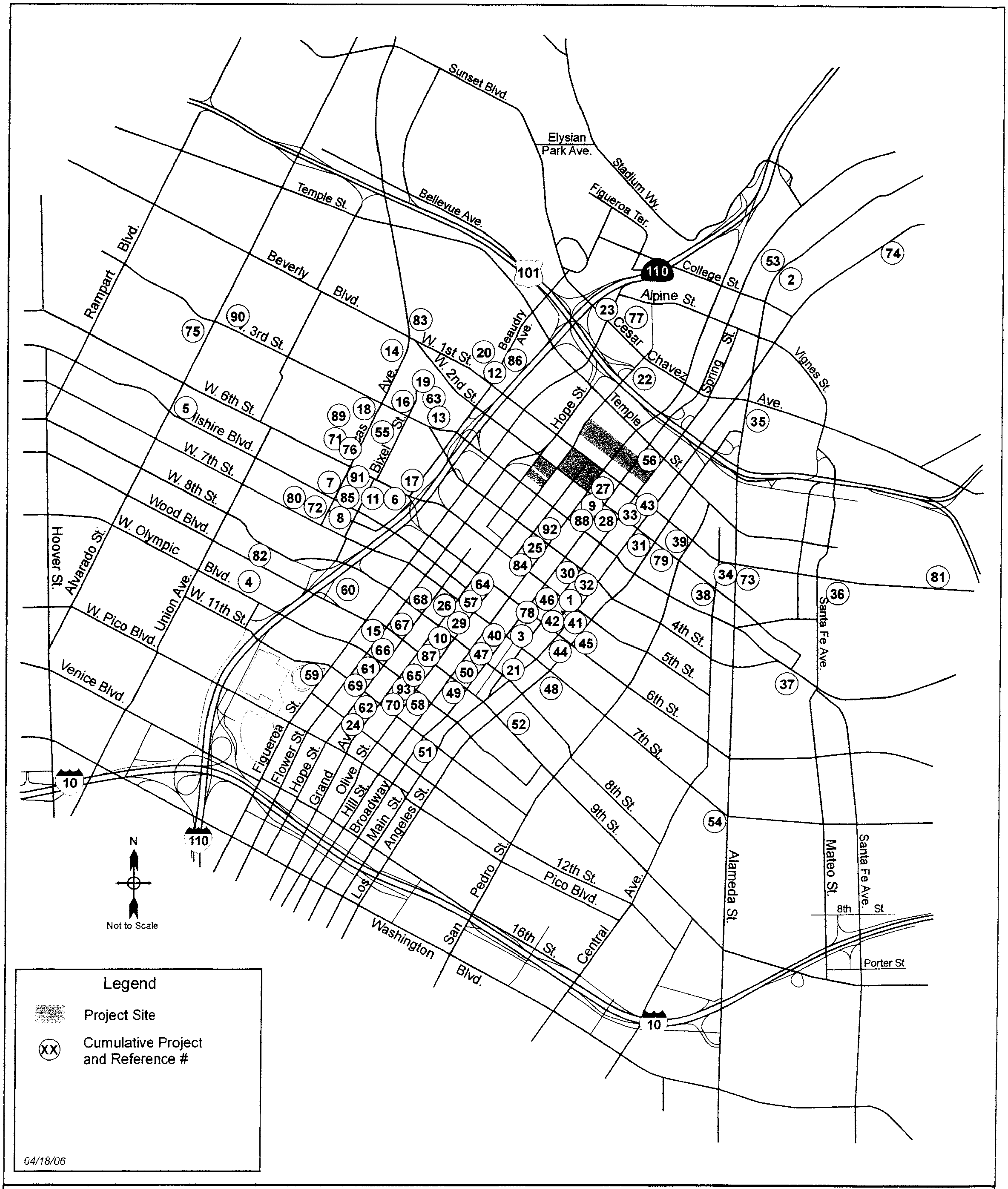

Figure 3-1
Location of Cumulative Projects

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

Table 3-1

Related Project List and Trip Generation Estimates

4/21/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1	Plaza de Cultura Y Arte	500 block of N. Main St.	32,000 s.f 25,000 s.f 14,100 s.f 23,700 s.f	Community Bldg. Performing Arts Plaza House Educational Center and Museum		20	4	24	82	44	126
2	Capitol Mills	Alameda St. / College St.	30 D.U 5,000 s.f 20,000 s.f	Artist-in-lofts Retail Office	637	33	18	51	26	42	68
3	Residential Project	201 - 215 7th St. Or 651 S. Spring	139 D.U	Apartments	934	14	57	71	56	30	86
4	Belmont Primary School # 11	980 S. Albany St. (Olympic / Albany)	380 Students	Kindergarten	490	88	72	160	48	59	107
5	Westlake Intermodal Center	Alvarado St. / Wilshire Blvd.	40,000 s.f 30,000 s.f 40,000 s.f	Grocery Retail Community Facility	6,596	130	79	209	292	316	608
6	Piero (Commercial & Residential Development)	616 Saint Paul St. (Saint Paul St. / Wilshire Blvd.)	10,000 s.f 330 D.U	Commercial (on ground level) Apartments (on 5 levels above ground)	1,496	39	76	115	74	57	131
7	Mixed Use	1234 Wilshire Blvd. (Wilshire Blvd. / Lucas Ave.)	12,500 s.f 210 D.U	Retail Residential	1,930	24	97	121	116	63	179
8	1100 Wilshire	1100 Wilshire Blvd.	460 D.U	Condominiums (conversion of existing bldg.)	2,696	34	168	202	166	82	248
9	Residential Project	205 - 207 S. Broadway	162 D.U	Apartments	1,089	17	66	83	65	35	100
10	Residential Project	416 - 432 W. 8th St. Or 800 S. Olive St.	110 D.U	Apartments	739	11	45	56	44	24	68
11	G.H Palmer	On 6th St. (Wilshire / St. Paul)	600 D.U 20,000 s.f	Apartments Retail	4,891	74	253	327	278	169	447
12	Central LA High School # 11	Beaudry Ave. / 1st Street	2,600 Students 10.5 acres	High School Park	4,446	736	330	1,066	171	193	364
13	Mixed Use - Residential Over Commercial	1207 W. 3rd St. (3rd St. / Boylston St.)	330 D.U 50,000 s.f	Residential Commercial (construct 330 units over 50,000 s.f commercial)	4,222	33	135	168	196	138	334
14	Apartments	1304 W. 2nd St. (2nd St. / Lucas Ave.)	300 D.U	Apartments	1,932	31	122	153	121	65	186
15	9th & Figueroa Project	9th / Figueroa / Flower	629 D.U 27,000 s.f	Condominiums Retail	2,624	37	146	183	143	95	238
16	Visconti	3rd St. / Bixel St.	300 D.U	High-End Residential Units (new construction)	1,989	24	129	153	125	61	186
17	Los Angeles Ctr Ph - 1 A	North of 6th St.	880,000 s.f	Office	4,500	580	79	659	82	552	634
18	Central LA High School # 10	322 S. Lucas St.	1,713 Students	High School	2,929	485	218	703	113	127	240
19	Residential Project	279 Emerald St.	85 D.U	Apartments	571	9	35	44	34	18	52
20	Residential Project	1030 Mignonette St. (1st / Bixel)	204 D.U	Apartments	1,371	21	83	104	82	44	126

Table 3-1

Related Project List and Trip Generation Estimates

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
21	Residential Project	756 S. Spring St.	84 D.U	Apartments	564	9	34	43	34	18	52
22	Central Area High School #9	450 N. Grand	64 class-rooms 1,600 Seats	Performing Arts High School Performing Arts Theater	2,736	367	289	656	96	144	240
23	Orsini (Addition II and III)	Figueroa St. / Chesar Chavez	826 D.U 40,000 s.f	Apartments Retail	4,832	102	187	289	259	213	472
24	Lot 114 - 1155 South Grand Project	Grand Ave. / 12th St.	311 D.U 7,294 s.f	Condominiums Retail	1,230	18	75	93	70	42	112
25	Metro 217	417 S. Hill St.	277 D.U	Luxury work-live lofts (conversion of the Subway Terminal Building)	1,837	23	118	141	115	57	172
26	Residential Project	600 W. 7th Street	70 D.U	Apartments	470	7	29	36	28	15	43
27	Los Angeles Courthouse	Between Broadway & Hill St and 1st St. & 2nd St.		41 U.S. District Courtrooms, 40 Judges chambers, court-related support offices and a circuit satellite library. Subterranean parking provides 150 spaces.	2,091	150	29	179	247	87	334
28	Douglas Building	257 S. Spring St.	50 D.U 20,000 s.f	Condominiums (conversion of 1898 structure) Retail	1,106	4	18	22	40	39	79
29	8th & Grand Project	North of 8th St. between Grand and Olive	875 D.U 34,061 s.f 10,000 s.f	Condominiums Retail Restaurants	4,162	52	205	257	230	142	372
30	Rowan Building	458 S. Spring St.	209 D.U	Loft Apartments (conversion of Rowan Building)	1,386	17	90	107	87	43	130
31	LA City Tokyo Branch Library	203 S. Los Angeles St.	12,500 s.f	Library	432	7	1	8	28	29	57
32	4th Street and Main St.	4th Street and Main St.		Residential Lofts and Retail	7,948	27	144	171	291	276	567
33	Residential Project	108 W. 2nd Street	146 D.U	Condominiums	856	11	53	64	53	26	79
34	Trammell Crow Reisdential Mixed-Use	1st Street / Alameda Street	863 D.U	Luxury Apartments (To be built in 3 phases - phase 1 (303 units), phase 2 (175 units), and phase 3 (385 units plus retail)	6,763	72	379	451	393	213	606
35	Alameda District Plan	Alameda St. / Los Angeles St.	8,200,000 s.f 750 Rooms 300 D.U 250,000 s.f 70,000 s.f	Office Hotel Apartments Retail Museum	40,210	2,242	604	2,846	1,210	2,173	3,383
36	SCI-Arc Lot	West of SCI-Arc at Santa Fe Avenue	300 D.U	Loft Apartments	1,131	28	62	90	68	49	117
37	The Freight Yard	3rd St. / Santa Fe	596,000 s.f	Multi-Use Development	7,532	490	327	817	328	492	820
38	2nd and Central	375 E. 2nd St.	124 D.U 12,500 s.f	Apartments Retail	1,101	18	48	66	61	41	102
39	LA Public Safety Facility MP	Civic Center (Various Locations)	433 Employees 512 Beds 30,000 s.f 21 Employees	EOC/POC/FDC Metro Jail Occupational Health & Services Division (OHSD) Fire Station #4	1,726	175	37	212	60	125	185
40	Convert Theatre to Dance Hall	740 S. Broadway (Broadway / 7th St.)	12,500 s.f	Dance Hall (convert former Theatre to Dance Hall)	937	0	0	0	33	33	66
41	Arcade Building	541 S. Spring St.	143 D.U	Loft Apartments (conversion of 12-story 1924 building)	948	12	61	73	60	29	89
42	Valuta Bldg. (Wilson Bldg.)	548 S. Spring St.	157 D.U	Loft Apartments	592	15	32	47	35	26	61

Table 3-1

Related Project List and Trip Generation Estimates

4/21/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
43	Police Headquaters Facility (PHF)	1st / Main St.	2,400 Employees 56 Employees 60,000 s.f 300 Stalls	Police Headquaters Facility (PHF) Motor Transport Division (MTD) Recreation Center Aiso St. Parking Facility	3,342	190	25	215	91	255	346
44	Pacific Electric Building	610 S. Main St.	314 D.U	Lofts with gym and roof garden. (conversion of existing building)	2,082	26	134	160	131	64	195
45	Santa Fe Lofts	121 E. 6th St.	103 D.U	Lofts (development of 1917 Santa Fe Aneex inot 103 lofts, with renovation of 32 units in Santa Fe building next door)	895	11	58	69	56	28	84
46	Security Building	510 S. Spring St.	153 D.U	Housing Units (development of 153 units in Historic Security Bank Building)	1,014	12	66	78	64	31	95
47	The Union	325 8th St.	91 D.U	Live-work lofts (conversion)	603	7	39	46	38	18	56
48	Santee Court	3 Blocks between Los Angeles St., Maple Ave., 7th St., and 9th St.	80 D.U 299 D.U	Condominiums Apartments	2,738	34	177	211	172	84	256
49	Broadway Plaza Lofts	901 S. Broadway	82 D.U	Lofts (conversion of former Blackstone's Department Store (built 1916) into 82 lofts, with 16 designated as affordable housing)	697	10	44	54	44	23	67
50	Eastern Columbia Building	849 S. Broadway	280 D.U	Lofts / Condos (conversion of existing 12-story 1930 Art Deco Structure)	1,641	21	102	123	101	50	151
51	Herald Examiner Building	11th St. / Broadway	150,000 s.f	Creative Office (restoration and renovation of Herald Examiner Bldg.)	1,652	208	28	234	38	186	224
52	Mixed Use	305-327 9th Street	74,000 s.f 157,000 s.f	Office Retail	10,490	257	99	356	465	560	1,025
53	Blossom Plaza	900 Broadway (Broadway / College)	223 D.U 7,000 s.f 15,000 s.f 25,000 s.f	Condominiums Museum Restaurant Retail	2,767	54	101	155	104	74	178
54	Los Angeles Apparel	744 Alameda St.	640,000 s.f	Warehouse Division	3,174	236	52	288	78	242	320
55	Apartments	1311 5th Street	80 D.U	Apartments	538	8	33	41	32	18	50
56	Hall of Justice	Temple Street / Spring St.	30 Employees 1,000 Space	Net increase in number of employees from 1630 to 1660 Parking Structure	1,052	134	18	152	25	121	146
57	Residential and Retail	515 W. 7th St. (7th St. / Olive St.)	55 D.U 28,000 s.f	Condominiums Retail	1,432	22	26	48	63	63	126
58	Balasco Theatre	1050 Hill St. (Hill St. / Olympic Blvd.)	33,423 s.f	Entertainment (variance to use existing Theatre)	1,220	0	0	0	163	164	327
59	LAED Entertainment District	Figueroa St. / 11th St.	1,200 Rooms 3,600 Seats 7,000 Seats 345,000 s.f 498,000 s.f 165,000 s.f 800 D.U	Hotel Cinema Theatre Restaurants Retail Office Apartments	47,777	927	551	1,478	1,881	1,731	3,612

Table 3-1

Related Project List and Trip Generation Estimates

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
60	Metropolis	8th St. / Francisco St.	600 Rooms	Hotel	24,644	1,817	409	2,226	904	2,151	3,055
			1,600,000 s.f	Office							
			223,000 s.f	Retail							
61	Quality Restaurant & Night Club	605 W. Olympic Blvd. (Olympic Blvd. / Hope St.)	7,142 s.f	Quality Restaurant and Night Club (in existing office building with 18 on-site and 100 off-site spaces).	630	0	0	0	36	17	53
62	Elleven	1111 S. Grand Ave. (Grand Ave. / 11th St.)	417 D.U	Condominiums	1,872	29	117	146	104	66	170
			15,000 s.f	Retail							
63	LAUSD - Central LA High School # 12	1201 Miramar St. (Miramar / Huntley)	500 Students	High School	855	141	64	205	33	37	70
64	Library Court	630 W. 6th St	90 D.U	Conversion of Old University Club	597	7	39	46	38	18	56
65	Olympic Lofts	Olympic Blvd. / Olive St.	78 D.U	Live-work lofts with restaurant and bar. (conversion of the Federal Reserve Bank Building)	967	8	36	44	57	28	85
66	Union Bank Building	Hope St. / Olympic Blvd.	116 D.U	Market-Rate Lofts with 450 space parking garage. (conversion of former Union Bank Building)	769	9	50	59	48	24	72
67	South Village (CIM Project)	8th St. & Hope St., 9th St. & Flower St.	939 D.U	Condominiums	9,067	124	246	370	425	343	768
			83,700 s.f	Retail / Restaurant							
			50,000 s.f	Supermarket							
68	Gas Co. Lofts	800-820 Flower St.	282 D.U	Apartments	1,824	23	120	143	115	56	171
			371,699 s.f	Office (removed)							
69	Metropolitan Lofts	11th / Hope / Flower	230 D.U	Apartments	1,711	27	66	93	76	54	130
			3,500 s.f	Retail							
70	Grand / 11th NE Project	Grand Ave. / 11th St.	128 D.U	Condominiums	676	8	33	41	38	23	61
			3,472 s.f	Retail							
			2,200 s.f	Restaurant							
71	Gratts Primary Ctr & Early Education Ctr	477 Lucas St.	380 Students	Primary School	490	88	72	160	48	58	106
72	Residential Project	622 Lucas St.	311 D.U	Condominiums	1,822	23	114	137	109	53	162
73	Bar & Lounge	701 3rd Street	8,770 s.f	Bar / Lounge	789	0	0	0	44	22	66
74	Chinatown Condos	1101 Main St. (Main / Rondout)	300 D.U	Condominiums	1,254	19	83	102	71	43	114
75	Medical Building	2100 W. 3rd Street	24,075 s.f	Medical Building	870	47	13	60	24	66	90
76	Residential Project	1311 W. 5th Street	80 D.U	Apartments	538	7	33	40	32	18	50
77	500 Bunker Hill	Bunker Hill / Cesar Chavez	17,000 s.f	Supermarket	1,924	37	23	60	98	91	189
			4,200 s.f	Retail							
78	Shybarry Tower	215 W. 6th St.	84 D.U	Condominiums	1,311	6	31	37	74	38	112
			6,000 s.f	Bar							
79	Little Tokyo Block 8 Project	200 Los Angeles St. (Los Angeles / 2nd St)	510 D.U	Condominiums	4,331	59	189	248	187	147	334
			240 D.U	Apartments							
			50,000 s.f	Retail							

Table 3-1

Related Project List and Trip Generation Estimates

4/21/2006

S No	Project Name	Location / Address	Project Description	Daily Trips	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
80	Mayfair Hotel	1256 W. 7th St.	250 D.U Condominiums (Conversion of 294 Room Hotel)	1,045	16	69	85	59	36	95
81	LAUSD ELA High School # 1	1201 1st Street (1st / Mission)	1,206 Students High School	2,062	341	153	494	79	90	169
82	James Wood Apartments	1322 & 1405 James Wood Blvd.	61 D.U Apartments 45 Students Child Care	612	25	42	67	42	33	75
83	Northwest Gateway	2nd / Glendale	276 D.U Apartments	1,855	28	113	141	111	60	171
84	Title Guarantee Building	411 W. 5th St	74 D.U Apartments	497	8	30	38	30	16	46
85	Wilshire Court	Wilshire / Bixel	201 D.U Apartments	1,351	21	82	103	81	44	125
86	Mixed - Use	110 Beaudry Ave (Beaudry / 1st)	200 D.U Apartments 5,000 s.f Retail	1,055	18	47	65	52	37	89
87	810 Grand Lofts	801 S. Grand Ave.	132 D.U Live - Work Condos	551	5	36	41	31	19	50
88	Mixed - Use	250 Hill St. (Hill / 3rd)	450 D.U Apartments 15,000 s.f Rtail	2,145	32	116	148	114	78	192
89	1010 Wilshire Building	1010 Wilshire Building	240 D.U Condominiums	1,003	16	66	82	56	35	91
90	House Ear Institute	Third / Alvarado	30,000 s.f Medical Offices	1,084	58	16	74	30	82	112
91	Villa Verona	Wilshire - Betn Bixel & Witmer	234 D.U Lofts 10,000 s.f Retail	983	17	53	70	50	32	82
92	Bunker Hill Design & Development Program EIR - Parcel Y	Block bounded by 3rd St., Olive St., Hill St., & 4th St.	960,000 s.f Office 100,000 s.f Retail	8,004	473	74	547	188	660	848
93	City House and The Olympic Tower	Southeast corner of Grand / Olympic	331 D.U Condominiums 10,000 s.f Retail 5,985 s.f Restaurant	2,351	30	98	128	126	83	209
			Total Trips	301,325	12,008	9,320	21,328	13,296	14,896	28,192

the individual projects. Where the information was not available from previous reports, the trip generation was estimated using trip rates in *Trip Generation – 7th Edition (Institute of Transportation Engineers, 2003).*

Similarly, trip distribution assumptions for these projects were also taken from previous studies where available, or if not available were estimated based on trip distribution estimates for other similar and comparable projects/studies as well as an understanding of the type of the project and its relation to regional population and employment with respect to trip origins and destinations, and its location with respect to the downtown roadway and circulation system.

Future Traffic Forecasts for 2015 Without Project Condition

As shown in Table 3-1, the related projects would generate a total of about 21,330 vehicle trips in the A.M. peak hour (about 12,000 inbound to the downtown and 9,300 outbound), and about 28,190 vehicle trips in the P.M. peak hour (about 13,300 inbound and 14,900 outbound). It should be noted that because of the large geographic distribution of these projects, that not all of these trips would travel through the study area and traverse the study intersections.

The trip estimates shown in Table 3-1 were then added to the roadway network and combined with existing volumes and ambient traffic growth (described earlier) to provide forecasts of future traffic conditions in the study area in 2015, for both the A.M. and P.M. peak periods, representing the future without Proposed Project conditions.

The future without Project peak hour traffic volumes are illustrated in Figures 3-2 and 3-3 for the A.M. and P.M. peak hours respectively.

3.3 Future Base Transportation System Improvements

Transportation system improvements that will occur prior to the completion year of the Proposed Project (2015) were considered for inclusion in the analysis of future transportation conditions. The following such improvements were identified for consideration.

Upper 2nd Street Connection between Olive Street and Grand Avenue

Upper 2nd Street currently exists only between Hill Street and Olive Street (one-way westbound) and between Grand Avenue and Hope Street (two-way). A recently approved CRA project calls for constructing the missing link between Olive Street and Grand Avenue so that 2nd Street will connect all the way across Bunker Hill as a local roadway. This new street connection, which is funded and programmed to be completed in the next

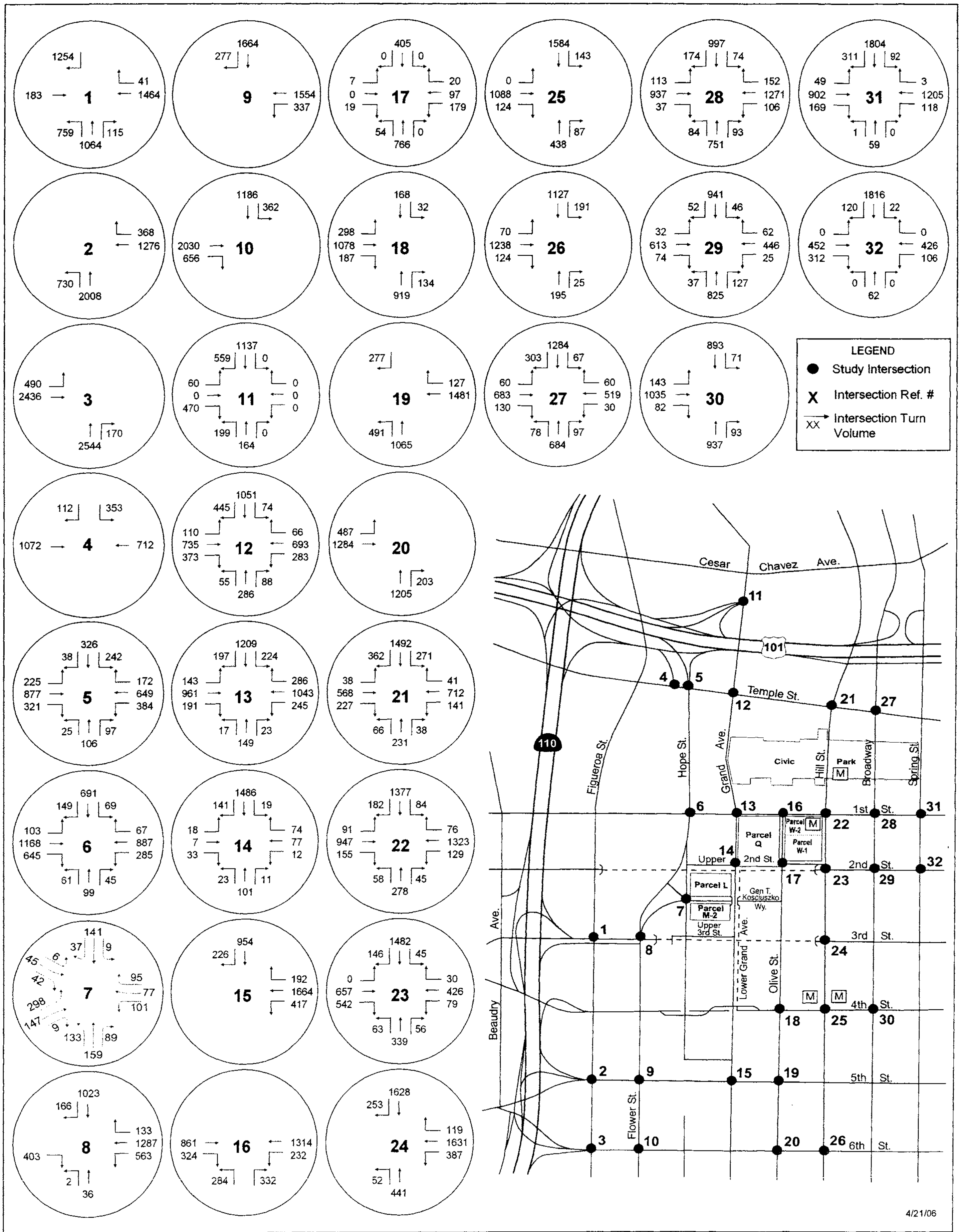

Figure 3-2
Future Without Project Traffic Volumes - AM Peak Hour

Grand Avenue Project

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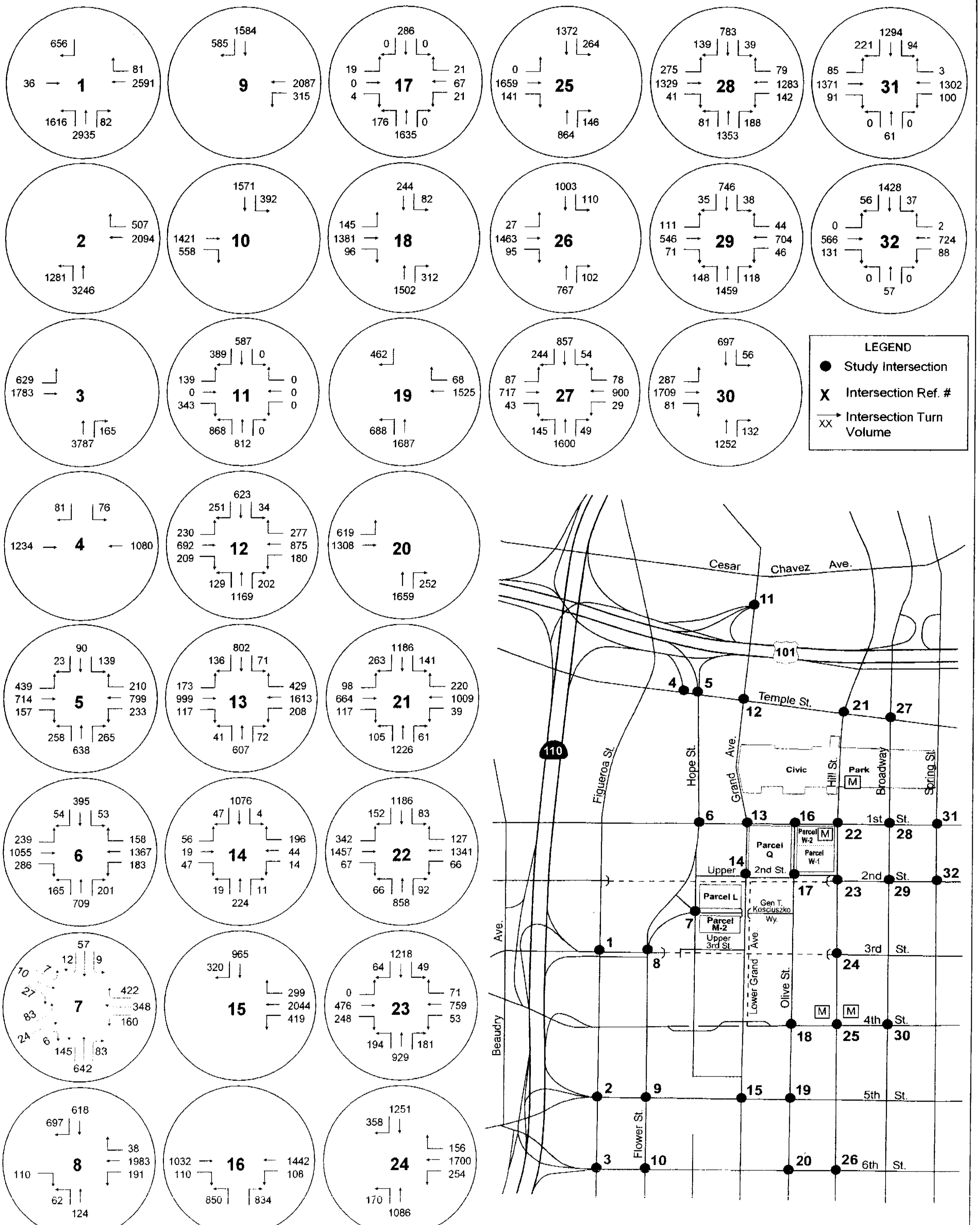

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Figure 3-3
Future Without Project Traffic Volumes - PM Peak Hour

Grand Avenue Project

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few years, will improve local circulation on Bunker Hill and improve local access to buildings in the area. The future traffic forecasts therefore assume the construction of this improvement in both the Future Without Project and Future With Project scenarios.

Metro Gold Line Eastside Extension

MTA is constructing a light rail line connecting Union Station in downtown Los Angeles to communities in East Los Angeles. The approximately six-mile line with eight new stations, will extend the existing Gold Line service (Pasadena to Union Station), and will follow an alignment south from Union Station over the US-101 Freeway, south on Alameda Street and then east on 1st Street over the Los Angeles River, and through the communities of Boyle Heights and East Los Angeles to terminate near the intersection of Pomona and Atlantic Boulevards. It is projected to open for service in 2009.

Metro Mid-City/Exposition Light Rail Transit Project

MTA proposes to construct this approximately ten-mile project to connect downtown Los Angeles with Culver City via the Metro-owned Exposition right-of-way. This light rail line would start at the 7th Street/Metro station in downtown, and run south along Flower Street, west on Exposition Boulevard and then in the Exposition right-of-way to Culver City, with eight to nine new stations. MTA hopes to complete this line by 2010.

In order to provide a conservative (i.e. worst case) analysis, these two rail transit projects were, however, not included in the traffic forecasting process, and no reductions in downtown street traffic were assumed in the future traffic forecasts because of these two future projects

3.4 Future Intersection Conditions

Future Without Project Intersection Level of Service

The future without Project traffic forecasts were evaluated to determine the V/C ratio and LOS for the analyzed intersections for both the A.M. peak hour and the P.M. peak hour. The results are shown in Table 3-2, which summarizes the intersection levels of service calculated for the future without project conditions, and compares them to existing conditions levels of service. The future without project intersection levels of service are also illustrated in Figure 3-4.

A.M. Peak Hour

As shown in Table 3-2, while traffic conditions will worsen in the future due to the additional traffic growth , the majority of intersections will continue to operate at LOS C or better during the A.M. peak hour in the future, except for seven intersections which will operate at LOS D or worse. These will be the following:

- Figueroa Street / 3rd Street (LOS D)
- Broadway / Temple Street (LOS D)
- Broadway / 1st Street (LOS D)

- Hope Street / Temple Street (US-101 On & Off Ramps) (LOS E)

- Hope Street / 1st Street (LOS E)
- Grand Avenue / Temple Street (LOS E)
- Hill Street / 3rd Street (LOS E)

P.M. Peak Hour

During the P.M. peak hour, as also shown in Table 3-2, the majority of intersections will continue to operate at LOS C or better in the future, except for eleven intersections which will operate at LOS D or worse. These will be the following:

- Grand Avenue / Temple Street (LOS D)
- Grand Avenue / 1st Street (LOS D)
- Olive Street / 5th Street (LOS D)
- Broadway / Temple Street (LOS D)
- Broadway / 1st Street (LOS D)

- Figueroa Street / 3rd Street\ (LOS E)
- Hope Street / Temple Street (US-101 On & Off Ramps) (LOS E)
- Grand Avenue / US-101 Ramps / I-110 Ramps (LOS E)
- Hill Street / Temple Street (LOS E)
- Hill Street / 1st Street (LOS E)

- Hill Street / 3rd Street (LOS F)

Table 3-2 Intersection Level Of Service - Future Without Project Conditions

4/21/2006

No.	Intersection	A.M Peak				P.M Peak			
		Existing Condtions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
1	Figueroa St. / 3rd St.	0.674	B	0.827	D	0.800	C	0.965	E
2	Figueroa St. / 5th St.	0.382	A	0.487	A	0.627	B	0.781	C
3	Figueroa St. / 6th St.	0.483	A	0.626	B	0.480	A	0.650	B
4	I-110 Off Ramp / Temple St.	0.346	A	0.398	A	0.341	A	0.409	A
5	Hope St. / Temple St. / US-101 Ramps	0.750	C	0.902	E	0.811	D	0.971	E
6	Hope St. / 1st St.	0.792	C	0.925	E	0.601	B	0.733	C
7	Hope St. / GTK Way / 2nd Place	0.360	A	0.420	A	0.702	C	0.776	C
8	Flower St. / 3rd St.	0.571	A	0.671	B	0.380	A	0.546	A
9	Flower St. / 5th St.	0.373	A	0.439	A	0.391	A	0.517	A
10	Flower St. / 6th St.	0.421	A	0.528	A	0.348	A	0.498	A
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.525	A	0.693	B	0.790	C	0.994	E
12	Grand Ave. / Temple St.	0.758	C	0.930	E	0.699	B	0.844	D
13	Grand Ave. / 1st St.	0.607	B	0.791	C	0.687	B	0.850	D
14	Grand Ave. / Upper 2nd St.	0.404	A	0.537	A	0.294	A	0.504	A
15	Grand Ave. / 5th St.	0.353	A	0.487	A	0.445	A	0.565	A
16	Olive St. / 1st St.	0.419	A	0.531	A	0.542	A	0.627	B
17	Olive St. / 2nd St.	0.299	A	0.283	A	0.364	A	0.406	A
18	Olive St. / 4th St.	0.299	A	0.437	A	0.489	A	0.653	B
19	Olive St. / 5th St.	0.489	A	0.623	B	0.612	B	0.812	D
20	Olive St. / 6th St.	0.309	A	0.402	A	0.371	A	0.486	A
21	Hill St. / Temple St.	0.645	B	0.762	C	0.785	C	0.933	E
22	Hill St. / 1st St.	0.595	A	0.744	C	0.717	C	0.911	E
23	Hill St. / 2nd St.	0.624	B	0.765	C	0.541	A	0.679	B
24	Hill St. / 3rd St.	0.718	C	0.968	E	0.727	C	1.018	F
25	Hill St. / 4th St.	0.402	A	0.518	A	0.483	A	0.760	C
26	Hill St. / 6th St.	0.359	A	0.457	A	0.425	A	0.586	A
27	Broadway / Temple St.	0.672	B	0.858	D	0.643	B	0.834	D
28	Broadway / 1st St.	0.615	B	0.824	D	0.630	B	0.841	D
29	Broadway / 2nd St.	0.493	A	0.613	B	0.547	A	0.748	C
30	Broadway / 4th St.	0.348	A	0.474	A	0.440	A	0.646	B
31	Spring St. / 1st St.	0.411	A	0.592	A	0.353	A	0.582	A
32	Spring St. / 2nd St.	0.466	A	0.609	B	0.296	A	0.509	A

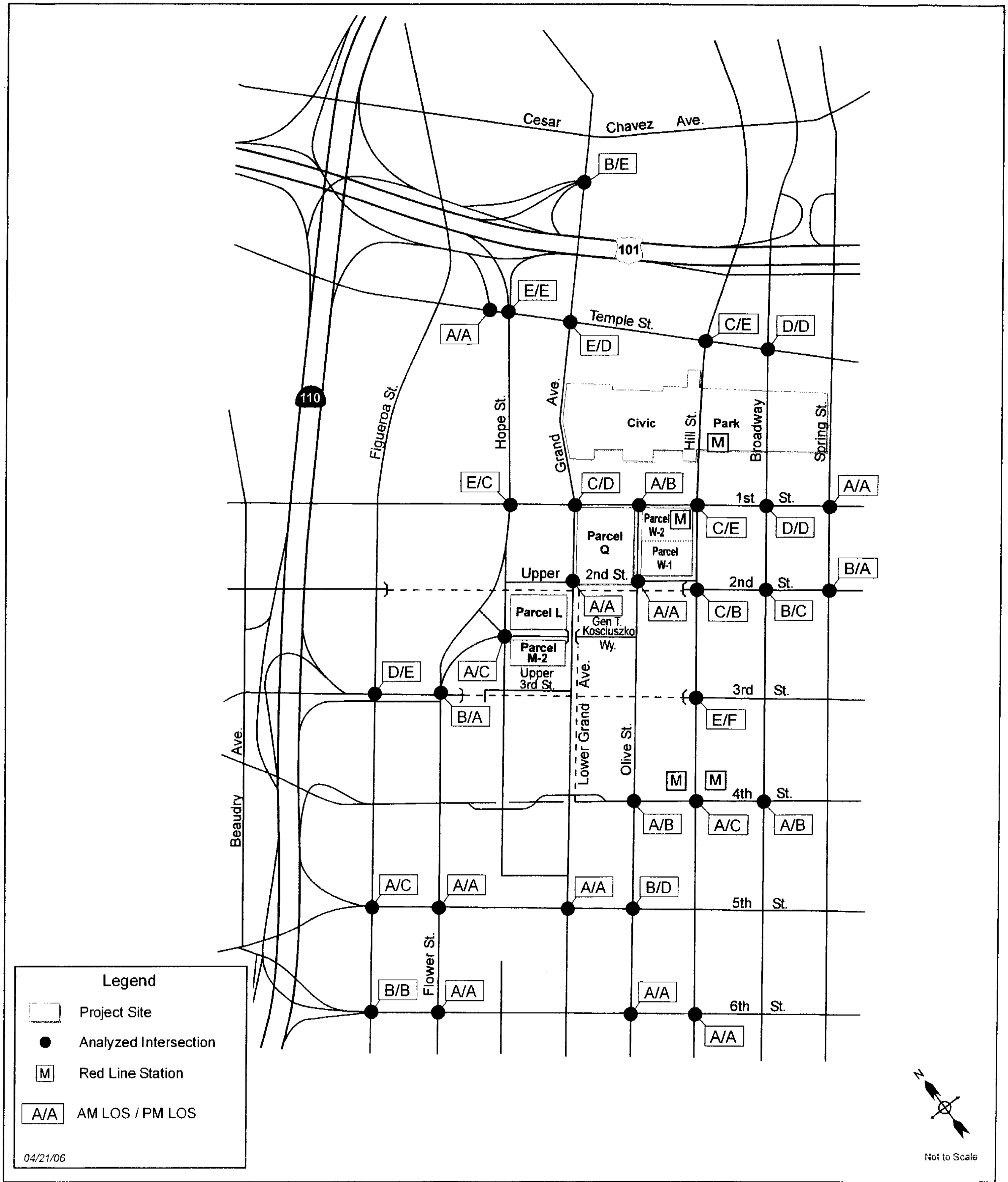

Figure 3-4
Intersection Level of Service - Future Without Project Conditions

Grand Avenue Project

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4. Project Description and Transportation Characteristics

This report section provides a description of the Proposed Project, and identifies the transportation characteristics of the Project including trip generation totals and trip distribution characteristics.

4.1 Project Description

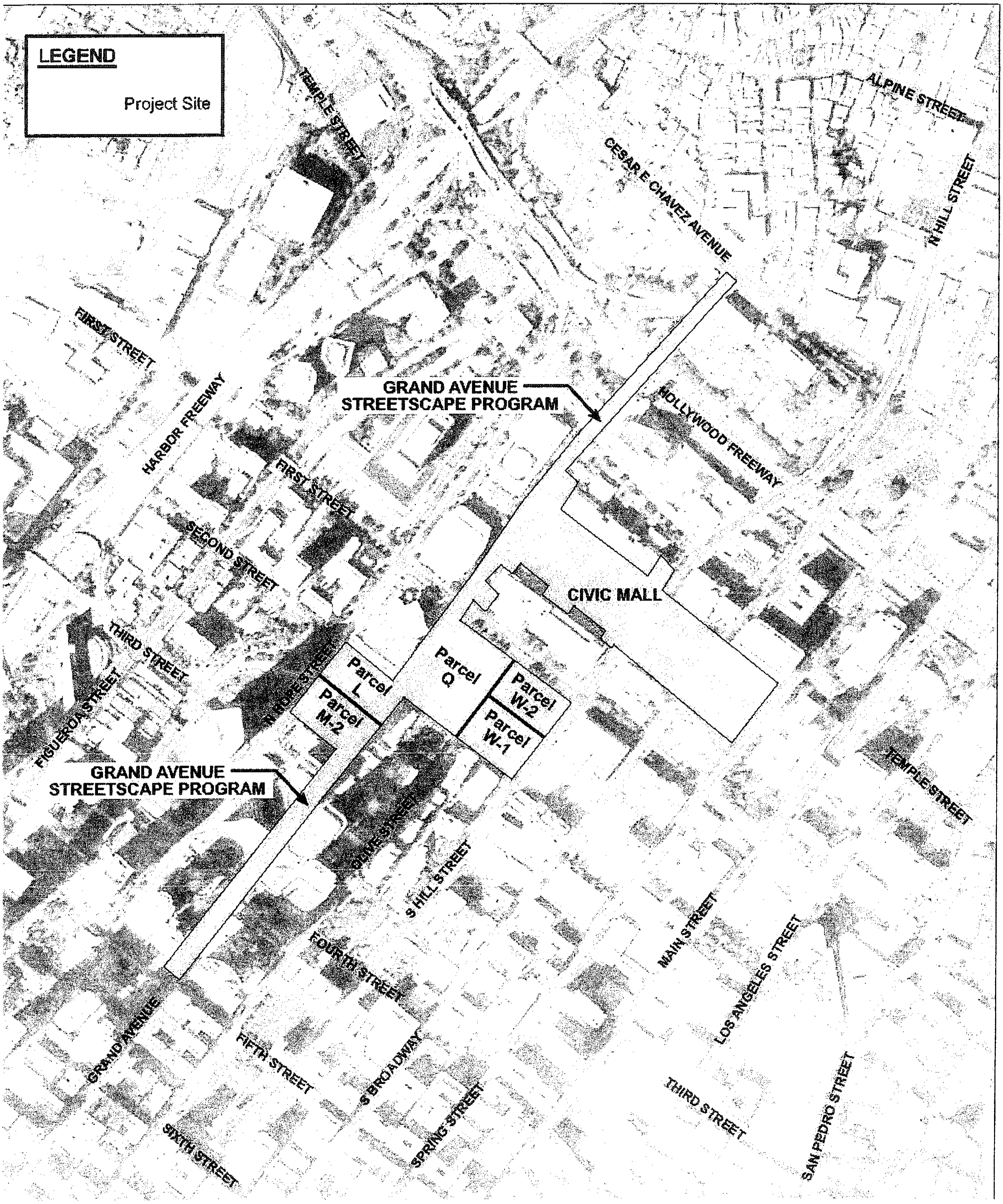
The Project Site consists of five parcels located in the Bunker Hill Urban Renewal Project Area; the Grand Avenue right-of-way between 5th Street and Cesar Chavez Avenue; and the Los Angeles Civic Mall, between Grand Avenue and Spring Street. The location of the Project Site and an identification of the Project's several components are show in Figure 4-1. The overall concept plan for the Project is shown in Figure 4-2. The individual Project components are described in more detail as follows:

The Civic Mall Park

The Proposed Project will create a 16-acre Civic Park by expanding the Los Angeles County Civic Mall located between Grand Avenue and Spring Street. Figure 4-3 shows the Conceptual Plan for the Civic Park. Most of these improvements are related to improving access to and usability of the Park. The Project will make the following changes that may affect auto access and circulation:

- County Mall Garage Ramps to Grand Avenue. The ramps to/from the County Mall parking garage on Grand Avenue will be re-configured. The County Mall garage is a two-level garage located under the Civic Mall between Grand Avenue and Hill Street. The garage is currently a permit-only garage for the County, with no access for the public (except on some evenings and weekends when it serves as additional parking for the Music Center across the street). Currently, the ramps are configured perpendicular to Grand Avenue, with the south ramp for entering traffic and the north ramp for exiting traffic. Left turns are allowed both in and out of these ramps, except in the P.M. peak hour when left turns out are prohibited.

  In order to improve pedestrian access and use of the Park, the Project would retain both ramps but would reconfigure them to be slip ramps parallel to Grand Avenue.



Source: PCR Services Corporation

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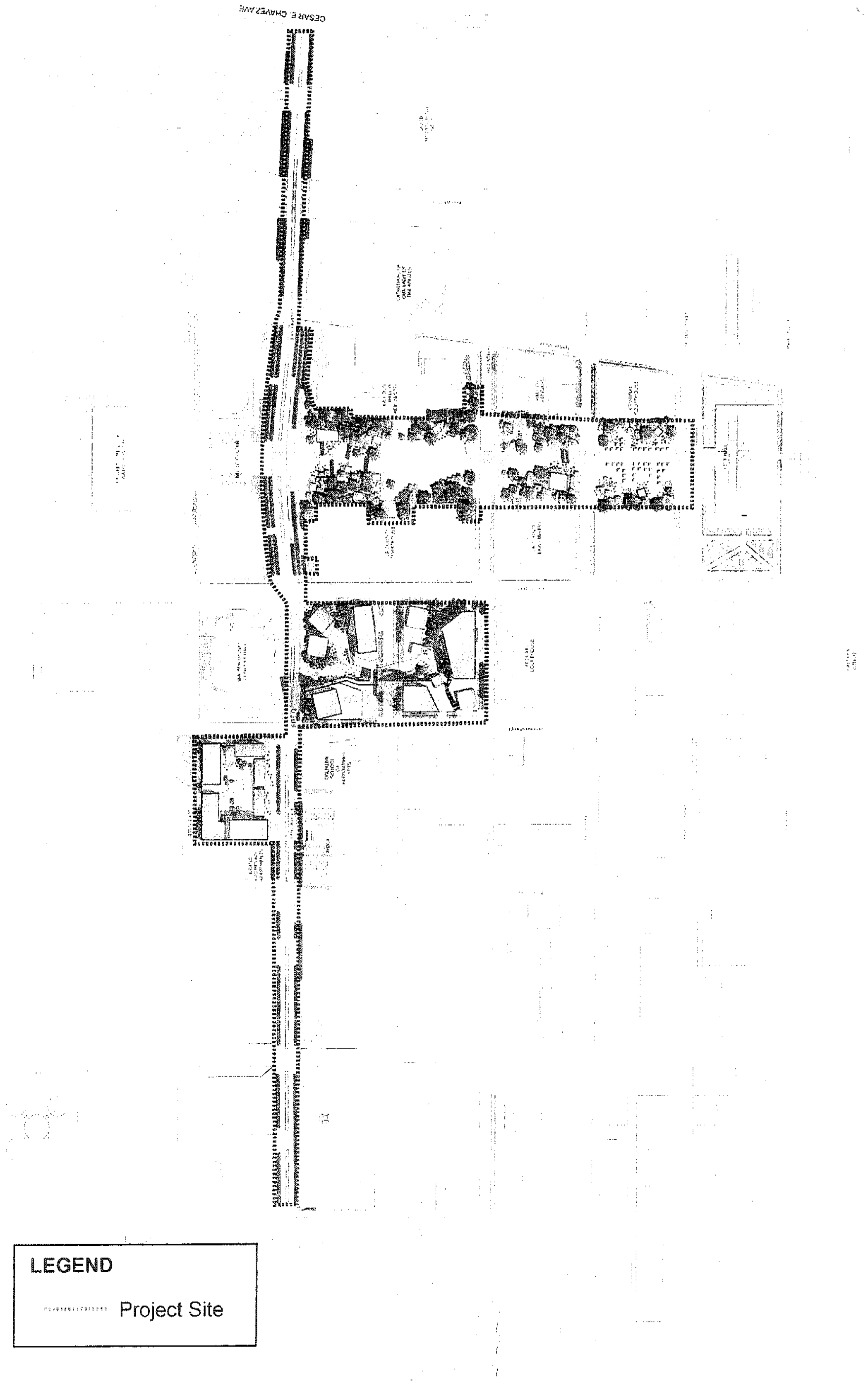
Figure 4-1
Proposed Project Site and Components



Source: PCR Services Corporation

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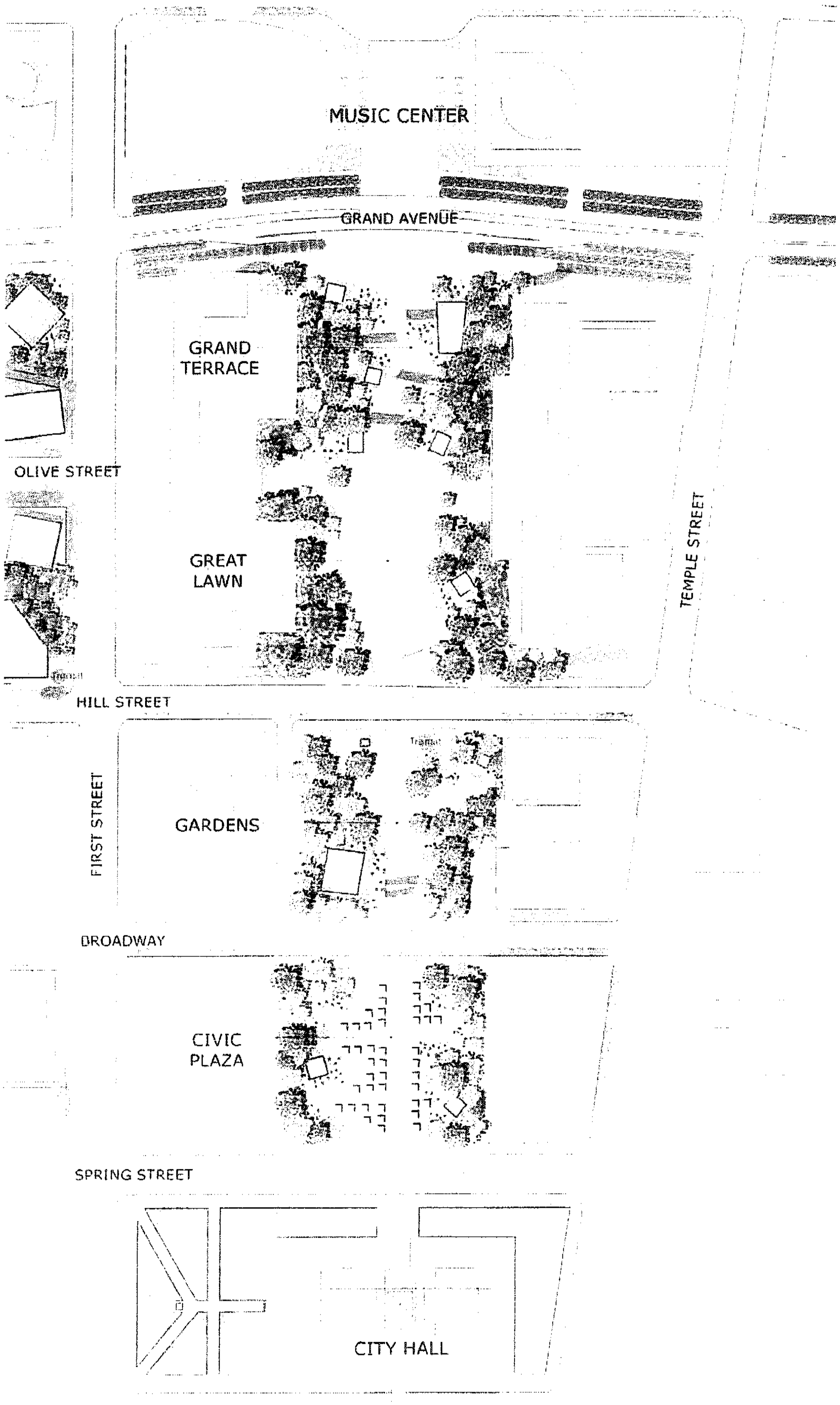
Figure 4-2
Overview of Grand Avenue Conceptual Plan



Source: PCR Services Corporation

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Figure 4-3
Conceptual Plan for Civic Park

Left turns would no longer be possible on Grand Avenue, so all movements would be right-in and right-out. This would affect existing inbound left-turning traffic in both peak periods – which instead would have to enter the garage via southbound Hill Street, and existing exiting left-turning traffic in the AM peak hour, which would have to exit via southbound Hill Street instead. (Access/egress is limited to right turns only due to the median in this portion of Hill Street).

The Project also proposes to replace the upper sections of the helical ramps to the garage on Hill Street with a similar configuration of slip ramps (configured parallel to the street rather than the current configuration perpendicular to the street), thereby improving pedestrian access to the Park. These entry and exit ramps are currently right-in/right-out only and so would remain that way in the future, and traffic circulation would be unaffected.

- Mid-Block Crosswalks. In order to improve pedestrian circulation along the Civic Mall, the Project will install new mid-block crosswalks on Hill Street, Broadway and Spring Street. Signalized crosswalks already exist in these locations but they will be upgraded as part of the Proposed Project.

- New Buildings/Land Uses. The Project will not introduce any significant new buildings or land uses into the Civic Mall. There is already a Starbucks coffee store in the Central Mall between Grand Avenue and Hill Street. The Proposed Project may introduce some new small pavilions or kiosks associated with retail sales to people already in the area, but there will be no new buildings that would be independent generators of new vehicle trips to the area – with one exception, up to 10,000 square feet of restaurant space.

The traffic analysis takes into account the reconfiguration of the garage ramps on Grand Avenue through the re-assignment of AM and PM peak hour left-turning traffic (as appropriate) from the Grand Avenue driveways to the Hill Street driveways of the garage.

The traffic analysis also takes into account the additional traffic that would be generated from the new restaurant space in the Civic Mall Park.

Anticipated Civic Park Uses

The anticipated range and types of activities in the Civic Park are as follows.

Typical Day-to Day Activity

Typically, day to day use of the park would take place by people already in the downtown area, namely, residents of the Bunker Hill area, employees in the Civic

Center and Bunker Hill areas, and visitors to such Civic Center and Bunker Hill uses as the County Administration and Court Buildings, Los Angeles City Hall, the Cathedral, the Music Center, the Walt Disney Concert Hall, and the Museum of Contemporary Art. Such day-to-day uses would include people walking and strolling in the park, enjoying the gardens, and lunching in the park, as well as activities focused on the local population – such as convenient seating (for reading areas and with Wi-Fi access), food kiosks, board and lawn games, and the like. In addition to these typical users, there may be users of the Park who would not be in the downtown area for some other reason or activity.

Weekly, Periodic and Seasonal Events

The Project also anticipates the programming of regular weekly, periodic, or seasonal events in the Park. These could include a wide variety of events such as book fairs, arts/antiques fairs, and concerts. These events would most typically occur at lunchtime (most likely targeted to the local downtown population), evenings (usually starting between 7pm and 8pm) and on weekends.

Annual Events, Festivals and Holiday Events

These types of special events that would be programmed in the Civic Park would occur on an irregular basis, and would typically occur on public holidays, at weekends, or in the evenings, i.e. outside the peak hours – when traffic volumes are much lower then during peak hours.

The traffic analysis considers these Civic Park activities in Section 5.4.

Grand Avenue Streetscape Program

The Project will also include a Streetscape Program for the stretch of Grand Avenue between Cesar Chavez Avenue in the north and Fifth Street in the south. Figure 4-4 shows the Conceptual Plan for the Grand Avenue Streetscape Program. These improvements are intended to improve the quality of the pedestrian experience along Grand Avenue and to enhance the perception of Grand Avenue as a memorable urban thoroughfare. Such improvements could include wider sidewalks where feasible, enhanced street lighting and signage, benches and bus shelters, new street trees, and other ornamental plantings.

However, such street improvements are not intended to decrease existing street or vehicular capacity. Existing on-street parking would also be retained wherever feasible. These improvements are therefore not expected to have any significant impact on traffic circulation in the area.

The Land Use Development Program

Overview

The proposed Project comprises two development options. Projected land uses on the five parcels consist of a combination of residential, retail, office, and hotel uses.

Project with County Office Building Option

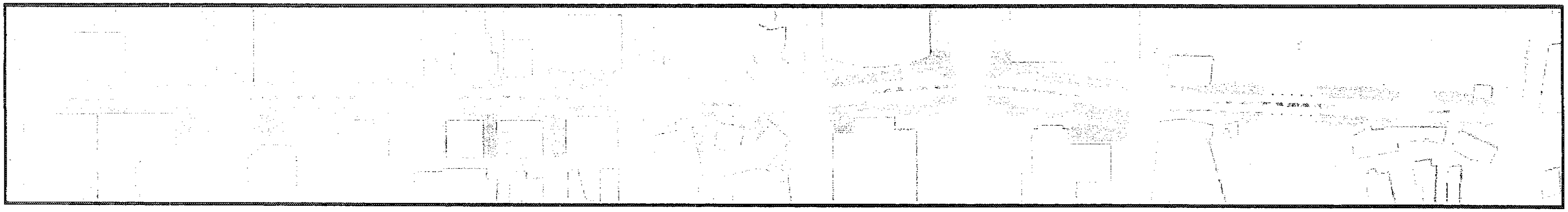
Total development proposed for the five parcels consists of up to 2,060 residential units, 20% of which (up to 412 units) would be provided as affordable housing; up to 275 hotel rooms; up to 449,000 square feet of retail space; and up to 681,000 square feet of government office space. The office space would potentially provide new space for the County administration functions currently housed in the Hall of Administration (HOA) and surrounding lease facilities. (The EIR analysis assumes the current HOA would be back-filled so no traffic adjustments were made for the existing HOA). This Project Option would provide approximately 5,035 parking spaces. All proposed parking would be provided in podium and subterranean parking structures.

The Conceptual Plan for the Development Parcels is shown in Figure 4-5. An overview of the proposed land uses for each parcel in this Project Option is presented in Table 4-1 below. The proposed conceptual plan for the development parcels is the primary basis for the traffic and parking analysis described in Chapter 5.

Table 4-1. Proposed Project with County Office Building Option Land Use Development Summary

Parcel	Residential		Commercial		
	Total Units	Affordable Units	Retail (sq. ft.)	Hotel (Rooms)	Office (sq. ft.)
Parcel Q	500	100	284,000	275	0
Parcels W-1/W-2	710	142	64,000	0	681,000
Parcels L/M-2	850	170	101,000	0	0
Total (All Parcels)	2,060	412	449,000	275	681,000

Source: The Related Companies, April, 2006



Source: PCR Services Corporation

The Plan Proposes the Following Improvements:

The goal of the Grand Avenue street improvements will be to create an urban thoroughfare through a key area of downtown Los Angeles. These improvements are intended to foster an active pedestrian environment without compromise to the functional requirements of vehicular circulation.

Toward this end, sidewalks will be widened wherever feasible from Fifth Street north to Cesar Chavez Avenue, and planting beds will be maximized in order to promote the growth of healthy and mature street trees. The existing mid-street openings along Grand Avenue will be examined with the intent of either replacing these spaces with planted medians, or providing additional roadway to compensate for widened sidewalks. Such improvements are not intended to decrease existing vehicular capacity, and existing on-street parking will be maintained wherever feasible.

A varied landscape will be implemented. The landscape will be comprised of trees providing extensive shade and seasonal color for the street, as well as flower beds and other plantings.

Contemporary benches and lights will be introduced. These furnishings will provide and consistent and modern identity for the street, and will elevate the quality of the street environment.

N

Not to Scale

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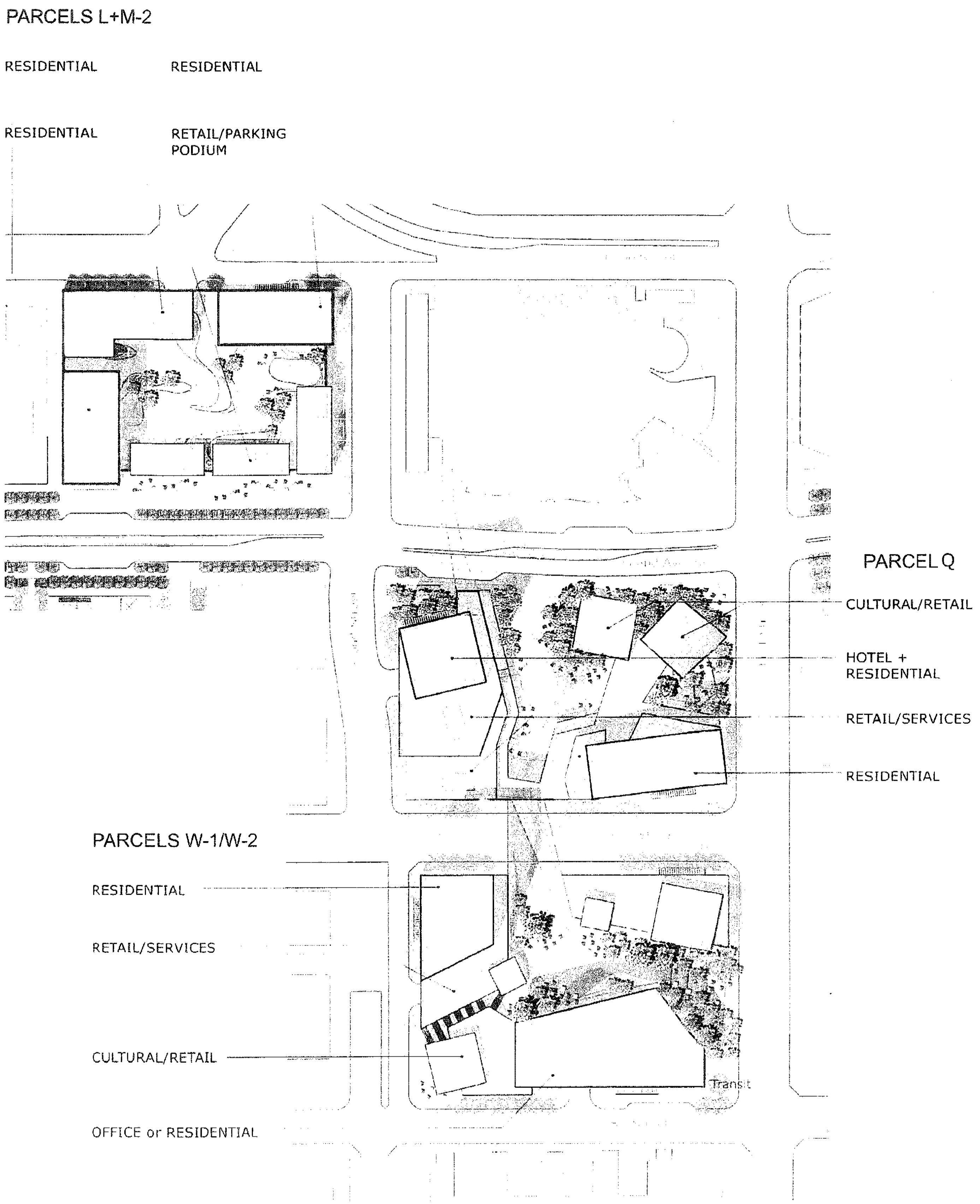
Figure 4-4
Conceptual Plan for Grand Avenue Streetscape Program



Source: PCR Services Corporation

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Figure 4-5
Conceptual Parcel Development Plan

Project with Additional Residential Development Option

This option would be essentially the same as the Project with County Office Building Option, except that the office building on Parcel W would be replaced with additional housing (600 units, of which 20% or 120 would be affordable housing). Total housing proposed for the five parcels for this Project Option would comprise 2,660 residential units, 20% of which (up to 532 units) would be provided as affordable housing. The remainder of the Project would be the same as the other option, with up to 275 hotel rooms and up to 449,000 square feet of retail space. This Project Option would provide approximately 5,255 parking spaces. All proposed parking would be provided in podium and subterranean parking structures.

The Conceptual Plan for the Development Parcels is shown in Figure 4-5. An overview of the proposed land uses for each parcel in this Project Option is presented in Table 4-2 below.

Table 4-2. **Proposed Project with Additional Residential Option Land Use Development Summary**

Parcel	Residential		Commercial		
	Total Units	Affordable Units	Retail (sq. ft.)	Hotel (Rooms)	Office (sq. ft.)
Parcel Q	500	100	284,000	275	0
Parcels W-1/W-2	1,310	262	64,000	0	0
Parcels L/M-2	850	170	101,000	0	0
Total (All Parcels)	2,660	532	449,000	275	0

Source: The Related Companies, April, 2006

Land Use Equivalency Program

The proposed land use development summary is conceptual. In order to fully respond to the future needs and demands of the Southern California economy, the Proposed Project includes an Equivalency Program that would allow the composition of on-site development to be modified to respond to future needs in a manner that does not increase the Project's impacts on the environment. The Equivalency Program would provide flexibility for modifications to land uses and square footages within the five parcels. Within this framework, land uses can be exchanged for certain other permitted land uses so long as the limitations of the Equivalency Program are satisfied and no additional environmental impacts occur. All permitted land use increases can be exchanged for corresponding decreases of other land uses under the proposed Equivalency Program. In the context of traffic circulation and impacts, this relates to the overall number of trips generated by the Project, and allows land use exchanges as long as the total number of peak hour trips generated does not exceed the totals identified in this study (see Section 4.4 later in this chapter).

Project Parking

Project with County Office Building Option

This Project Option proposes a total of up to approximately 5,035 on-site parking spaces to serve both residential and commercial components of the Project. All proposed parking would be provided in podium and subterranean parking structures. The parking would be approximately distributed among the parcels as follows:

Parcel Q	1,510 spaces
Parcel W-1/W-2	1,955 spaces
Parcel L/M-2	1,570 spaces
Total	5,035 spaces

Project with Additional Residential Development Option

This Project Option proposes a total of up to approximately 5,255 on-site parking spaces to serve both residential and commercial components of the Project. All proposed parking would be provided in podium and subterranean parking structures. The parking would be approximately distributed among the parcels as follows:

Parcel Q	1,510 spaces
Parcel W-1/W-2	2,175 spaces
Parcel L/M-2	1,570 spaces
Total	5,255 spaces

Project Access and Driveways

A parking garage will be located on each of the development parcels. The anticipated location of project driveways to access the parking garages is shown in Figure 4-6. The parking supply will include two general types of parking – residential parking and commercial parking. The residential parking will be dedicated to the residential uses only and will be physically separate from the commercial parking. The commercial parking will generally be accessible to all commercial users (except for any valet areas and certain areas reserved for hotel use on Parcel Q).

Project access and driveway locations will be the same for both Project Options.

Parcel Q Access

This parcel will comprise local and destination retail/commercial uses, the 275-room hotel, and residential uses. The hotel and some of the condominium units will be in one tower on the southwest corner of the block, with the remaining residential units (condominiums and affordable rental/apartment units) in a second tower on the northeast corner of the block.

There will be no driveway access off of Grand Avenue. A curb drop-off area (in a curb pull-out) will be provided on Grand Avenue at mid-block, starting just north of the hotel entrance.

The main public garage access will be located on Olive Street about mid-block between First and Second Streets. This driveway will be unsignalized (due to the lack of sufficient distance between 1st and 2nd Streets to accommodate a new signal) and will allow all movements except for left-turns out of the Project (which will not be possible due to the configuration and extent of the double northbound left turn lanes on Olive Street). This driveway will serve the retail/commercial components of the Project.

A secondary public garage access will be located on Lower Grand Avenue, generally opposite the entrance to the Disney Hall garage. This driveway will serve as a secondary exit point (only) for the retail/commercial components of the Project (public entry to the retail/commercial uses will not be available via this driveway). Immediately adjacent to this exit driveway on Lower Grand Avenue will be a private entry and exit driveway for the residential component of the Project.

A driveway on 1st Street, midway between Grand Avenue and Olive Street will be right-in and right-out only and will provide access/egress to a valet parking area on the mezzanine level of the Parcel Q development. This valet area may be used by visitors to the retail commercial components of the Project, as well as by residents (condominiums and affordable units) of the second residential tower at the corner of 1st Street and Olive Street. Cars that have been dropped at the hotel valet zone on Grand Avenue will be brought into the garage via this driveway.

Two driveways will be provided on 2nd Street. A mid-block driveway between Grand Avenue and Olive Street will provide full movement access exclusively for residents of the hotel tower condominiums. A second driveway will be located on 2nd Street between the residential driveway and Grand Avenue. This will be an exit right turn out only, that will only be used to return valet cars to the hotel curb on Grand Avenue.

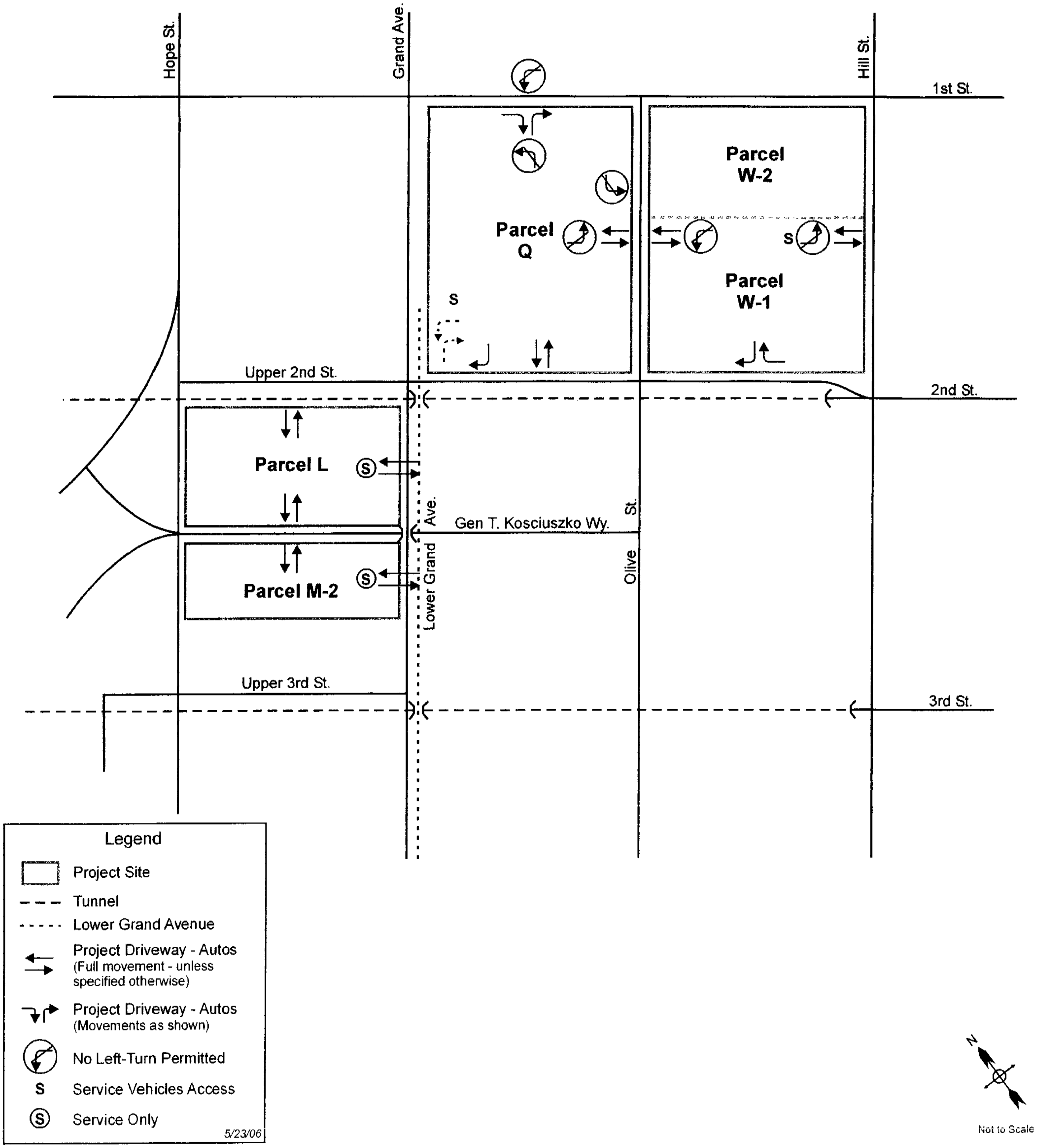

Figure 4-6
Project Site and Proposed Access Locations

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

All truck and service vehicle access for Parcel Q will occur at Lower Grand Avenue where the truck loading docks will be located to the north of the garage driveway.

Parcels W-1/W-2 Access

This parcel will include a smaller amount of retail commercial uses than Parcel Q, a residential tower and an office tower (for the Project with County Office Building Option). A public garage will be accessed via a main entrance driveway on Hill Street, mid-block between First and Second Streets. This will be an unsignalized driveway (due to the lack of sufficient distance between 1st and 2nd Streets to accommodate a new signal) allowing all turns except left turns out (the traffic volumes on Hill Street will preclude convenient left turns out). This entrance will provide access to parking for both the office building (or residential building) and the retail/commercial uses.

A secondary public garage entrance will be provided on Olive Street, mid-block between First and Second Streets, opposite the entrance to the Parcel Q garage. This will provide access to the retail commercial parking, the office parking, and the residential parking. This will be a right-in/right-out only driveway (because this driveway will be unsignalized, and because the configuration of Olive Street with northbound double left turn lanes precludes providing for a southbound left-turn).

A driveway on Second Street, about mid-block between Olive Street and Hill Street will provide exclusive access to residential parking, and possibly to an internal valet/drop-off area within the garage. This will be a right-in/right-out only driveway as Second Street is one-way westbound on this block.

All truck and service vehicle access for Parcel W will occur at the Hill Street driveway where the truck loading docks will be located.

For the Project with Additional Residential Development Option, access/egress points would be the same, with all driveways providing access/egress for the two residential towers.

Parcels L/M-2 Access

This parcel will comprise some retail commercial uses and two residential towers, built on a platform extending over General Thaddeus Kosciusko Way. In keeping with other buildings along Grand Avenue between First Street and Fifth Street, no vehicular access will be provided off of Grand Avenue.

The principal access to these parcels will be provided via an unsignalized full movement driveway on Second Street mid-way between Grand Avenue and Hope Street. This driveway will provide access to public parking and to private residential parking.

Two driveways for exclusive residential use will also be provided on General Thaddeus Kosciusko Way midday between Hope Street and Lower Grand Avenue – one to Parcel L and one to Parcel M-2. These will be unsignalized full movement driveways.

All truck and service vehicle access for Parcels L/M-2 will occur on Lower Grand Avenue where the truck loading docks will be located.

4.2 Project Transportation Characteristics

The transportation characteristics of the Project will reflect its location in downtown Los Angeles. It is expected that the Project will have lower levels of car usage, lower vehicle trip rates, and much higher levels of transit usage and walking than in more conventional and suburban locations, because of the following:

- The urban nature of the Project, in densely developed downtown Los Angeles.
- The close proximity of the Project to the highest levels of rail and bus transit service in Los Angeles.
- The proximity of the Project within walking distance of many other destinations in downtown including office towers and the Civic Center (work destinations), the Music Center, the Walt Disney Concert Hall, and restaurants (cultural and entertainment destinations), and residential towers (customer base for the retail commercial uses).

A considerable number of transit and walking trips will therefore replace conventional auto trips.

The transportation philosophy of the Project is to capitalize on the mixed use nature of the Project itself, as well as its location downtown, to:

- encourage and support transit use,
- provide convenient access to transit,
- create and enhance a walkable environment in the Bunker Hill/Civic Center area of downtown, and to
- provide convenient and attractive pedestrian connections

Project Trip Generation

The typical methodology of estimating trip generation using trip rates from Institute of Transportation Engineers (ITE) data[3] does not adequately reflect the characteristics of the proposed Project and the downtown environment in which it is located, because those trip rates were derived from data typically collected from stand-alone (single use) suburban sites, rather than sites with the characteristics defined above. The trip rates therefore require the following types of adjustments to reflect these characteristics.

Trips Internal to the Project

With a project as large as the proposed Project, some trips will both start and end within the Project itself – and thus will be walking trips not requiring use of a car. These will include people who live in the Project making a trip to the retail, restaurant, and/or other commercial uses and the health club, or even to the office building if they both live and work in the Project. It will include office workers who visit the commercial uses in the Project. It will also include people who drive to the Project, but visit multiple destinations within the Project (for example retail and restaurant, or restaurant and health club). Because these people walk between those multiple destinations they will make only one vehicle trip rather than driving to each destination[4].

Trip Interaction with Adjacent Uses in the Downtown

The Project site is located in the heart of downtown, adjacent to or near many other uses including office buildings, entertainment uses, and residential towers. Some of the visitors to the Project commercial uses will come from these uses and thus will walk to the Project rather than drive, for example office workers or nearby downtown residents visiting the retail or restaurant uses and the health club. Similarly some visitors will be already visiting the Walt Disney Concert Hall and/or the Music Center, and will park there, and then walk across to the Project to eat at a restaurant or to shop before the show. In addition, some people who live in the Project, will make trips to other adjacent or nearby downtown uses (such as to work in office buildings or to restaurants), and will walk rather

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[3] Institute of Transportation Engineers, 7th Edition Trip Generation Manual, Washington D.C., 2003

[4] Experience and research shows that dense concentrations of land use mixes results in substantial interaction between uses, For example, a study of major suburban activity centers (NCHRP Report 323, *Travel Characteristics at Large-Scale Suburban Activity Centers*, Washington D.C., 1989) indicates various such trip-making characteristics, including: that 30% of residents in major activity centers also work there; that 10% to 15% of office trips make at least one stop on the way to/from work; that 15% to 30% of retail trips are internal to the activity center; and that 19% to 27% of hotel trips remain internal to the center. As these data are for suburban centers, the numbers would be expected to be higher in the more dense and transit rich environments of downtowns.

than drive a car[5]. The ability to make trips to other local destinations in the downtown without using a car will be a major appeal to those choosing to live in the Project and have an urban downtown lifestyle.

Trips Using Transit

As previously identified, the Project site is served by very significant levels of transit service, including both rail and bus transit. The Metro Red Line station with two portals on the Project site (on Parcel W-2 at Hill Street & 1st Street, and at the Court of Flags on the Civic Mall) provides direct access to the entire rail system in the metropolitan Los Angeles area, and 58 bus lines provided by eight transit operators serve the area of the Project site. In addition the LADOT DASH service provides shuttle bus service around downtown. The *Downtown Los Angeles Cordon Count*[6], conducted by LADOT in 2002, shows that transit use into and out of the downtown core including the Bunker Hill area is very high with about 41% of all peak period trips into/out of the entire downtown area occurring on transit and as rideshare passengers (32% on transit and 9% as rideshare). This data relates to all uses in the downtown but is heavily oriented to work-related trips because of the large number of jobs downtown[7]. The data in the *Downtown Los Angeles Cordon Count* show that the 2002 counts reflect a higher percentage using transit than in 1990 – largely due to the addition of rail transit to downtown Los Angeles (with 25% of all transit trips using rail).

Pass-By Trips

Even accounting for the types of adjustments defined above, and the significant levels of transit and walk trips, the majority of trips to and from the Project will continue to be made by automobile. However, some of those vehicle trips may already be passing by the site as existing trips on adjacent roadways. By stopping at the site they will not add traffic to the street system (although they will add trips to the Project driveways).

Trip Generation Estimates

The number of vehicle trips expected to be generated by the Project was estimated for each of the Project land uses for the AM peak hour and PM peak hour time periods. This analysis started with the trip generation rates from the Institute of Transportation Engineers, *Trip Generation – 7th Edition*, 2003, a standard source of trip rate information, but utilized adjustments to account for the factors discussed above in the preceding

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[5] See note 4, above.

[6] City of Los Angeles, *Downtown Cordon Count*, May 2002

[7] A recent survey of residents in Downtown Los Angeles (The Los Angeles Downtown Center Business Improvement District, Live, Work & Play Downtown L.A., 2005) identified that about 17% of downtown residents walk or bike to work and school; that about 9% take transit to work and school; and that 46% of residents also work at downtown locations.

paragraphs to reflect the specific mix of uses in the Project and its location in downtown Los Angeles.

The adjustment factors to account for trips remaining internal to the large mixed use project, and transit and walk trips in a dense downtown environment, were developed in conjunction with LADOT, and were based on a variety of sources including: those discussed above; the travel characteristics data in the *Downtown Los Angeles Cordon Count (2002)*; consideration of the individual Project land use components and the likelihood of transit and walk trips and trips remaining internal to the Project; consideration of the various other land uses nearby and the likelihood of trip interaction with the Proposed Project; and previously studied and approved/entitled major development projects in downtown (such as the Alameda District Specific Plan[8][9] and the Los Angeles Sports and Entertainment District Specific Plan[10][11]). The adjustment factors are shown in Appendix C, the LADOT Methodology Memorandum of Understanding, and in the detailed trip generation calculations in Appendix A, and are summarized below.

Based on all of the considerations discussed above, and the characteristics of the Project, the reductions that were used for trips remaining internal to the Project were 5% for residential and hotel uses, 15% for retail and restaurant uses, and 20% for the health club. Reductions for walk trips thru interaction with other downtown buildings were 10% for the hotel and market, 15% for the condominiums, 20% for the apartments and retail, 30% for the restaurants, and 35% for the health club. The reductions used for transit, shuttle bus and rideshare were 5% for most uses, except 20% for the hotel, 25% for the apartments, and 40% for the office building. Pass-by trips were estimated using standard LADOT adjustment factors by type of use[12], and were 10% for restaurant and the event facility uses, 30% to 40% for retail uses (depending on the size of retail square footage in each block) and 40% for the market.

The adjusted trip generation rates used in the study are shown in Table 4-3 for each land use and for the A.M. peak and P.M. peak hours. Also shown is the combined trip discount factor for each land use representing the sum of the adjustments discussed above. As shown in Table 4-3, the overall reductions were approximately 29% for residential trips (average), 34% for the hotel trips, 43% for the office trips, 55% for the retail components of the Project, 50% for the restaurants, 23% for the event facility, and 62% for the health club.

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[8] City of Los Angeles, *Alameda District Specific Plan FEIR* November, 1995

[9] City of Los Angeles, *Ordinance No. 171139 - Alameda District Specific Plan*, June, 1996

[10] City of Los Angeles, *Los Angeles Sports & Entertainment District FEIR*, April, 2001

[11] City of Los Angeles, *Ordinance No. 174224 - Los Angeles Sports &Entertainment District Specific Plan*, August, 2001.

[12] City of Los Angeles Department of Transportation, *Traffic Study Policies and Procedures*, 2003

Table 4-3 **Trip Generation Rates** 4/21/2006

Land Use	Land Use ITE Source Code	Trip Basis	A.M Peak Hour			P.M Peak Hour			Net Trip Reduction Factor[12]
			In	Out	Total Trip Rate	In	Out	Total Trip Rate	
Condominiums	232[1,2]	Trips per D.U	19%	81%	0.26	62%	38%	0.28	24%
Apartments	222[1,3]	Trips per D.U	25%	75%	0.17	61%	39%	0.20	44%
Hotel	310[1,4]	Trips per Room	61%	39%	0.35	53%	47%	0.40	34%
Office	715[1,5]	Trips per 1,000 S.F	89%	11%	0.96	15%	85%	0.90	43%
Supermarket	850[1,6]	Trips per 1,000 S.F	61%	39%	1.66	51%	49%	4.55	55%
Retail	820[1,7]	Trips per 1,000 S.F	61%	39%	0.72	48%	52%	2.85	55%
Restaurant	931[1,8,9]	Trips per 1,000 S.F	52%	48%	0.38	67%	33%	3.52	50%
Event Facility	444[1,10]	Trips per Seat	-	-	0.00	75%	25%	0.06	23%
Health Club	492[1,11]	Trips per 1,000 S.F	42%	58%	0.41	51%	49%	1.39	62%

Trip rates are net adjusted rates, per calculations in Appendix A.

1. Base unadjusted ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, as shown in following notes.
2. ITE 232 trip generation equation for High-Rise Condominium / Townhouse was used. (AM :- $T=0.29(X)+28.26$ and PM :- $T=0.34(X)+15.47$)
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation for AM Peak and trip rate for PM Peak for Hotel was used. (AM :- $LN(T) = 1.24*LN(X) - 2.00$ and PM peak hour trip rate = 0.59)
5. ITE 715 trip generation equation for Single Tenant Office Building was used. (AM $T = 1.66*(X) + 22.94$ and PM $T = 1.52(X) + 34.88$)
6. ITE 850 trip generation equation for Supermarket was used. (AM :- $LN(T) = 1.70*LN(X) - 1.42$ and PM :- $LN(T) = 0.79*LN(X) + 3.20$)
7. ITE 820 trip generation equation for Shopping Center was used. (AM :- $LN(T) = 0.60*LN(X) + 2.29$ and PM :- $LN(T) = 0.66*LN(X) + 3.40$)
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sitdown Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.
12. Combined trip reduction factors representing internal trips, walk trips, transit trips, and pass-by trips, per Appendix A.

Note: Where ITE trip generation equation was used, the trip rate shown in the table is the average rate for all Project Parcels and may differ slightly for individual parcels shown in Table 4-4, and Table 4-5.

These trip rates were applied to the land use quantities for each parcel of the Project. The detailed calculations are shown in Appendix A. A summary of the estimates of vehicle trips that would be generated by the Project, in total, by parcel, and by land use type, is shown in Table 4-4 for the Project with County Office Building Option, and in Table 4-5 for the Project with Residential Option.

Project with County Office Building Option

This Project Option would generate a total of about 1,551 vehicle trips in the A.M. peak hour, of which 919 would be inbound to the Project, and 632 would be outbound trips. In the P.M. peak hour the Project would generate a total of about 2,464 vehicle trips, of which 1,120 would be inbound to the project and 1,344 trips would be outbound from the Project.

Table 4-4 shows the total trips that would be generated by each development parcel. In the A.M. peak hour, Parcel Q would generate 416 vehicle trips, Parcel W-1/W-2 would generate 872 trips, and Parcel L/M-2 would generate 263 trips. In the P.M. peak hour, Parcel Q would generate 984 vehicle trips, Parcel W-1/W-2 would generate 986 trips, and Parcel L/M-2 would generate 494 trips.

Also shown in Table 4-4 is the breakdown of trips by land use in the overall Project. In the A.M. peak hour, about 499 trips would be generated by residential uses, 97 trips by the hotel, 298 trips by the commercial uses, and 657 trips by the office uses. In the P.M. peak hour, about 542 trips would be generated by residential uses, 110 trips by the hotel, 1,202 trips by the commercial uses, and 610 trips by the office uses.

Project with Additional Residential Development Option

This Project Option would generate less trips, and would generate a total of about 1,019 vehicle trips in the A.M. peak hour, of which 359 would be inbound to the Project, and 660 would be outbound trips. In the P.M. peak hour the Project would generate a total of about 2,003 vehicle trips, of which 1,121 would be inbound to the project and 882 trips would be outbound from the Project.

Table 4-5 shows the total trips that would be generated by each development parcel. These would be the same as for the Office Option for Parcels Q and L/M-2 and would only differ for Parcel W-1/W-2, which would generate 340 trips in the A.M. peak hour, and 525 trips, in the P.M. peak hour.

Also shown in Table 4-5 is the breakdown of trips by land use in the overall Project. In the A.M. peak hour, about 624 trips would be generated by residential uses, 97 trips by the hotel, and 298 trips by the commercial uses. In the P.M. peak hour, about 691 trips would be generated by residential uses, 110 trips by the hotel, and 1,202 trips by the commercial uses.

Table 4-4 Summary of Project Trip Generation - Project with County Office Building Option

4/21/2006

A. By Parcel

Project Component	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Parcel Q								
Condominiums	400	D.U	21	89	110	71	44	115
Apartments	100	D.U	4	13	17	12	8	20
Subtotal Residential			25	102	127	83	52	135
Hotel	275	Rooms	59	38	97	58	52	110
Supermarket	53,000	S.F	54	34	88	123	118	241
Retail	97,750	S.F	41	26	67	128	139	267
Restaurant	42,000	S.F	8	8	16	99	49	148
Event Facility	250	Seats	0	0	0	11	3	14
Health Club	50,000	S.F	9	12	21	36	33	69
Subtotal Commercial			112	80	192	397	342	739
Subtotal			196	220	416	538	446	984
Parcel W-1 / W-2								
Condominiums	568	D.U	28	119	147	98	60	158
Apartments	142	D.U	6	18	24	17	11	28
Subtotal Residential			34	137	171	115	70	186
Office	681,000	S.F	585	72	657	91	519	610
Retail	54,400	S.F	25	15	40	74	81	155
Restaurant	10,000	S.F	2	2	4	23	12	35
Subtotal Commercial			612	89	701	188	612	800
Subtotal			646	226	872	303	683	986
Parcel L / M-2								
Condominiums	680	D.U	33	139	172	116	71	187
Apartments	170	D.U	7	22	29	21	13	34
Subtotal Residential			40	161	201	137	84	221
Retail	73,100	S.F	34	22	56	106	114	220
Restaurant	15,000	S.F	3	3	6	36	17	53
Subtotal Commercial			37	25	62	142	131	273
Subtotal			77	186	263	279	215	494
Total All Parcels			919	632	1,551	1,120	1,344	2,464

Table 4-4 Summary of Project Trip Generation - Project with County Office Building Option

4/21/2006

B. By Land Use

Land Use Type	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Condominiums	1,648	D.U	82	347	429	285	175	460
Apartments	412	D.U	17	53	70	50	32	82
Subtotal Residential	2,060	D.U	99	400	499	335	207	542
Hotel	275	Rooms	59	38	97	58	52	110
Office	681,000	S.F	585	72	657	91	519	610
Supermarket	53,000	S.F	54	34	88	123	118	241
Retail	225,250	S.F	100	63	163	308	334	642
Restaurant	67,000	S.F	13	13	26	158	78	236
Event Facility	250	Seats	0	0	0	11	3	14
Health Club	50,000	S.F	9	12	21	36	33	69
Subtotal Commercial			761	194	955	727	1,085	1,812
Total			919	632	1,551	1,120	1,344	2,464

Table 4-5

Summary of Project Trip Generation
Project with Additional Residential Development Option

4/21/2006

A. By Parcel

Project Component	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Parcel Q								
Condominiums	400	D.U	21	89	110	71	44	115
Apartments	100	D.U	4	13	17	12	8	20
Subtotal Residential			25	102	127	83	52	135
Hotel	275	Rooms	59	38	97	58	52	110
Supermarket	53,000	S.F	54	34	88	123	118	241
Retail	97,750	S.F	41	26	67	128	139	267
Restaurant	42,000	S.F	8	8	16	99	49	148
Event Facility	250	Seats	0	0	0	11	3	14
Health Club	50,000	S.F	9	12	21	36	33	69
Subtotal Commercial			112	80	192	397	342	739
Subtotal			196	220	416	538	446	984
Parcel W-1 / W-2								
Condominiums	1,048	D.U	48	204	252	175	108	283
Apartments	262	D.U	11	33	44	32	20	52
Subtotal Residential			59	237	296	207	128	335
Office	0	S.F	0	0	0	0	0	0
Retail	54,400	S.F	25	15	40	74	81	155
Restaurant	10,000	S.F	2	2	4	23	12	35
Subtotal Commercial			27	17	44	97	93	190
Subtotal			86	254	340	304	221	525
Parcel L / M-2								
Condominiums	680	D.U	33	139	172	116	71	187
Apartments	170	D.U	7	22	29	21	13	34
Subtotal Residential			40	161	201	137	84	221
Retail	73,100	S.F	34	22	56	106	114	220
Restaurant	15,000	S.F	3	3	6	36	17	53
Subtotal Commercial			37	25	62	142	131	273
Subtotal			77	186	263	279	215	494
Total All Parcels			359	660	1,019	1,121	882	2,003

Table 4-5

Summary of Project Trip Generation
Project with Additional Residential Development Option

4/21/2006

B. By Land Use

Land Use Type	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Condominiums	2,128	D.U	102	432	534	362	223	585
Apartments	532	D.U	22	68	90	65	41	106
Subtotal Residential	2,660	D.U	124	500	624	427	264	691
Hotel	275	Rooms	59	38	97	58	52	110
Office	0	S.F	0	0	0	0	0	0
Supermarket	53,000	S.F	54	34	88	123	118	241
Retail	225,250	S.F	100	63	163	308	334	642
Restaurant	67,000	S.F	13	13	26	158	78	236
Event Facility	250	Seats	0	0	0	11	3	14
Health Club	50,000	S.F	9	12	21	36	33	69
Subtotal Commercial			176	122	298	636	566	1,202
Total			359	660	1,019	1,121	882	2,003

Project Trip Distribution and Assignment

The geographic distribution of Project trips is based on a number of factors, including the type of Project land uses, the geographic location and distribution of the population from which trips by visitors and employees of the commercial uses will originate, and the geographic location and distribution of employment and commercial centers to which residents of the Project will make trips. It is also based on the configuration and operating characteristics of the street system serving the Project.

The estimated trip distribution for the Project is shown in Figure 4-7 for inbound trips, and in Figure 4-8 for outbound trips. The distributions are different due to the locations of freeway ramps, the layout of one-way streets, and the location of Project driveways.

The distributions were developed in conjunction with LADOT (see Appendix D - LADOT Traffic Study Methodology Memorandum of Understanding) and were based on consideration of regional trip distribution information available in the Los Angeles County Congestion Management Program[13], a general consideration of the market areas for the specific Project land uses, previous studies of large scale developments in the downtown area[14], and the roadway system serving the Project.

The Project trips were assigned to the roadway network in the study area on the basis of these distributions. All trips generated by a Project parcel were assigned as originating or being destined to that parcel. Because the Project covers four blocks, and because different Project driveways access different streets, the distribution for each parcel differed slightly in some respects from the overall Project distribution shown in Figures 4-7 and 4-8 to reflect specific routings between driveways and freeway ramps or major arterials exiting the study area, and the operating characteristics of the street system (such as one-way streets).

4.3 Future With Project Traffic Projections

The traffic volumes forecast to be generated by the Project with Office Building Option are shown in Figure 4-9 for the A.M. peak hour and in Figure 4-10 for the P.M. peak hour.

Future total traffic volumes with the Project with Office Building Option were obtained by then adding these volumes to the background traffic previously forecast (in Chapter 3) for the future baseline condition without the Project. The resulting future with Project with Office Building Option traffic projections are shown in Figure 4-11 for the A.M. peak hour

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[13] LACMTA, *2004 Congestion Management Program for Los Angeles County*, 2004

[14] For example, Alameda District Specific Plan FEIR and Los Angeles Sports & Entertainment District FEIR

and in Figure 4-12 for the P.M. peak hour. These traffic forecasts were then used to evaluate potential Project traffic impacts, as described in the following chapter.

The same methodology was used to forecast traffic volumes for the Project with Additional Residential Development Option. Figures 4-13 thru 4-16 show the corresponding trip volume data for the Project with Additional Residential Development Option.

4.4 Land Use Equivalency Program

As discussed earlier, in Section 4.1, the Proposed Project includes an Equivalency Program that would allow the composition of on-site development to be modified to respond to future needs in a manner that does not increase the Project's impacts on the environment.

Within this framework, land uses can be exchanged for certain other permitted land uses so long as the limitations of the Equivalency Program are satisfied and no additional environmental impacts occur. All permitted land use increases can be exchanged for corresponding decreases of other land uses under the proposed Equivalency Program.

In the context of traffic circulation and impacts, this relates to the overall number of trips generated by the Project, and allows land use exchanges as long as the total number of peak hour trips generated does not exceed the totals identified in this study. Table 4-6 shows the trip equivalencies developed for the Proposed Project.

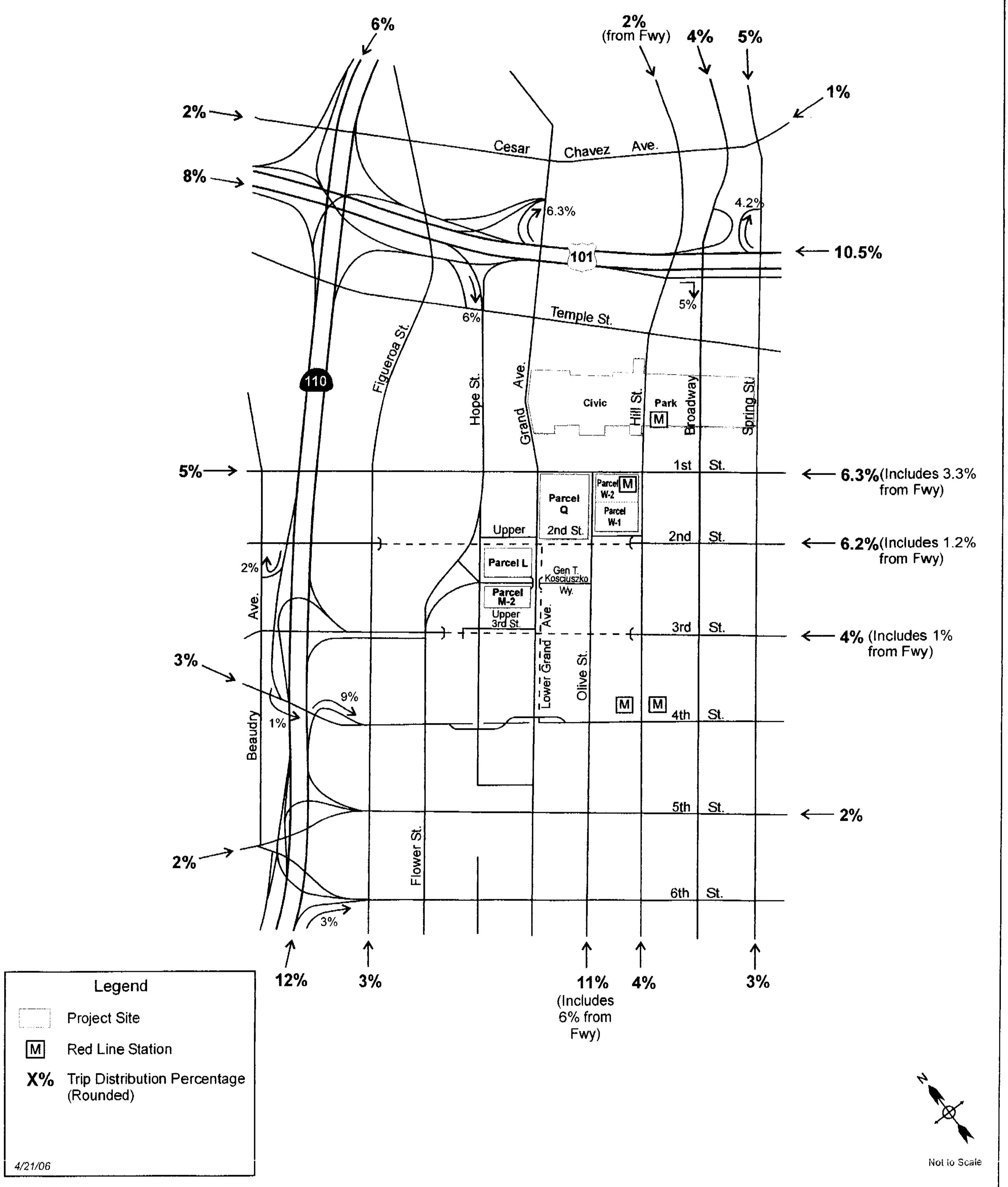

Figure 4-7
Project Trip Distribution - Inbound

Grand Avenue Project

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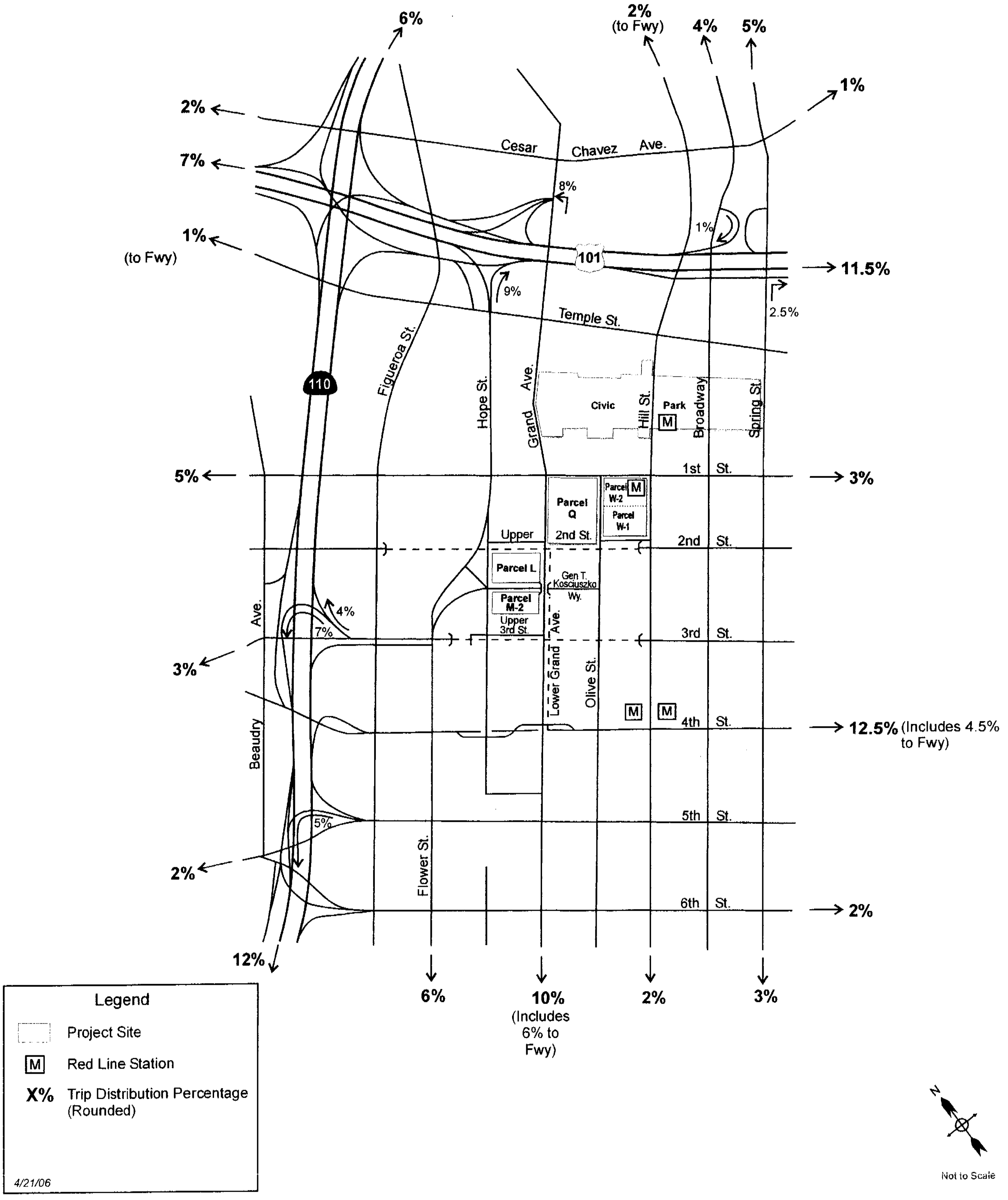

Figure 4-8
Project Trip Distribution - Outbound

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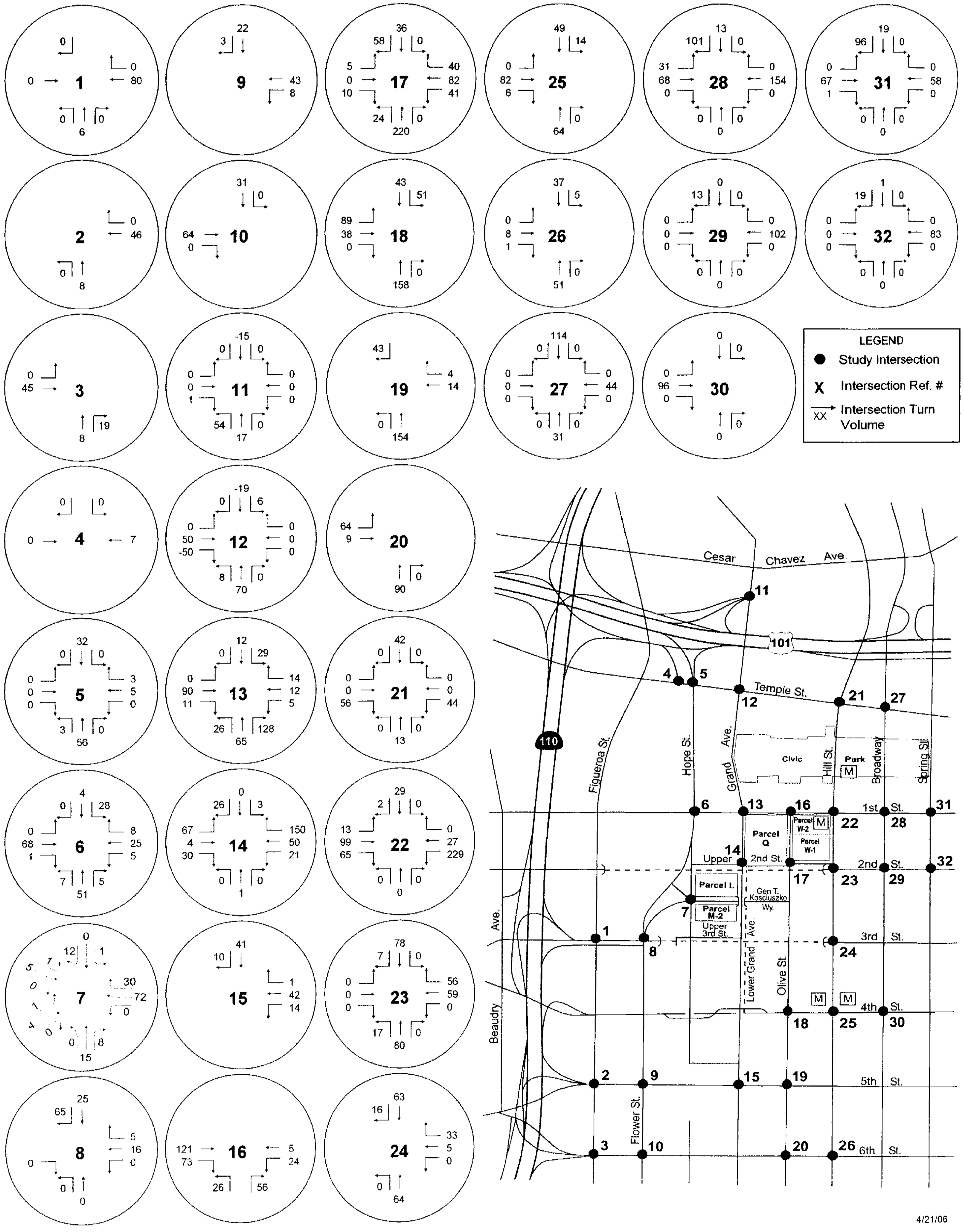

Figure 4-9

Project Only Traffic Volumes - AM Peak Hour - Project with County Office Building Option

Grand Avenue Project

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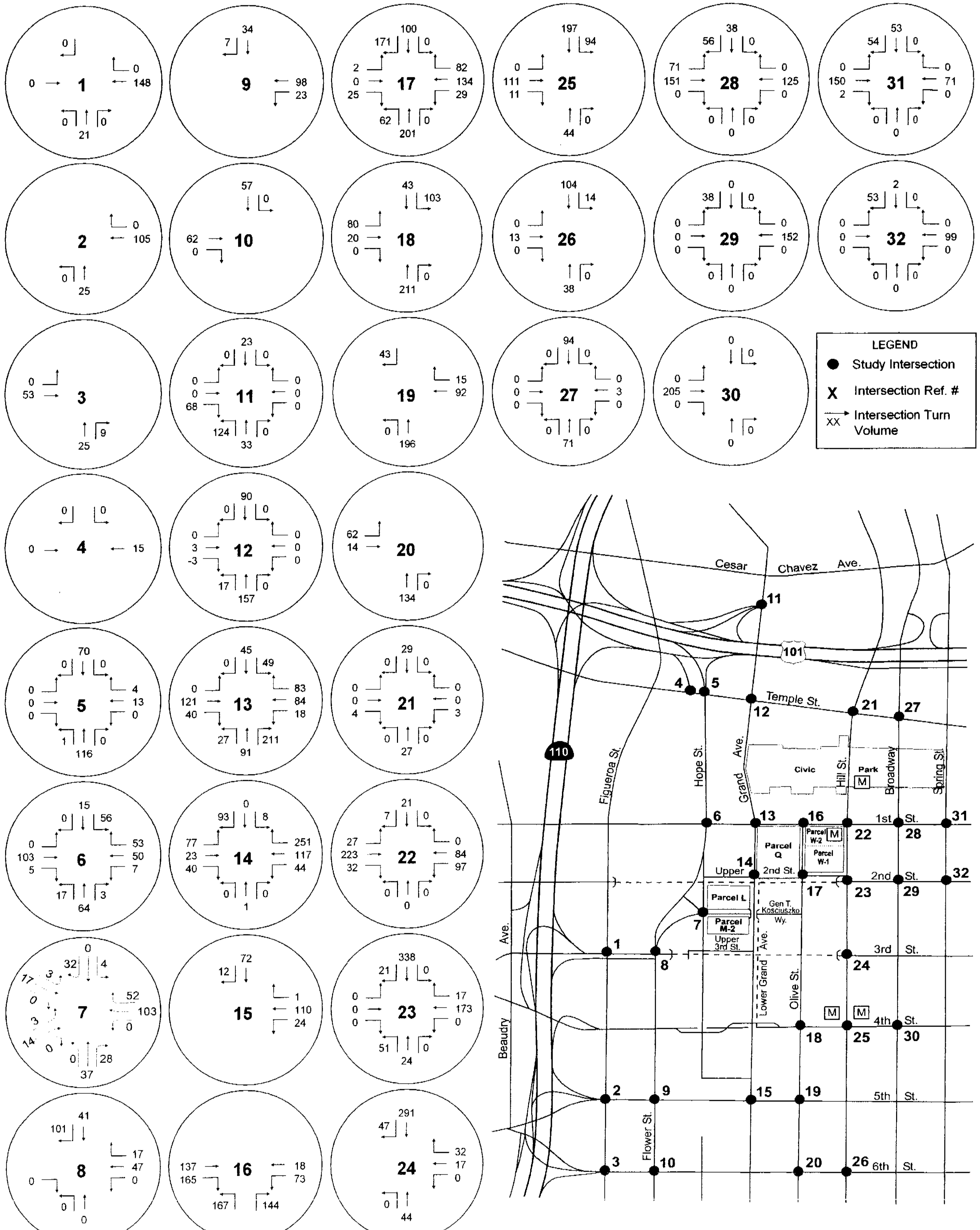

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Figure 4-10
Project Only Traffic Volumes - PM Peak Hour - Project with County Office Building Option

Grand Avenue Project

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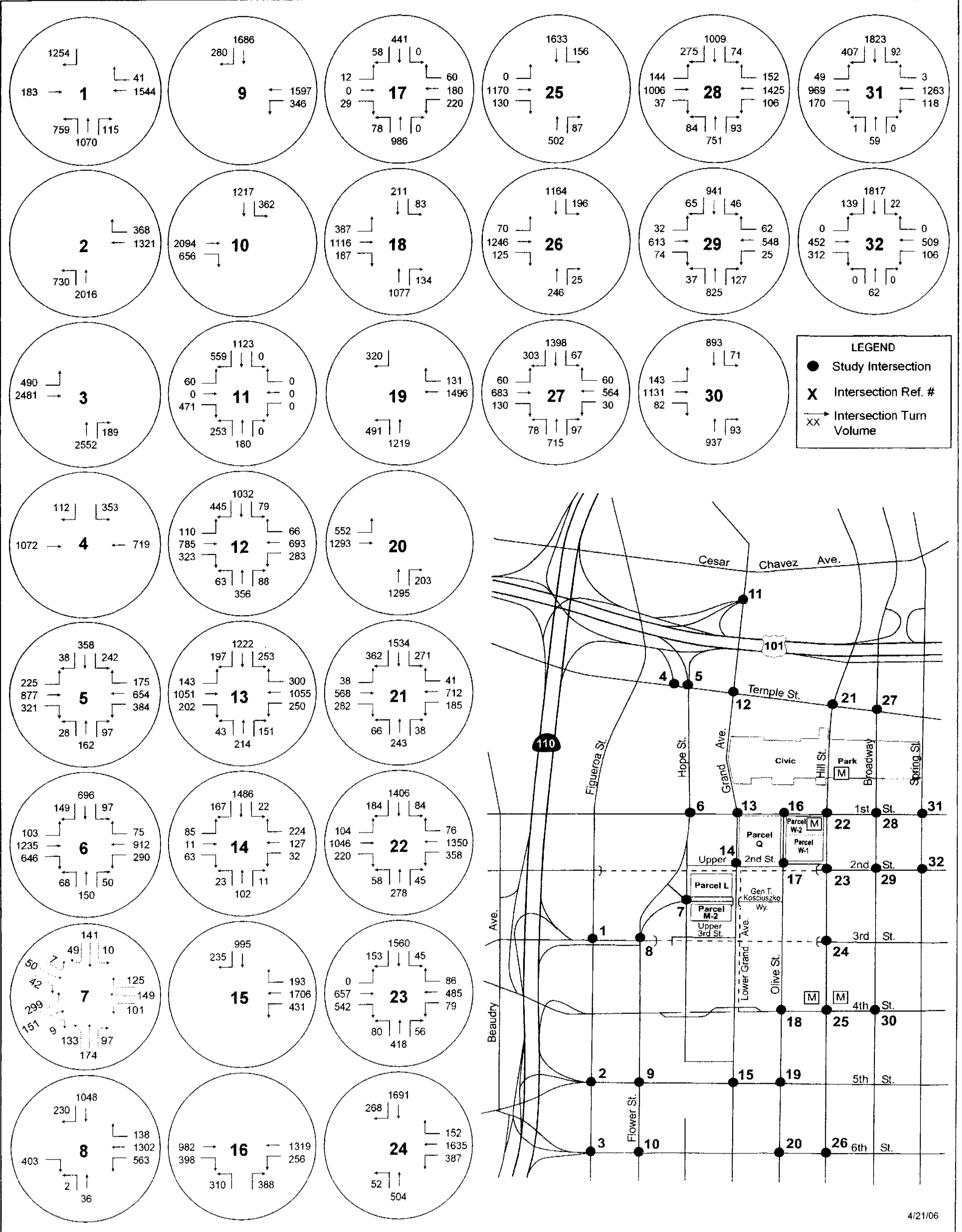

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Figure 4-11
Future with Project Traffic Volumes - AM Peak Hour - Project with County Office Building Option

Grand Avenue Project

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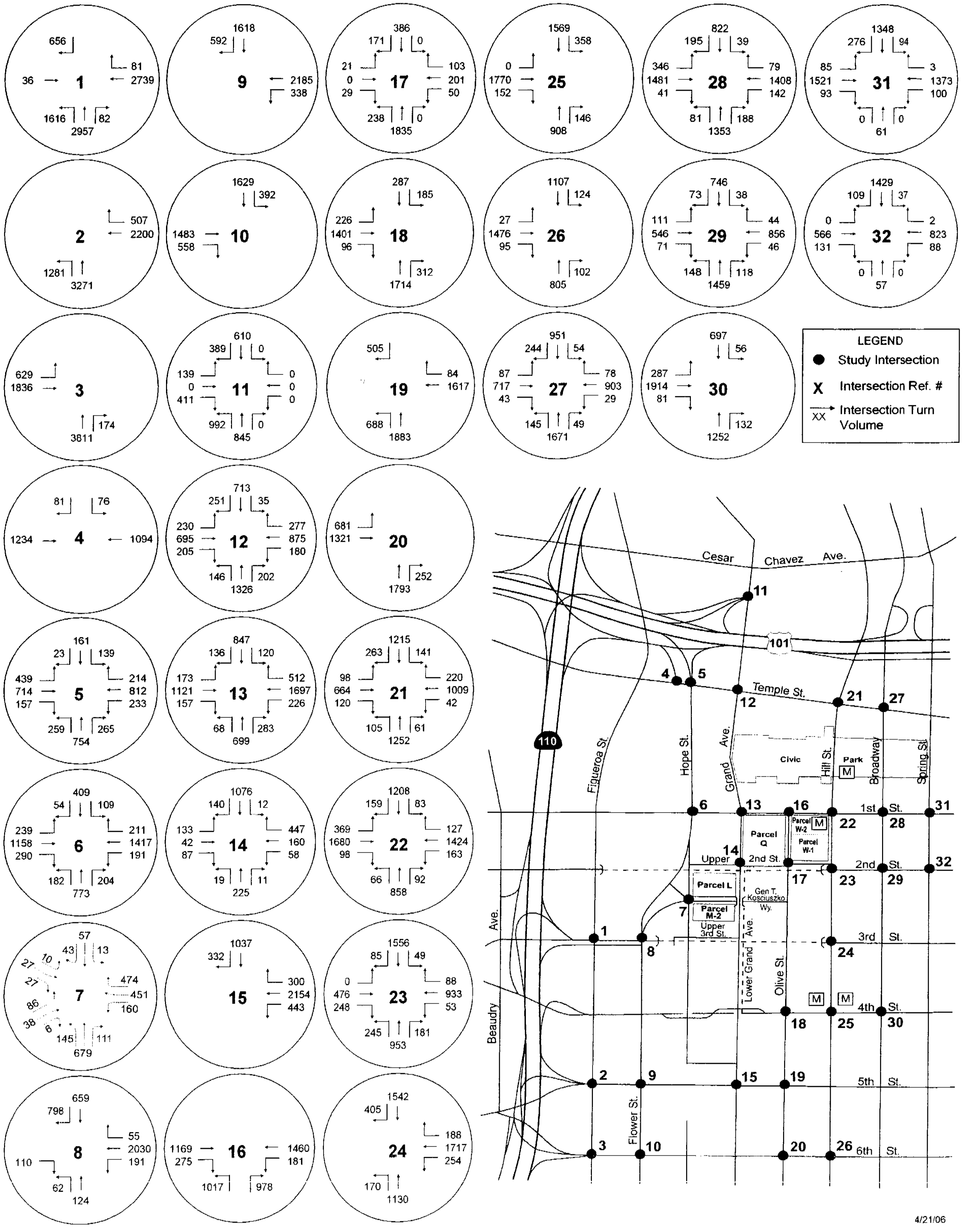

Figure 4-12

Future with Project Traffic Volumes - PM Peak Hour - Project with County Office Building Option

Grand Avenue Project

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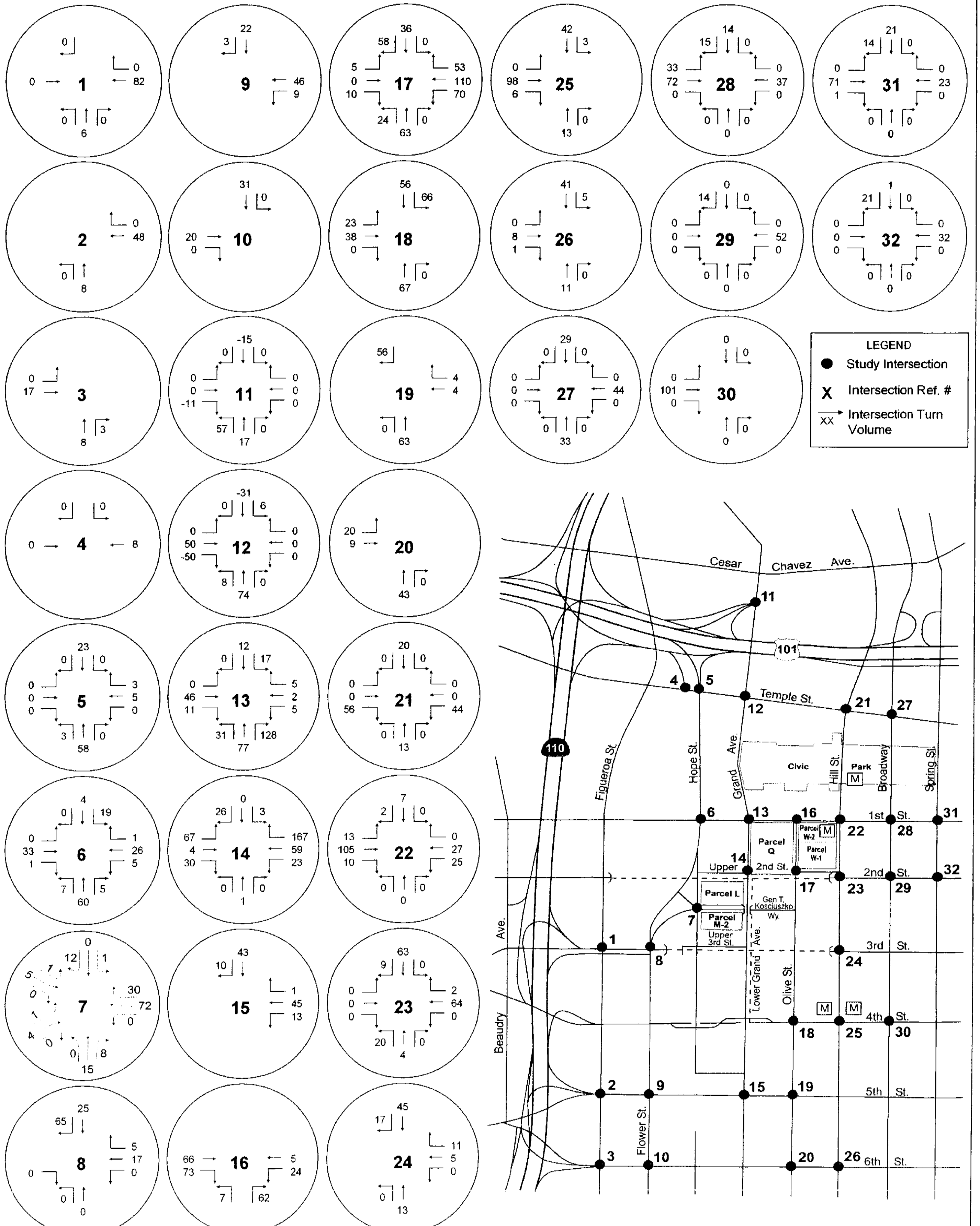

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Figure 4-13

Project Only Volumes - AM Peak Hour - Project with Additional Residential Development Option

Grand Avenue Project

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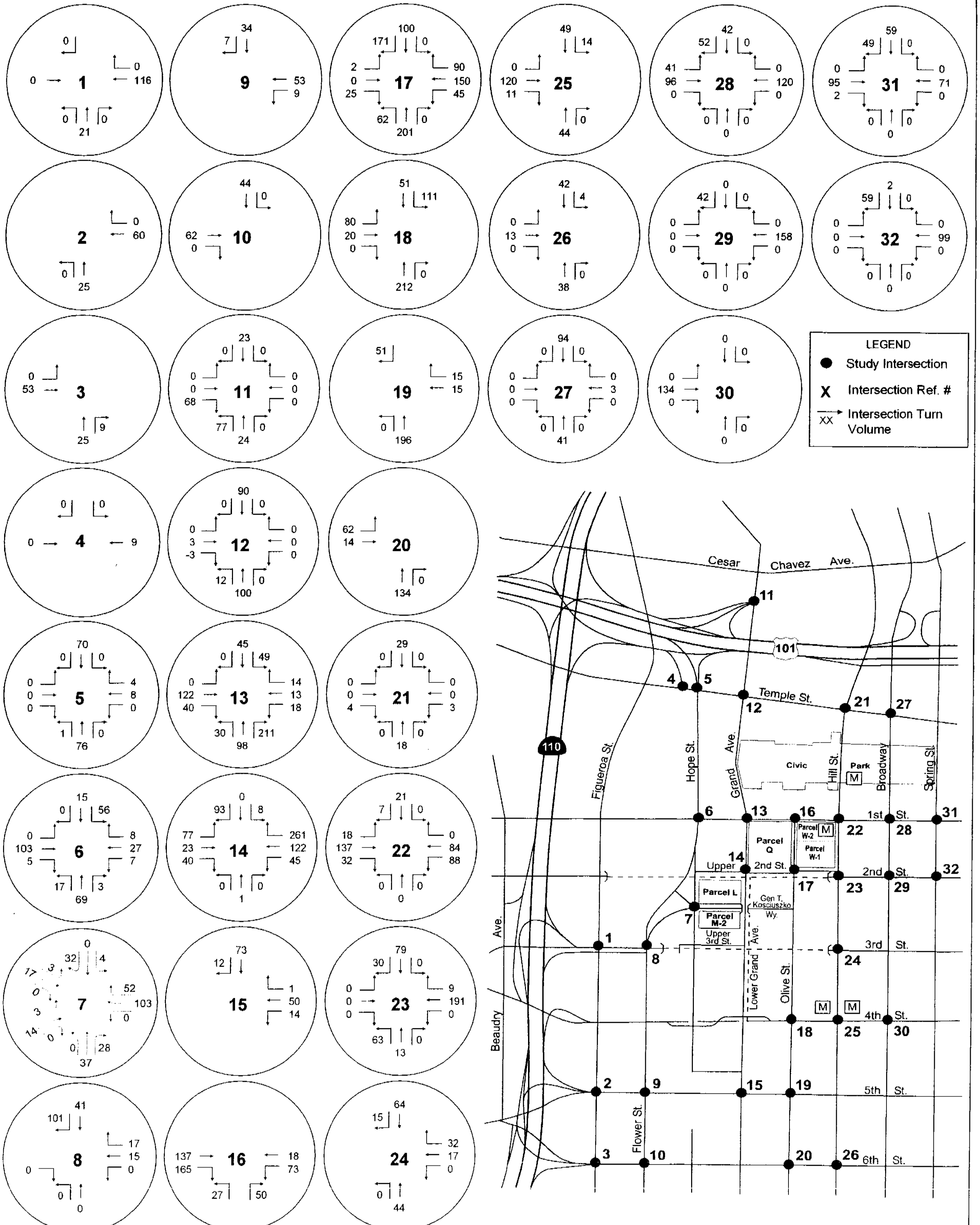

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Figure 4-14

Project Only Volumes - PM Peak Hour - Project with Additional Residential Development Option

Grand Avenue Project

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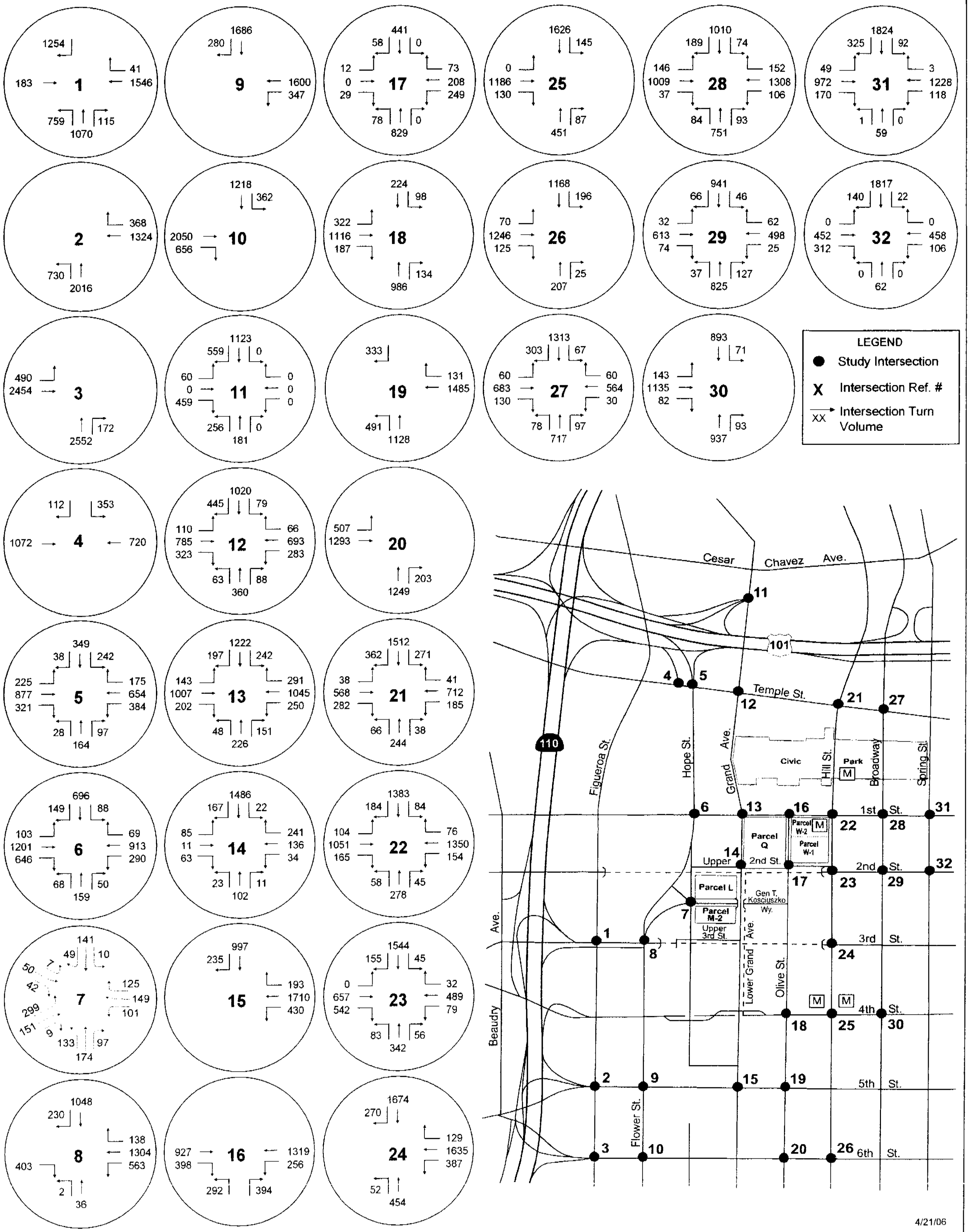

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Figure 4-15

Future With Project - AM Peak Hour - Project with Additional Residential Development Option

Grand Avenue Project

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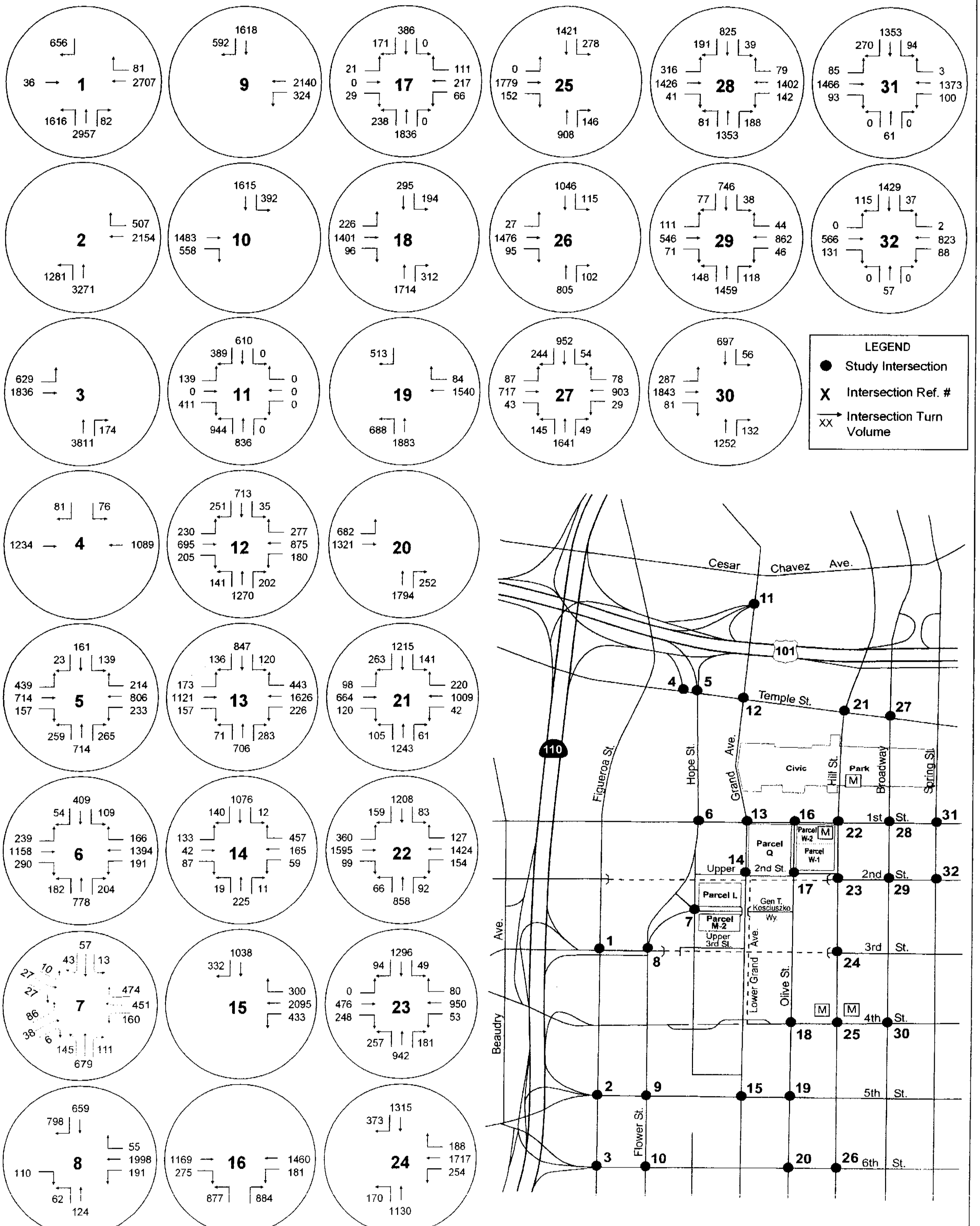

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Figure 4-16

Future With Project - PM Peak Hour - Project with Additional Residential Development Option

Grand Avenue Project

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Table 4.6 Equivalency Matrix - Land Use Conversion Factors

To This Land Use →	Units	Condo- miniums	Apart- ments	Hotel	Market	Retail	Restaurant	Event Facility	Health Club	Office
From This Land Use ↓		DU's	DU's	Rooms	1,000 sf	1,000 sf	1,000 sf	Seats	1,000 sf	1,000 sf
Condominiums	DU's	NA	1.400	0.700[1]	0.062[2]	0.098[2]	0.080[2]	4.667[3]	0.201[2]	0.311[2]
Apartments	DU's	0.714	NA	0.500[1]	0.044[2]	0.070[2]	0.057[2]	3.333[3]	0.144[2]	0.222[2]
Hotel	Rooms	1.429[4]	2.000[4]	NA	0.088[5]	0.140[5]	0.114[5]	6.667[6]	0.288[5]	0.444[5]
Market	1,000 sf	16.129[7]	22.727[7]	11.364[8]	NA	1.596	1.293	75.833[9]	3.273	5.056
Retail	1,000 sf	10.204[7]	14.286[7]	7.143[8]	0.627	NA	0.810	47.500[9]	2.050	3.167
Restaurant	1,000 sf	12.500[7]	17.544[7]	8.772[8]	0.773	1.235	NA	58.667[9]	2.532	3.911
Event Facility	Seats	0.214[10]	0.300[10]	0.150[11]	0.013[12]	0.021[12]	0.017[12]	NA	0.043[12]	0.067[12]
Health Club	1,000 sf	4.975	6.944	3.472	0.306	0.488	0.395	23.256	NA	1.544
Office	1,000 sf	3.215	4.505	2.252	0.198	0.316	0.256	14.925	0.648	NA

Numbers shown in table represent conversion factors from one land use to another, to maintain trip totals equivalent to and not exceeding those assumed in the DEIR.

Numbers are based on weekday P.M. peak hour trip generation data, and average trip rates for each land use type over the entire Project.

For example, if it was desired to convert Project square footage from retail to office uses, the conversion factor to be used is 3.167, i.e. 75,000 sf of retail uses could be replaced with 237,525 sf of office uses (75,000 x 3.167) without increasing the overall number of trips.

Ratios are conversion factors from 1,000 sf to 1,000 sf, except where specified by footnotes as described below:

1. Ratios are conversion factors from DU's to rooms.
2. Ratios are conversion factors from DU's to 1,000 sf.
3. Ratios are conversion factors from DU's to seats.
4. Ratios are conversion factors from rooms to DU's.
5. Ratios are conversion factors from rooms to 1,000 sf.
6. Ratios are conversion factors from rooms to seats.
7. Ratios are conversion factors from 1,000 sf to DU's.
8. Ratios are conversion factors from 1,000 sf to rooms.
9. Ratios are conversion factors from 1,000 sf to seats.
10. Ratios are conversion factors from seats to DU's.
11. Ratios are conversion factors from seats to rooms.
12. Ratios are conversion factors from seats to 1,000 sf.

5. Project Impact Analysis – Project with County Office Building Option

This chapter addresses potential transportation impacts of the Project with Office Building Option, including traffic impacts, Congestion Management Plan and freeway impacts, transit impacts, and parking impacts.

5.1 Roadway Traffic Impact Analysis – County Office Building Option

Traffic forecasts for the future without Project conditions were described in Chapter 3, and shown in Figures 3-2 and 3-3. Traffic forecasts for the Future with Project condition were described in Chapter 4, and shown in Figures 4-11 and 4-12.

The potential impacts of the Project on the street system were evaluated by analyzing these forecast conditions and comparing projected levels of service at the study intersections for the without Project and with Project conditions.

Significant Impact Thresholds

LADOT has established criteria to determine if project impacts are significant at an intersection. These criteria are shown below.

Definition of Significant Impact at Intersection

With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	0.701 – 0.800	equal to or greater than 0.040
D	0.801 – 0.900	equal to or greater than 0.020
E, F	> 0.900	equal to or greater than 0.010

Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the volume/capacity (V/C) ratio is less than 0.040. However, in another example, if the intersection is operating at LOS E or LOS F and the incremental change in V/C ratio is 0.010 or greater, then the project would be considered to have a significant impact at that location.

Results of the Impact Analysis – County Office Building Option

The intersection level of service analysis for the future with Project conditions is summarized in Table 5-1 and shown in Figure 5-1 for the A.M. and P.M. peak hours. Table 5-1 also compares the level of service for without Project and with Project conditions, shows the increase in V/C ratios at each intersection due to the Project, and identifies if the increase is significant .

A.M. Peak Hour Project Traffic Impacts

As shown in Table 5-1, the Project would result in a significant traffic impact at seven intersections in the A.M. peak hour. These intersections are as follows (with the resultant LOS in parentheses):

▪ Grand Avenue / 1st Street	(LOS D)
▪ Hill Street / Temple Street	(LOS D)
▪ Broadway / Temple Street	(LOS D)
▪ Hope St / Temple St. / US-101 Ramps	(LOS E)
▪ Hope Street / 1st Street	(LOS E)
▪ Hill Street / 3rd Street	(LOS E)
▪ Broadway / 1st Street	(LOS E)

Three of the seven impacted intersections will continue to operate at LOS D with the Project. The remaining four impacted intersections will operate at LOS E, although three of those (Hope St / Temple St. / US-101 Ramps, Hope Street / 1st Street, and Hill Street / 3rd Street) would also operate at LOS E without the Project.

P.M. Peak Hour Traffic Impacts

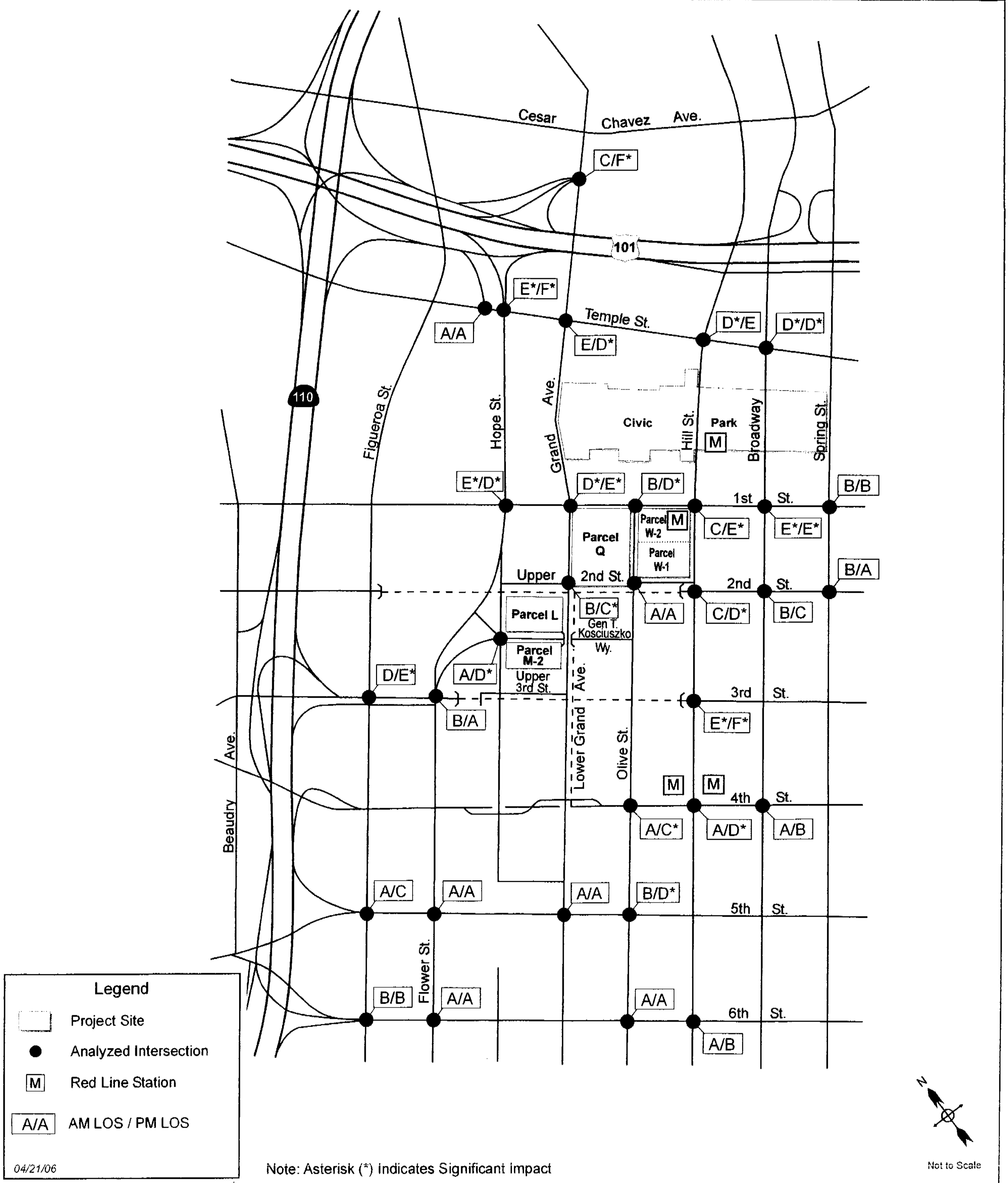
As shown in Table 5-1, the Project would result in a significant traffic impact at seventeen intersections in the P.M. peak hour. These intersections are as follows (with the resultant LOS in parentheses):

▪ Grand Avenue / Upper 2nd Street	(LOS C)
▪ Olive Street / 4th Street	(LOS C)
▪ Hope Street / 1st Street	(LOS D)
▪ Hope Street / GTK Way / 2nd Place	(LOS D)
▪ Grand Avenue / Temple Street	(LOS D)
▪ Olive Street / 1st Street	(LOS D)

Table 5-1 Intersection Level Of Service - Future With Project Conditions - Project with County Office Building Option

4/21/2006

No.	Intersection	A.M Peak						P.M Peak					
		Future Without Project Condtions		Future With Project Conditions		Change in V/C	Significant Impact	Future Without Project Condtions		Future With Project Conditions		Change in V/C	Significant Impact
		V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
1	Figueroa St. / 3rd St.	0.827	D	0.837	D	0.010	No	0.965	E	0.985	E	0.020	Yes
2	Figueroa St. / 5th St.	0.487	A	0.492	A	0.005	No	0.781	C	0.795	C	0.014	No
3	Figueroa St. / 6th St.	0.626	B	0.632	B	0.006	No	0.650	B	0.658	B	0.008	No
4	I-110 Off Ramp / Temple St.	0.398	A	0.400	A	0.002	No	0.409	A	0.413	A	0.004	No
5	Hope St. / Temple St. / US-101 Ramps	0.902	E	0.921	E	0.019	Yes	0.971	E	1.015	F	0.044	Yes
6	Hope St. / 1st St.	0.925	E	0.935	E	0.010	Yes	0.733	C	0.830	D	0.097	Yes
7	Hope St. / GTK Way / 2nd Place	0.420	A	0.452	A	0.032	No	0.776	C	0.845	D	0.069	Yes
8	Flower St. / 3rd St.	0.671	B	0.678	B	0.007	No	0.546	A	0.569	A	0.023	No
9	Flower St. / 5th St.	0.439	A	0.448	A	0.009	No	0.517	A	0.535	A	0.018	No
10	Flower St. / 6th St.	0.528	A	0.540	A	0.012	No	0.498	A	0.515	A	0.017	No
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.693	B	0.724	C	0.031	No	0.994	E	1.100	F	0.106	Yes
12	Grand Ave. / Temple St.	0.930	E	0.929	E	-0.001	No	0.844	D	0.896	D	0.052	Yes
13	Grand Ave. / 1st St.	0.791	C	0.818	D	0.027	Yes	0.850	D	0.918	E	0.068	Yes
14	Grand Ave. / Upper 2nd St.	0.537	A	0.670	B	0.133	No	0.504	A	0.708	C	0.204	Yes
15	Grand Ave. / 5th St.	0.487	A	0.502	A	0.015	No	0.565	A	0.597	A	0.032	No
16	Olive St. / 1st St.	0.531	A	0.609	B	0.078	No	0.627	B	0.801	D	0.174	Yes
17	Olive St. / 2nd St.	0.283	A	0.359	A	0.076	No	0.406	A	0.583	A	0.177	No
18	Olive St. / 4th St.	0.437	A	0.548	A	0.111	No	0.653	B	0.740	C	0.087	Yes
19	Olive St. / 5th St.	0.623	B	0.654	B	0.031	No	0.812	D	0.858	D	0.046	Yes
20	Olive St. / 6th St.	0.402	A	0.424	A	0.022	No	0.486	A	0.513	A	0.027	No
21	Hill St. / Temple St.	0.762	C	0.815	D	0.053	Yes	0.933	E	0.941	E	0.008	No
22	Hill St. / 1st St.	0.744	C	0.766	C	0.022	No	0.911	E	0.947	E	0.036	Yes
23	Hill St. / 2nd St.	0.765	C	0.793	C	0.028	No	0.679	B	0.845	D	0.166	Yes
24	Hill St. / 3rd St.	0.968	E	0.996	E	0.028	Yes	1.018	F	1.103	F	0.085	Yes
25	Hill St. / 4th St.	0.518	A	0.542	A	0.024	No	0.760	C	0.851	D	0.091	Yes
26	Hill St. / 6th St.	0.457	A	0.466	A	0.009	No	0.586	A	0.609	B	0.023	No
27	Broadway / Temple St.	0.858	D	0.895	D	0.037	Yes	0.834	D	0.866	D	0.032	Yes
28	Broadway / 1st St.	0.824	D	0.915	E	0.091	Yes	0.841	D	0.939	E	0.098	Yes
29	Broadway / 2nd St.	0.613	B	0.616	B	0.003	No	0.748	C	0.768	C	0.020	No
30	Broadway / 4th St.	0.474	A	0.489	A	0.015	No	0.646	B	0.678	B	0.032	No
31	Spring St. / 1st St.	0.592	A	0.609	B	0.017	No	0.582	A	0.622	B	0.040	No
32	Spring St. / 2nd St.	0.609	B	0.612	B	0.003	No	0.509	A	0.517	A	0.008	No



Note: Asterisk (*) indicates Significant Impact

Figure 5-1
Intersection Level of Service - Future With Project Conditions - Project with County Office Building Option

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▪ Olive Street / 5th Street	(LOS D)
▪ Hill Street / 2nd Street	(LOS D)
▪ Hill Street / 4th Street	(LOS D)
▪ Broadway / Temple Street	(LOS D)
▪ Figueroa Street / 3rd Street	(LOS E)
▪ Grand Avenue / 1st Street	(LOS E)
▪ Hill Street / 1st Street	(LOS E)
▪ Broadway / 1st Street	(LOS E)
▪ Hope Street / Temple St. / US-101 Ramps)	(LOS F)
▪ Grand Avenue / US-101 / I-110 Ramps	(LOS F)
▪ Hill Street / 3rd Street	(LOS F)

Ten of the seventeen impacted intersections will continue to operate at LOS D or better, with the Project. Four of the impacted intersections will operate at LOS E with the Project, two of which would also operate at LOS E without the Project (Figueroa Street / 3rd Street, and Hill Street / 1st Street). Three intersections, Hope Street / Temple St. / US-101 Ramps, Grand Avenue / US-101 / I-110 Ramps, and Hill Street / 3rd Street will operate at LOS F with the Project, two of which would operate at LOS E without the Project and one (Hill Street / 3rd Street) would operate at LOS F without the Project.

5.2 Project Driveway Analysis – County Office Building Option

The proposed locations of Project driveways were described earlier in Chapter 4. A review was conducted of all driveway locations, the results of which are presented here.

Significant Impact Thresholds

The following criteria were established (based on factors in the "*CEQA Thresholds Guide*", City of Los Angeles (1998) to determine if there would be any significant impacts due to Project driveways:

- Intersections at the primary site access locations would operate at LOS F during the AM or PM peak hours.

- The design features/physical configurations of the Project would affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists so as to create a hazardous condition.

Driveway Traffic Analysis

The Project traffic forecasts developed in Chapter 4 were utilized to estimate traffic turning volumes at Project driveways on the A.M. and P.M. peak hours. These are shown in Figures 5-2 and 5-3 respectively. All Project driveway intersections would be unsignalized. Traffic operations at driveways were analyzed using the methodology for unsignalized intersections in the *"Highway Capacity Manual"*, Transportation Research Board, Washington, D.C., 2000". The results are shown in Table 5-2 which shows the level of service for each approach for each driveway intersection.

As can be seen from Table 5-2, the vast majority of Project driveway intersection approaches would operate at LOS C or better, with many driveways operating at LOS A or LOS B. Some driveways would operate at LOS D at certain times (mainly some approaches of the Parcel W driveways on Hill Street and Olive Street), but no driveway intersection approach would operate at worse than LOS D. It is therefore concluded that the Project with County Office Building Option would not cause any significant traffic impacts at Project driveway locations.

As can be seen in Figure 4-6, which shows the proposed conceptual driveway locations, nine of the ten principal driveway locations would be at mid-block locations. They would thus be located well away from adjacent intersections, at locations with good visibility for both drivers and pedestrians. One driveway location, on Upper Second Street for the hotel valet exit traffic on Parcel Q, would be located closer to Grand Avenue than mid-block. However this would be an exit-only driveway, for hotel valet vehicles only, and would be sufficiently distant from the intersection (approximately 90 feet), to afford good visibility. Specific design details of the Project driveways are not available at this early stage of Project planning. However, all driveways would be perpendicular to the roadway and are proposed with standard curb-cuts and designs, and would thus afford good visibility to drivers and pedestrians. All Project driveways would be designed in accordance with LADOT standards and approvals. It is therefore concluded that the Project driveways would not create hazardous conditions and would not create any significant impacts.

5.3 CMP and Regional Highway Analysis – Project with County Office Building Option

The Los Angeles County Congestion Management Plan (CMP) requires that new development projects analyze potential project impacts on CMP monitoring locations, if an EIR is prepared for the project.

The CMP requires that the Traffic Study analyze traffic conditions at all CMP monitoring arterial monitoring intersections where the Proposed Project will add 50 or more trips during either the A.M. or P.M. weekday peak hours of adjacent street traffic. The CMP

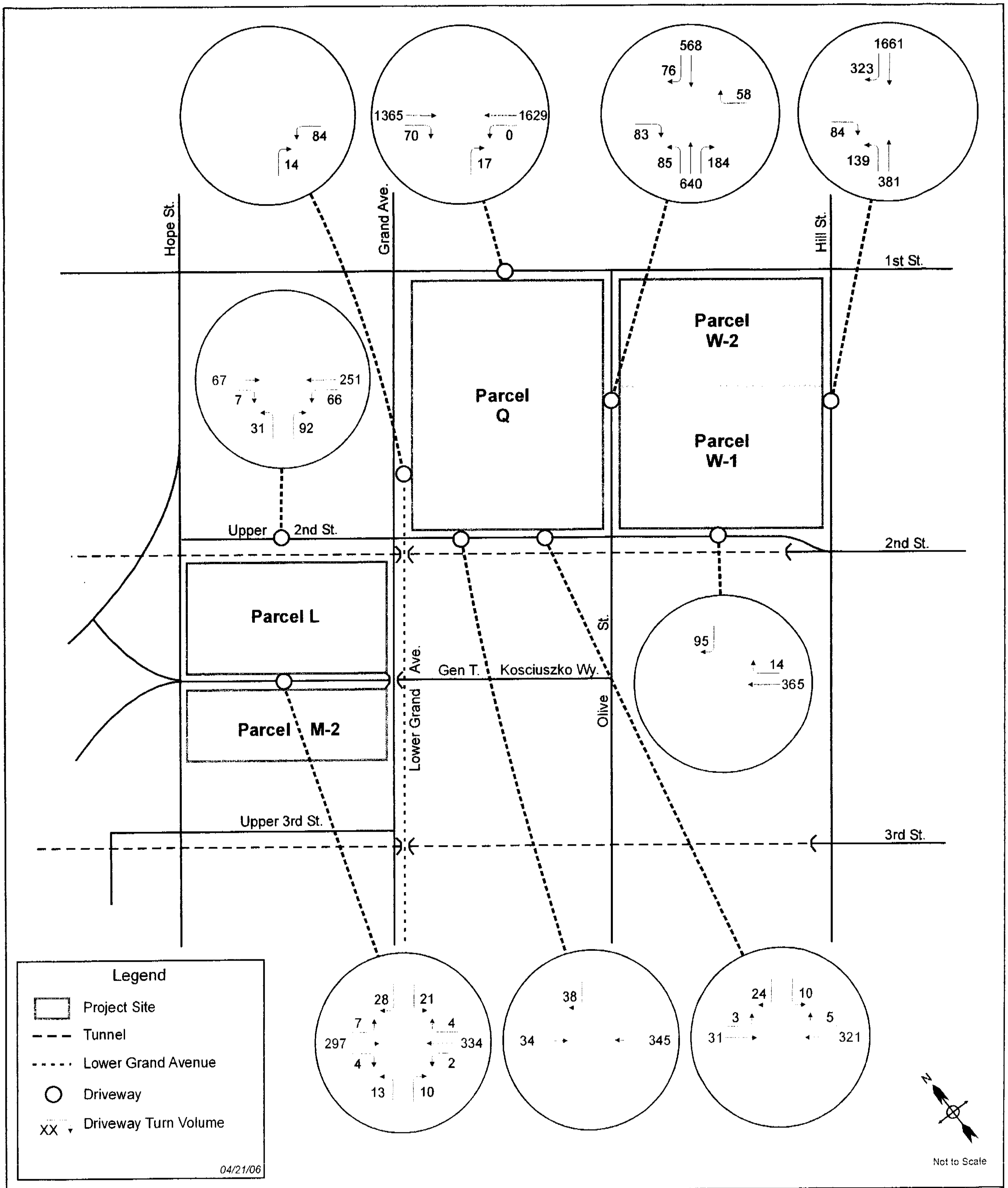

Figure 5-2
Project Driveway Volumes - AM Peak Hour - Project with County Office Building Option

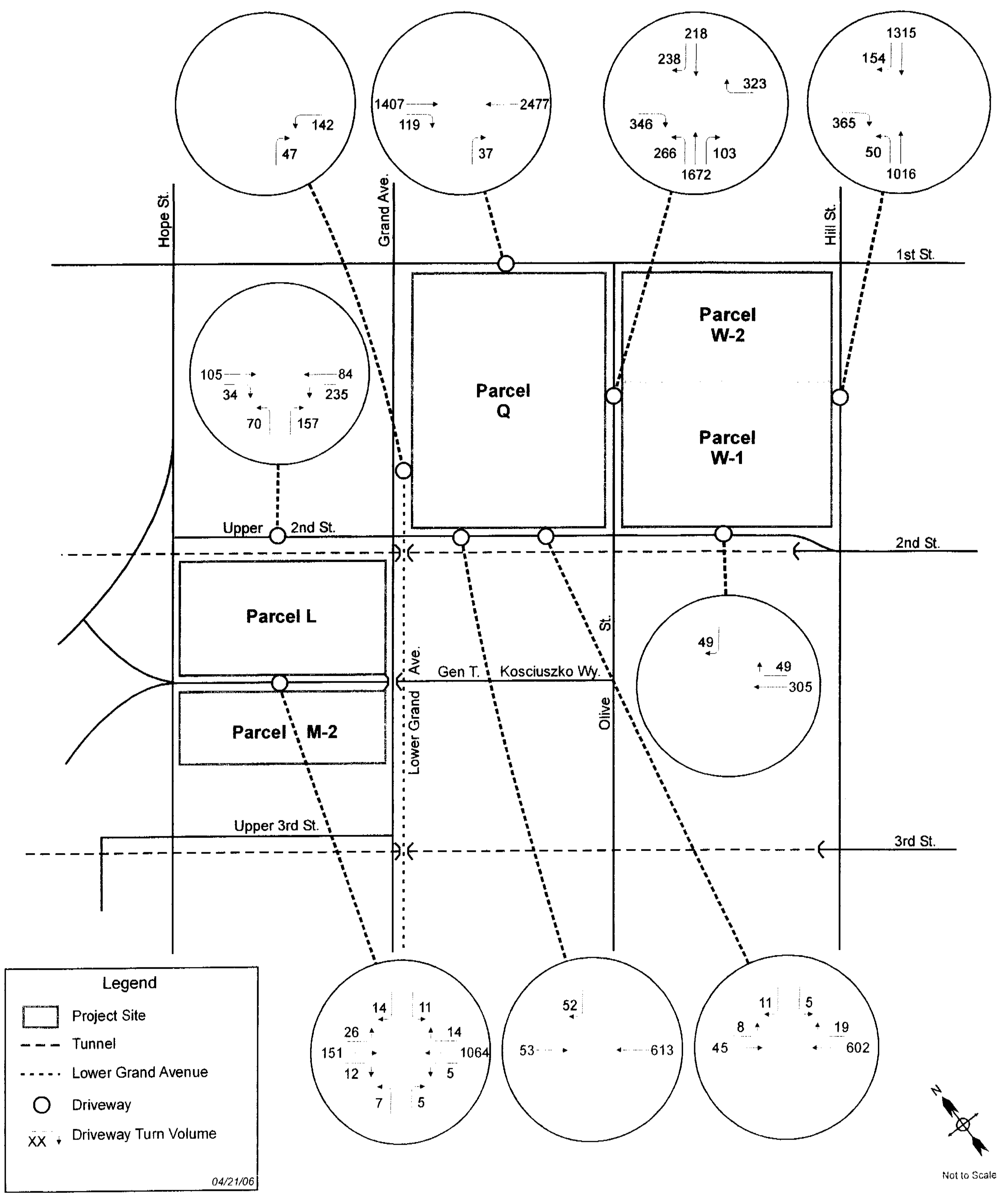

Figure 5-3
Project Driveway Volumes - PM Peak Hour - Project with County Office Building Option

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Table 5-2 Future With Project Conditions - Driveway Level of Service Project with County Office Building Option

4/21/2006

Parcel	Driveway		Future With Project - AM Peak Hour		Future With Project - PM Peak Hour	
			Delay (secs)	LOS	Delay (secs)	LOS
Q	1st Street Driveway	NB Right Turn	12.0	B	12.8	B
		NB Approach	12.0	B	12.8	B
		Worst Case LOS	**12.0**	**B**	**12.8**	**B**
Q	Upper 2nd St. Driveway (Mid block)	EB Left Turn	7.9	A	8.7	A
		SB Approach	9.9	A	11.6	B
		Worst Case LOS	**9.9**	**A**	**11.6**	**B**
Q	Upper 2nd St. Driveway (Closer to Grand Ave.)	SB Right Turn	9.5	A	10.6	B
		SB Approach	9.5	A	10.6	B
		Worst Case LOS	**9.5**	**A**	**10.6**	**B**
Q / W	Olive St. Driveway	NB Left Turn	9.2	A	9.2	A
		EB Right Turn	11.0	B	13.2	B
		WB Right Turn	10.6	B	32.0	D
		EB Approach	11.0	B	13.2	B
		WB Approach	10.6	B	32.0	D
		Worst Case LOS	**11.0**	**B**	**32.0**	**D**
W	Hill St. Driveway	NB Left Turn	27.6	D	13.7	B
		EB Right Turn	17.2	C	27.9	D
		EB Approach	17.2	C	27.9	D
		Worst Case LOS	**27.6**	**D**	**27.9**	**D**
W	Upper 2nd St. Driveway	SB Right Turn	11.2	B	10.4	B
		SB Approach	11.2	B	10.4	B
		Worst Case LOS	**11.2**	**B**	**10.4**	**B**
L / M2	Upper 2nd St. Driveway	NB Left Turn	11.1	B	17.2	C
		NB Right Turn	8.8	A	9.3	A
		WB Left Turn	7.4	A	7.9	A
		NB Approach	9.4	A	11.8	B
		Worst Case LOS	**9.4**	**A**	**11.8**	**B**
L / M2	GTK Driveway	NB Left Turn	13.2	B	18.0	C
		NB Right Turn	9.2	A	8.7	A
		SB Left Turn	13.4	B	33.9	D
		SB Right Turn	9.4	A	12.5	A
		EB Left Turn	7.9	A	10.7	B
		WB Left Turn	7.8	A	7.5	A
		NB Approach	11.4	B	14.1	B
		SB Approach	11.1	B	21.9	C
		Worst Case LOS	**11.4**	**B**	**21.9**	**C**

also requires that traffic studies analyze mainline freeway monitoring locations where the project will add 150 or more trips in either direction during either A.M. or P.M. weekday peak hours. If, based on these criteria, the Traffic Study identifies no facilities for study, then no further traffic analysis is required.

CMP Arterial Monitoring Locations

A review of the 2004 CMP indicated the following arterial monitoring stations that are closest to the Project site:

- Sunset Boulevard and Alvarado Street
- Wilshire Boulevard and Alvarado Street
- Alameda Street and Washington Boulevard

These intersections are located some considerable distance from the Project (between one-and-a-half and two-and-a-half miles). Nevertheless, the number of Project vehicle trips expected to pass through these intersections was estimated based on the Project trip distribution (as shown in Figures 4-7 and 4-8), and the Project trip generation (shown in Table 4-3). A maximum of approximately two percent of Project trips are expected to use each of Sunset Boulevard, Wilshire Boulevard, and Alameda Street through these intersections, which represents 31 trips in the A.M. peak hour and 49 trips in the P.M. peak hour. Due to dispersal of Project traffic onto multiple routes and streets as it travels further from the Project, the actual percentage will probably be less than this by the time Project traffic reaches those monitoring intersections. As these volumes are all less than the CMP threshold of 50 or more trips in either the A.M. or P.M. peak hours, no further analysis is necessary.

CMP Freeway Monitoring Locations

A review of the 2004 CMP identified the following freeway monitoring locations that are closest to the Project site:

- US-101 south of Santa Monica Boulevard
- US-101 north of Vignes Street
- SR-110 at Alpine Street
- SR-110 south of US-101
- SR-110 at Slauson Street
- I-10 west of Vermont Avenue
- I-10 at East LA City Limit (nr. Indiana Street)
- SR-60 east of Indiana Street
- I-5 north of Stadium Way

Additional Freeway Analysis Locations

In order to more fully investigate the potential impact of the Project on the freeway system, some additional analysis locations were selected including a number of key locations on the mainline freeways nearest the Project site and surrounding the downtown area where Project traffic would be most highly concentrated and most likely to cause potential traffic impacts. At locations further from the Project site, Project traffic will be more dispersed and far less likely to cause impacts. These additional analysis locations were as follows:

- I-10 east of Los Angeles Street
- US-101 between Alvarado Street and Glendale Boulevard
- US-101 between Grand Avenue and Hill Street
- SR-110 between Solano Avenue and Hill St/Stadium Way
- SR-110 between Olympic Blvd and Pico Boulevard

Freeway Analysis

Existing traffic volumes on these freeway segments in the A.M. and P.M. peak hours were obtained either from the "*2004 Congestion Management Program for Los Angeles County*" (LACMTA), or the California Department of Transportation (Caltrans) "*2004 Traffic Volumes on California State Highways*". These data were from either 2003 or 2004 so were adjusted to represent 2005 conditions by applying a growth factor of 1% per year.

Freeway levels of service are determined by calculating demand/capacity ratios per the definitions shown in Table 5-3.

Table 5-3 Level of Service Definitions for Freeway Mainline Segments

Level of Service	Demand/Capacity Ratio
A	0.00 – 0.35
B	>0.35 – 0.54
C	>0.54 – 0.77
D	>0.77 – 0.93
E	>0.93 – 1.00
F (0)	>1.00 – 1.25
F (1)	>1.25 – 1.35
F (2)	>1.35 – 1.45
F (3)	>1.45

Source: *2004 Congestion Management Program for Los Angeles County*, Los Angeles County Metropolitan Transportation Authority, July 2004. Exhibit B-6

The freeway impact analysis at all these locations (including both CMP and non-CMP locations) is shown in Table 5-4 for the A.M peak hour and Table 5-5 for the P.M. peak hour.

Existing conditions levels of service were calculated for each freeway segment using a capacity of 2,000 vehicles per hour per freeway mainline lane (as per the 2004 Congestion Management Program. The existing D/C ratios and levels of service are shown in Table 5-4 for the AM peak hour and in Table 5-5 for the PM peak hour.

Future year 2015 base freeway traffic volumes without the Project were projected by factoring existing volumes by 1% growth per year. These future base volumes, along with D/C ratios and levels of service are also shown in Tables 5-4 and 5-5.

Trips from the proposed Project were assigned to the freeway system using the trip distribution parameters identified earlier in Chapter 4. These were added to the Future Without Project base volumes to obtain future with Project total volumes on the freeway segments. Both the Project only trips, and the future total trips with the Project, are shown in Tables 5-4 and 5-5 along with the total with Project D/C ratios and levels of service.

The number of Project vehicle trips expected to pass through the four CMP monitoring locations closest to the Project was estimated based on the Project trip distribution (as shown in Figures 4-7 and 4-8), and the Project trip generation (shown in Table 4-4). This analysis showed (see Tables 5-4 and 5-5) that the highest number of trips at the locations closest to the Project site in either peak hour (in either direction) was 106 trips in the P.M. peak hour on the US-101 south of Santa Monica Boulevard, 81 trips in the P.M. peak hour on SR-110 at Alpine Street, 156 trips in the P.M. peak hour on US-110 north of Vignes Street, and 38 trips in the P.M. peak hour on SR-110 south of US-101.

The number of trips passing through CMP monitoring locations further from the Project site, as shown in Tables 5-4 and 5-5, ranged from 50 to 121 trips in the P.M. peak hour.

As shown in Tables 5-4 and 5-5, the Project would thus add less than the CMP threshold of 150 or more trips in either direction at all CMP monitoring locations during the A.M. peak hour, and would add less than 150 trips to all CMP locations in the P.M. peak hour – except at one location at US-110 north of Vignes Street where it would 156 trips. Except for this location, no further CMP analysis is necessary according to the CMP guidelines. However – for purposes of providing a comprehensive review all the freeway analysis locations were investigated in the following analysis.

Table 5-4 Freeway Impact Analysis - AM Peak Hour - Project with County Office Building Option

No.	Freeway Segments	CMP Location	DIR	Existing (2006)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
1	I-10 at Budlong Ave. [1]	Yes	EB	17,350	12,500	1.388	F(2)	19,165	12,500	1.533	F(3)	83	19,248	12,500	1.540	F(3)	0.007	No
			WB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	55	20,623	12,500	1.650	F(3)	0.004	No
2	I - 10 East of Los Angeles Street [2]	No	EB	6,490	8,000	0.811	D	7,169	8,000	0.896	D	0	7,169	8,000	0.896	D	0.000	No
			WB	8,600	8,000	1.075	F(0)	9,500	8,000	1.187	F(0)	0	9,500	8,000	1.187	F(0)	0.000	No
3	I - 10 at East Los Angeles City Limit [1]	Yes	EB	6,750	12,000	0.563	C	7,456	12,000	0.621	C	23	7,479	12,000	0.623	C	0.002	No
			WB	11,325	12,000	0.944	E	12,510	12,000	1.042	F(0)	31	12,541	12,000	1.045	F(0)	0.003	No
4	US - 101 south of Santa Monica Blvd. [1]	Yes	NB	7,145	8,000	0.893	D	7,893	8,000	0.987	E	50	7,943	8,000	0.993	E	0.006	No
			SB	11,100	8,000	1.388	F(2)	12,261	8,000	1.533	F(3)	74	12,335	8,000	1.542	F(3)	0.009	No
5	US - 101 from Alvarado St. to Gendale Blvd. [2]	No	NB	7,776	8,000	0.972	E	8,590	8,000	1.074	F(0)	43	8,633	8,000	1.079	F(0)	0.005	No
			SB	8,773	8,000	1.097	F(0)	9,691	8,000	1.211	F(0)	74	9,765	8,000	1.221	F(0)	0.009	No
6	US - 101 Grand Ave. to Hill St. [2]	No	NB	7,446	8,000	0.931	E	8,225	8,000	1.028	F(0)	6	8,231	8,000	1.029	F(0)	0.001	No
			SB	5,185	8,000	0.648	C	5,727	8,000	0.716	C	136	5,863	8,000	0.733	C	0.017	No
7	US - 101 north of Vignes St. [1]	Yes	NB	13,872	10,000	1.387	F(2)	15,323	10,000	1.532	F(3)	96	15,419	10,000	1.542	F(3)	0.010	No
			SB	5,333	8,000	0.667	C	5,891	8,000	0.736	C	73	5,964	8,000	0.745	C	0.009	No
8	SR - 110 from Solano to Hill St. / Stadium Way [2]	No	NB	4,623	6,000	0.771	D	5,107	6,000	0.851	D	51	5,158	6,000	0.860	D	0.008	No
			SB	7,314	6,000	1.219	F(0)	8,079	6,000	1.347	F(1)	73	8,152	6,000	1.359	F(2)	0.012	No
9	SR - 110 at Alpine St. [1]	Yes	NB	4,710	6,000	0.785	D	5,203	6,000	0.867	D	38	5,241	6,000	0.873	D	0.006	No
			SB	8,407	6,000	1.401	F(2)	9,287	6,000	1.548	F(3)	55	9,342	6,000	1.557	F(3)	0.009	No
10	SR - 110 south of US - 101 [1]	Yes	NB	8,283	8,000	1.035	F(0)	9,150	8,000	1.144	F(0)	21	9,171	8,000	1.146	F(0)	0.003	No
			SB	11,131	8,000	1.391	F(2)	12,296	8,000	1.537	F(3)	19	12,315	8,000	1.539	F(3)	0.002	No
11	SR - 110 from Olympic Blvd. to Pico Blvd. [2]	No	NB	6,848	8,000	0.856	D	7,564	8,000	0.946	E	108	7,672	8,000	0.959	E	0.014	No
			SB	10,833	8,000	1.354	F(2)	11,966	8,000	1.496	F(3)	73	12,039	8,000	1.505	F(3)	0.009	No

Table 5-4 Freeway Impact Analysis - AM Peak Hour - Project with County Office Building Option

4/21/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2006)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
12	SR - 110 at Slauson Ave. [1]	Yes	NB	11,321	8,000	1.415	F(2)	12,505	8,000	1.563	F(3)	83	12,588	8,000	1.574	F(3)	0.010	No
			SB	9,275	8,000	1.159	F(0)	10,245	8,000	1.281	F(1)	57	10,302	8,000	1.288	F(1)	0.007	No
13	SR - 60 at Indiana Street [1]	Yes	EB	5,090	12,000	0.424	B	5,623	12,000	0.469	B	23	5,646	12,000	0.470	B	0.002	No
			WB	16,650	12,000	1.388	F(2)	18,392	12,000	1.533	F(3)	31	18,423	12,000	1.535	F(3)	0.003	No
14	I - 5 north of Stadium Way [1]	Yes	NB	9,390	10,000	0.939	E	10,372	10,000	1.037	F(0)	25	10,397	10,000	1.040	F(0)	0.003	No
			SB	13,875	10,000	1.388	F(2)	15,327	10,000	1.533	F(3)	36	15,363	10,000	1.536	F(3)	0.004	No

Notes:

1. Existing demand (factored from 2003 to 2005 conditions) and capacity obtained from LACMTA "2004 Congestion Management Program for Los Angeles County".
2. Existing demand (factored from 2004 to 2005 conditions) from Caltrans " 2004 California State Highway Traffic Volumes". Existing capacity calculated using 2000 vehicles per lane.

Table 5-5 Freeway Impact Analysis - PM Peak Hour - Project with County Office Building Option

4/21/2006

No.	Freeway Segments		DIR	Existing (2005)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
1	I-10 at Budlong Ave. [1]	Yes	EB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	101	20,669	12,500	1.654	F(3)	0.008	No
			WB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	118	20,686	12,500	1.655	F(3)	0.009	No
2	I - 10 East of Los Angeles Street [2]	No	EB	9,020	8,000	1.128	F(0)	9,964	8,000	1.245	F(0)	0	9,964	8,000	1.245	F(0)	0.000	No
			WB	7,080	8,000	0.885	D	7,821	8,000	0.978	E	0	7,821	8,000	0.978	E	0.000	No
3	I - 10 at East Los Angeles City Limit [1]	Yes	EB	12,365	12,000	1.030	F(0)	13,659	12,000	1.138	F(0)	50	13,709	12,000	1.142	F(0)	0.004	No
			WB	9,055	12,000	0.755	C	10,002	12,000	0.834	D	38	10,040	12,000	0.837	D	0.003	No
4	US - 101 south of Santa Monica Blvd. [1]	Yes	NB	11,100	8,000	1.388	F(2)	12,261	8,000	1.533	F(3)	106	12,367	8,000	1.546	F(3)	0.013	No
			SB	10,280	8,000	1.285	F(1)	11,356	8,000	1.419	F(2)	90	11,446	8,000	1.431	F(2)	0.011	No
5	US - 101 from Alvarado St. to Gendale Blvd. [2]	No	NB	7,623	8,000	0.953	E	8,421	8,000	1.053	F(0)	91	8,512	8,000	1.064	F(0)	0.011	No
			SB	8,104	8,000	1.013	F(0)	8,952	8,000	1.119	F(0)	90	9,042	8,000	1.130	F(0)	0.011	No
6	US - 101 Grand Ave. to Hill St. [2]	No	NB	5,951	8,000	0.744	C	6,574	8,000	0.822	D	85	6,659	8,000	0.832	D	0.011	No
			SB	7,830	8,000	0.979	E	8,649	8,000	1.081	F(0)	170	8,819	8,000	1.102	F(0)	0.021	Yes
7	US - 101 north of Vignes St. [1]	Yes	NB	6,693	10,000	0.669	C	7,393	10,000	0.739	C	118	7,511	10,000	0.751	C	0.012	No
			SB	11,099	8,000	1.387	F(2)	12,260	8,000	1.533	F(3)	156	12,416	8,000	1.552	F(3)	0.020	Yes
8	SR - 110 from Solano to Hill St. / Stadium Way [2]	No	NB	5,213	6,000	0.869	D	5,758	6,000	0.960	E	108	5,866	6,000	0.978	E	0.018	No
			SB	6,231	6,000	1.039	F(0)	6,883	6,000	1.147	F(0)	89	6,972	6,000	1.162	F(0)	0.015	No
9	SR - 110 at Alpine St. [1]	Yes	NB	9,026	6,000	1.504	F(3)	9,970	6,000	1.662	F(3)	81	10,051	6,000	1.675	F(3)	0.013	No
			SB	8,407	6,000	1.401	F(2)	9,287	6,000	1.548	F(3)	67	9,354	6,000	1.559	F(3)	0.011	No
10	SR - 110 south of US - 101 [1]	Yes	NB	12,007	8,000	1.501	F(3)	13,263	8,000	1.658	F(3)	31	13,294	8,000	1.662	F(3)	0.004	No
			SB	11,131	8,000	1.391	F(2)	12,296	8,000	1.537	F(3)	38	12,334	8,000	1.542	F(3)	0.005	No
11	SR - 110 from Olympic Blvd. to Pico Blvd. [2]	No	NB	7,722	8,000	0.965	E	8,530	8,000	1.066	F(0)	131	8,661	8,000	1.083	F(0)	0.016	No
			SB	9,231	8,000	1.154	F(0)	10,197	8,000	1.275	F(1)	155	10,352	8,000	1.294	F(1)	0.019	No

Table 5-5 Freeway Impact Analysis - PM Peak Hour - Project with County Office Building Option

4/21/2006

No.	Freeway Segments		DIR	Existing (2005)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
12	SR - 110 at Slauson Ave. [1]	Yes	NB	8,550	8,000	1.069	F(0)	9,445	8,000	1.181	F(0)	101	9,546	8,000	1.193	F(0)	0.013	No
			SB	12,155	8,000	1.519	F(3)	13,427	8,000	1.678	F(3)	121	13,548	8,000	1.693	F(3)	0.015	No
13	SR - 60 at Indiana Street [1]	Yes	EB	15,425	12,000	1.285	F(1)	17,039	12,000	1.420	F(2)	50	17,089	12,000	1.424	F(2)	0.004	No
			WB	6,445	12,000	0.537	B	7,119	12,000	0.593	C	38	7,157	12,000	0.596	C	0.003	No
14	I - 5 north of Stadium Way [1]	Yes	NB	12,855	10,000	1.286	F(1)	14,200	10,000	1.420	F(2)	54	14,254	10,000	1.425	F(2)	0.005	No
			SB	10,560	10,000	1.056	F(0)	11,665	10,000	1.166	F(0)	44	11,709	10,000	1.171	F(0)	0.004	No

Notes:

1. Existing demand (factored from 2003 to 2005 conditions) and capacity obtained from LACMTA "2004 Congestion Management Program for Los Angeles County".
2. Existing demand (factored from 2004 to 2005 conditions) from Caltrans " 2004 California State Highway Traffic Volumes". Existing capacity calculated using 2000 vehicles per lane.

Significant Impact Criteria

The impact analysis used the Los Angeles County CMP threshold of significance, which states that a project impact is significant if it causes a net increase in the demand to capacity (D/C) ratio on a freeway segment of 2% or more (D/C ratio increase greater than or equal to 0.02), which causes or worsens LOS F conditions.

Freeway Mainline Impact Analysis

As shown in Tables 5-4 and 5-5, the Project would add more trips to the freeway system in the P.M. peak hour than in the A.M. peak hour. Because of the numerous freeways, freeway ramps, and access routes serving the Project site and the downtown area, Project trips would be dispersed over these multiple routes. The highest Project trips would occur on the US-101 Hollywood Freeway between Grand Avenue and Hill Street, on the US-101 Hollywood Freeway north of Vignes Street, and on the SR-110 Harbor Freeway between Olympic Boulevard and Pico Boulevard. The Project would add between 155 and 170 peak direction trips during the P.M. peak hour at these three locations.

However, the impact of the added Project trips would not change the level of service at any of the analyzed locations, and the incremental increase in the D/C ratio would be less than significant at all locations, as also shown in Tables 5-4 and 5-5, with two exceptions in the P.M. peak hour. The Project would cause an incremental increase in the D/C ratio of 0.021 at the US-101 Hollywood Freeway between Grand Avenue and Hill Street, and an incremental increase in the D/C ratio of 0.020 at the US-101 Hollywood Freeway north of Vignes Street, both in the P.M. peak hour. As these would be at or very slightly above the threshold of significance, it is concluded that the Project with County Office Building Option would cause two significant traffic impacts on the freeway system – one of which would occur at a CMP monitoring location (US-101 Hollywood Freeway north of Vignes Street).

CMP Transit Impact Analysis

An analysis of potential Project impacts on the transit system was performed, per the CMP requirements and guidelines.

Significant Impact Thresholds

Based on factors in the *"CEQA Thresholds Guide"*, City of Los Angeles (1998), the following criterion was established to determine if there would be any significant transit impacts due to the Project:

- The capacity of the transit system serving the Project area would be substantially exceeded.

Transit Analysis

The number of transit trips that would be generated by the Project was estimated based on the trip generation methodology described in Chapter 4, and is summarized in Table 5-6.

The estimate of base vehicle trips (unadjusted) for each Project land use (from Tables A-1 and A-2 in Appendix A) was converted to person trips by applying a conversion factor of 1.4, as per CMP guidelines. The person trip numbers were then multiplied by the estimated percent taking transit for each land use, as previously determined and discussed in Chapter 4 and Appendix A. These numbers are higher in some cases than the default countywide guidelines in the CMP but are more accurate in this instance as they reflect the higher transit use that would occur for the Project because of its downtown location. The estimates of transit trips in both the A.M. and P.M. peak hours are shown in the final columns of Table 5-6.

Because of the nature of the Project land uses, there would be a higher number of transit trips in the P.M. peak hour. As Table 5-6 shows, there would be approximately 820 A.M. peak hour transit trips generated by the Project and about 935 P.M. peak hour transit trips.

The capacity of the transit system service to the Project area was also estimated and is summarized in Table 5-7, which identifies transit lines, peak period headway, vehicle (bus and train) capacities and overall peak period capacity. These are capacities for one direction of transit service. The capacity of transit service directly serving the site, including the Red Line and bus services, is about 23,140 person trips in each peak hour. This is a conservatively low number as it does not include the Metro Blue and Metro Gold Lines and Metrolink, as passengers on those lines may walk to reach the Project or may transfer to the Red Line or buses (including DASH). When these other rail lines are added in to the calculation, then the transit capacity serving the Project area is 36,000 person trips per peak hour.

During the P.M. peak hour (the highest Project trip volume) there would be approximately 935 transit trips generated by the Project, of which about 661 would be outbound from the Project and about 274 trips would be inbound to the Project. The peak direction total of 661 trips would represent about 2.9% of the 23,140 person trip transit capacity directly serving the Project area, and about 1.8% of the total 36,000 person trip transit capacity serving the Bunker Hill/Civic Center area (including all rail service).

Because Project trips would represent very small proportions of the overall transit system capacity, it is concluded that the Project would not cause the capacity of the transit system to be substantially exceeded and therefore that the Project with County Office Building

Table 5-6

Transit Trips Generated by The Project - Project with County Office Building Option

4/21/2006

Land Use	Base (Unadjusted)[1] Vehicle Trips		Person Trips[2]		% By Transit[3]	Transit Trips					
						AM Peak Hour			PM Peak Hour		
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		Total	In[4]	Out[4]	Total	In[4]	Out[4]
Condominiums	564	607	790	850	5%	40	8	32	42	26	16
Apartments	124	145	174	203	25%	44	11	33	51	31	20
Hotel	143	162	200	227	20%	40	24	16	45	24	21
Office	1,153	1,070	1,614	1,498	40%	646	575	71	599	90	509
Retail	599	2,110	839	2,954	5%	42	26	16	148	71	77
Restaurant	54	502	76	703	5%	4	2	2	35	24	11
Event Facility	0	18	0	25	5%	0	0	0	1	1	0
Health Club	61	203	85	284	5%	4	2	2	14	7	7
Total	2,698	4,817	3,777	6,744		820	648	172	935	274	661

1. From trip generation tables in Appendix A.
2. Conversion factor of 1.4 from vehicle trips to person trips, per CMP guidelines.
3. From trip generation tables in Appendix A.
4. In/out distribution from trip generation tables in Appendix A.

Table 5-7 Public Transit Service Capacity Serving the Project Area

4/21/2006

Route	Description	Approximate Peak Period Headway (minutes)	Vehicle / Train Capacity (Including Standees)	Hourly Capacity
Metro Bus Lines				
2	Sunset Bl.	5	55	660
4	Santa Monica Bl.	8	55	413
10	Melrose Ave. - Virgil Ave. - Temple St.	7	55	471
11	Melrose Ave. - Beverly Bl. - Temple St.	7	55	471
14	Beverly Hills - Beverly Bl.	12	55	275
30	W.Pico Bl. - East 1st St. - Floral Dr.	4	55	825
31	W.Pico Bl. - East 1st St.	4	55	825
33	Venice Bl.	10	55	330
37	Adams Bl.	12	55	275
40	Hawthorne Bl. - Crenshaw Bl. - M.L.King Jr. Bl.	10	55	330
42	La Tijera Bl. - LAX City Bus Center	13	55	254
45	Broadway - Mercury Ave.	6	55	550
46	Broadway - Griffin Ave.	6	55	550
48	Maple Ave. - S. San Pedro St.	7	55	471
60	Long Beach Bl. - Santa Fe Ave.	6	55	550
68	W. Washington Bl. - Cesar E. Chavez Ave.	7	55	471
70	Garvey Ave. (LA / El Monte)	7	55	471
76	Valley Bl. - Main St. (El Monte Bus Station)	9	55	367
78	Huntington Dr. - Main St. - Las Tunas Dr. (LA / S. Arcadia)	20	55	165
79	Huntington Dr. (LA / Arcadia)	20	55	165
81	Figueroa St.	10	55	330
96	Riverside - LA Zoo	20	55	165
302	Sunset Bl. Limited	10	55	330
360	Long Beach Bl. Limited	10	55	330
381	Figueroa St. Limited	10	55	330
439	Redondo Beach - LAX City Bus Center - Patsaouras Transit Plaza/Union Station Express	45	55	73
442	South Bay Galleria Transit Center - Hawthorne - Manchester - Patsaouras Transit Plaza/Union Station	25	55	132
444	Rancho Palos Verdes - Rolling Hills Estates - Torrance - Patsaouras Transit Plaza/Union Station Express	30	55	110
445	San Pedro - Artesia Transit Center - Patsaouras Transit Plaza/Union Station Express	35	55	94
446	San Pedro - Pacific Ave. - Wilmington - Carson - Patsaouras Transit Plaza/Union Station Express	60	55	55
447	San Pedro - 7th St. - Wilmington - Carson - Patsaouras Transit Plaza/Union Station Express	60	55	55
484	Cal Poly Pomona - La Puente - Valley Bl. - LA Express	13	55	254
485	Lake Ave. - Oak Knoll - Fremont - LA Express	15	55	220
487	El Monte - Santa Anita Ave. - Sierra Madre - San Gabriel Ave. - LA Express	18	55	183
489	Temple City - Rosemead Bl. - LA Express	18	55	183
490	Cal Poly Pomona - Walnut - Covina - Baldwin Park - Ramona Bl. - LA Express	20	55	165
720	Wilshire - Whittier Bl.	5	55	660
745	South Broadway	4	55	825
			Subtotal	13,385
Antelope Valley Transit				
AV 785	Antelope Valley - Downtown Los Anegeles - Union Station	25	55	132
Foothill Transit				
FT 488	Glendora - West Covina - Downtown Los Angeles Express	30	55	110
FT 492	Montclair - Arcadia - Los Angeles Expressway via Arrow Highway	30	55	110
FT 494	San Dimas - Glendora - Downtown Los Angeles Express	30	55	110

Table 5-7 Public Transit Service Capacity Serving the Project Area

4/21/2006

Route	Description	Approximate Peak Period Headway (minutes)	Vehicle / Train Capacity (Including Standees)	Hourly Capacity
LADOT Commuter Express				
CE 409	Sylmar - Sunland - Tujunga - Glendale	15	55	220
CE 419	Chatsworth - Northridge - Granada Hills - Mission Hills	15	55	220
CE 423	Newbury Park - Thousand Oaks - Woodland Hills - Calabasas - Encino	15	55	220
CE 430	Pacific Palisades - Brentwood - VA Medical Ctr.	30	55	110
CE 431	Westwood - Palms	30	55	110
CE 437	Venice - Marina Del Ray - Culver City	22	55	150
CE 438	Redondo Beach - Hermosa Beach - Manhattan Beach - El Segundo	15	55	220
CE 448	Rancho Palos Verdes - Lomita - Wilmington - Harbor City	25	55	132
Montebello Municipal Bus Lines				
M 341	Montelbello to Downtown Los Angeles from Taylor Ranch Express	30	55	110
Santa Monica Municipal Bus Lines				
SM 10	Santa Monica - Los Angeles Freeway Express	15	55	220
Torrance Transit				
T 1	Torrance - Los Angeles via Gardena	30	55	110
T 2	Torrance - Los Angeles via South Bay Galleria Transit Center	60	55	55
LADOT - DASH				
LDB	Route B: Chinatown - Financial District	8	35	263
LDD	Route D: Union Station / South Park	5	35	420
LDCHS	City Hall Shuttle	6	35	350
LDMSB	Metrolink Shuttle Bunker Hill	7	35	300
			Subtotal	3,672
Metro Rail Lines				
Blue	7th / Metro Center and Long Beach	5	288	3,456
Red	Union Station and North Hollywood - Union Station and Wilshire / Western	10	1,014	6,084
Gold	Union Station and Sierra Madre Villa	10	352	2,112
			Subtotal	11,652
Metrolink Commuter Rail Lines				
Ventura County Line	Montalvo - LA Union Station	38	576	909
Antelope Valley Line	Lancaster - LA Union Station	31	576	1,115
San Bernardino Line	San Bernardino - Pomona - LA Union Station	20	576	1,728
Riverside Line	Downtown Riverside - LA Union Station	33	576	1,047
Orange County Line	Oceanside - Irvine - Anaheim - LA Union Station	20	576	1,728
91 Line	San Bernardino - Anaheim - Commerce - LA Union Station	45	576	768
			Subtotal	7,296
			Total	36,004

Option would not create any significant impacts on the transit systems serving the Project area and downtown.

5.4 Civic Park Analysis

The activities that could occur in the Civic Park were described in Section 4.1 – Project Description. Many of the uses would occur outside the regular peak traffic hours and would not occur on a daily basis. Instead, many would occur intermittently and on an irregular basis. For these reasons they could not be included in the preceding peak hour analyses of the Project's development program. Nevertheless, the following analysis provides an evaluation of the likely types of activities in the Civic Park and the associated potential traffic and parking impacts.

Typical Day-to Day Activity

Typically, day to day use of the park would take place by people already in the downtown area, namely, residents of the Bunker Hill area, employees in the Civic Center and Bunker Hill areas, and visitors to such Civic Center and Bunker Hill uses as the County Administration and Court Buildings, Los Angeles City Hall, the Cathedral, the Music Center, the Walt Disney Concert Hall, and the Museum of Contemporary Art. Such day-to-day uses would include people walking and strolling in the park, enjoying the gardens, and lunching in the park, as well as activities focused on the local population – such as convenient seating (for reading areas and with Wi-Fi access), food kiosks, board and lawn games, and the like. As these people would already be in the area for other reasons, i.e. living, working, or visiting, and would already have already parked their car, they would walk to the Park and not cause any new vehicle trips. This would also apply to smaller events that may occur or be programmed on a regular basis, such as small concerts, cultural programs, local art programs, and corporate events (such as product launches), which would primarily be targeted to the local downtown population.

In addition to these typical users, there may be users of the Park who would not be in the downtown area for some other reason or activity. However, these users typically would not drive to engage in activities in the Park during the peak hours -because of conflicts with other daily routines such as going to work, and not wanting to drive in heavy peak period traffic. Accordingly, new additional vehicle trips by these users during the peak traffic hours would be unlikely. For all of these reasons, the vast majority of users of the Park would not make new trips during the peak hours to the Park.

Therefore, the regular day-to-day activities in the Park would not cause significant traffic impacts. Similarly, because these typical day-to-day visitors to the Park would have already parked somewhere else, there would be no new significant parking demand impacts.

Weekly, Periodic and Seasonal Events

The Project also anticipates the programming of regular weekly, periodic, or seasonal events in the Park. These could include a wide variety of events such as book fairs, arts/antiques fairs, and concerts. These events would most typically occur at lunchtime (most likely targeted to the local downtown population), evenings (usually starting between 7pm and 8pm) and on weekends. Trips to and from such events, which could involve vehicle trips because people may drive in from outside downtown, would typically occur outside the peak roadway traffic hours. Since background roadway traffic volumes would be much lower than during peak hours, significant traffic impacts would not be expected due to such events. Similarly, during evenings and weekends, there would be a plentiful supply of parking available, such as the County Mall garage, the Court of Flags garage, other Bunker Hill garages, and surface lots that are currently unused during those times.

However, there may be times when such events might start earlier in the evening, or might be associated with concerts/programs at the Music Center and the Walt Disney Concert Hall. Such events could result in patrons traveling during the PM peak hour. For example, event patrons might arrive early to have dinner prior to an evening program. The number of times that such events would occur, and the number of people who would attend, is unknown at this early stage of planning for the Civic Park. For the purpose of evaluating potential impacts, the following estimates were made.

It is anticipated that such periodic weeknight events may occur once every other week or a total of about 26 events a year. The size of those events could range from small (average of about 500 people) to medium (average of about 1,000 people) to large (average of about 3,500 people). It is anticipated that the event size could break down as about one-third small events, one-third medium events and one-third large events,

While the medium and large sized events may worsen traffic conditions in the PM peak hour, the number of such events would be infrequent and would not occur on a regular basis. Yet, although such a traffic impact would be temporary in nature, that impact may, on occasion, be significant in its magnitude.

It is not anticipated that such events would cause a significant parking impact. Not all of the parking needs for these events would always be new and additional. For example, people arriving early for related events at the Music Center and the Walt Disney Concert Hall would park in those parking garages and be part of current parking demands. Other incoming attendees would be arriving as daytime employees were leaving their jobs and exiting their parking spaces. The incoming attendees could therefore use the parking spaces vacated by employees. For example, because of the typically early start to their work day, many County employees leave between 4pm and 5pm. Both small and medium sized events could be accommodated in this manner in Civic Center and Bunker Hill parking garages. For larger events that started earlier, parking demand would also be met by garages and lots further away from the Civic Park. It is therefore concluded that there would be no significant parking impacts.

Annual Events, Festivals and Holiday Events

These types of special events that would be programmed in the Civic Park would occur on an irregular basis, and would typically occur on public holidays, at weekends, or in the evenings, i.e. outside the peak hours – when traffic volumes are much lower then during peak hours. Therefore, they would not be expected to cause significant traffic impacts. It is expected that very large events such as festivals and holiday events would be handled in the same way as similar events (such as sports team celebrations, holiday festivals, etc.) are currently handled by the City – that is, on a case-by-case basis with specific event planning coordination with City Departments. The operator of the County-owned Civic Park would coordinate with the County, City, and other appropriate agencies on a case-by-case basis for such events.

Such events could potentially have temporary and short-term (one-time) traffic impacts. These would typically be addressed, at the discretion of the Los Angeles Department of Transportation (LADOT) or other appropriate agencies, by the preparation of special traffic management and controls plans on a temporary basis, as are currently prepared for special events as deemed necessary by LADOT. Such plans would reduce and minimize traffic impacts. Given the traffic management controls in such plans, the temporary and infrequent nature of such events, and the general acceptance of the public of some level of traffic congestion and vehicle delays in arriving at and departing these successful special events, there generally should be no significant traffic impacts. Yet, on occasion, the size of the event and other factors may cause this traffic impact to be significant.

With respect to parking for these special events, as they would occur on public holidays, at weekends, or in the evenings, there would be a substantial amount of available parking in the County garages, Civic Center and Bunker Hill garages, and numerous surface lots that are usually used by employees during the weekday daytime. Therefore, there would be no significant parking impacts cause by these events.

5.5 Construction Impacts – Project with County Office Building Option

The overall Project would be built in a number of phases, and construction would occur on a block-by-block basis. It is anticipated that the Parcel Q development would be constructed first, followed by Parcel L/M-2, and finally Parcel W-1/W-2, and that the construction period for each block would be approximately three years. However, it should be noted that the Project may experience a possible overlap in construction phases.

This overlap would not be more than one year in duration, with the last year of one phase overlapping with the first year of the next phase. This overlap impact would not be more than the impact caused at the peak of construction (the second year of total construction) due to the less intensive nature of activities at the beginning and end of each phase. During construction, off-site activity would typically involve the arrival and departure of construction trucks removing material/debris from demolition and excavation at the site and delivering construction materials to the site, and construction workers arriving and departing the site.

Significant Impact Thresholds

Based on factors in the *"CEQA Thresholds Guide"*, City of Los Angeles (1998), the following criteria were established to determine if the Project would have a significant traffic and circulation impact relative to construction - if construction traffic or activities caused the following:

- Substantial delays and disruption of existing traffic and pedestrian flow; and
- Temporary relocation of existing bus stops to more than one-quarter mile from their existing stop locations.

Impacts of Construction Truck Activity

Depending on the exact nature of construction activity (e.g. demolition/excavation, concrete pouring, or deliveries), truck traffic would be expected to typically be distributed evenly across the workday, with most truck trips therefore occurring during off-peak traffic hours. During certain activities, such as excavation, truck traffic would be expected to be focused on the first half of the workday, with some trucks arriving prior to the start of the workday, i.e. before the A.M. peak hour, while some truck trips could also occur during the A.M. peak hour. Truck trips would typically not occur after the end of the construction work day (3:00pm or 4:00pm) so there would be no truck trips during the P.M. peak hour.

Most construction truck traffic would be freeway-oriented, and use the US-101 Hollywood and SR-110 Harbor Freeways which are only two-three blocks from the Project site. The likely routes to/from these freeways would be via Grand Avenue and Hope Street to/from the US-101 Hollywood Freeway and via 3rd Street and 4th Street/Lower Grand Avenue to/from the SR-110 Harbor Freeway.

The number of truck trips would vary throughout the construction period, with the highest levels of truck activity occurring in the early stages of construction (for example during excavation). Precise numbers of truck trips are therefore not known at this early stage of

Project planning. However, estimates[15] of truck activity indicate that for at least about half of the construction period the number of truck trips would be less than 40 trips per day. For much of the remainder of the construction period the number of truck trips would be in the range of 40 to 120 trips per day. Because of the low volume of trips and the fact that they would mostly occur outside the peak hours, the impact of truck trips during these periods is not expected to be significant.

The highest periods of truck activity would be in the initial six to eight months of construction for each block, when haul trucks would carry excavated material from the site. During those periods it is estimated[16] there may be from 130 trucks a day to a peak of 300 trucks a day. Because some of these trips would occur in the A.M. peak hour, the higher number of trucks could cause temporary but significant traffic impacts.

Impacts of Construction Worker Trips

The number of construction workers would also vary throughout the construction period. Typically on the order of 250 workers would be expected on site, although the number of workers could peak at about 600 workers at certain times. Generally, the construction workers would be expected to arrive and depart the site outside of the normal peak hours, i.e. during off-peak hours. They would typically arrive before 7:00 am and depart around 3:00 or 3:30 pm. The impact of construction worker trips on the AM peak hour and PM peak hour traffic is therefore expected to be negligible.

Impacts of Temporary Street Configuration Modifications

It is not expected that complete closures of any streets would be required during construction, although they could occur due to unforeseen circumstances – in which case they could cause temporary significant impacts. It is however expected that there would need to be certain temporary traffic lane closures on streets adjacent to the Project site for certain periods, although the specific location and duration of such closures is unknown at this time. Such closures may be necessary for utility relocations, as well as to facilitate the delivery of construction materials, or for certain construction procedures. It is expected that, at most, one traffic or parking lane adjacent to the curb may need to be closed at certain locations for certain periods of time. Typically this would be expected to be on Olive Street, Grand Avenue or Hill Street, rather than on First Street or Second Street. Such lane closures could occur for periods of up to 4-6 months, or up to about 18 to 24 months, depending on the stage of construction. Although temporary in nature, such closures could cause significant traffic impacts during such periods of time.

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[15] The Related Companies, April 2006

[16] Ibid

While every effort would be made to minimize both the extent and duration of any lane closures, there may however also be a need for short-term (a few hours) and/or partial lane closures immediately adjacent to the Project site on occasion throughout the construction period. As these would be for short periods of time only, and would most often occur during off-peak hours – no significant impacts would be expected on peak hour traffic conditions.

Impacts on Sidewalks and Pedestrian Circulation

In certain cases it may be necessary to close sidewalks for either short or extended periods of time. Because the street system in the area of the Project is a fully developed street grid with sidewalks on both sides of all streets, there would be convenient alternate pedestrian routes available simply by using the sidewalk on the other side of the street. While the use of these alternative routes may lead to some inconvenience to pedestrians, due to slightly longer walk distances in some cases, it is not expected such increases would be significant. It is therefore concluded that there would be no significant impacts on pedestrian circulation during construction of the Project.

Impacts on Other/Adjacent Uses

The Project will completely redevelop each of the three development blocks so there will be no remaining uses on the Project site. There will therefore be no construction impacts to any remaining existing site uses. The Project does not anticipate the closure or modification of any driveways to adjacent projects. Access and circulation to existing uses on adjacent blocks would therefore not be affected and there would be no significant construction impacts.

Impacts of Reconstructing County Mall Garage Ramps on Grand Avenue

The reconfiguration of the ramps to/from the County Mall parking garage on Grand Avenue would require the ramps to be shut down for a period of time during the reconstruction. During that time, traffic would have to enter and exit the County Mall garage via either the Hill Street ramps, or via the Music Center garage (which connects to the County Mall garage under Grand Avenue).

Similarly the reconfiguration of the upper sections of the helical ramps to the garage on Hill Street would also require those ramps to be shut down for a period of time during the reconstruction. During that time, traffic would have to enter and exit the County Mall garage via the Grand Avenue ramps.

It would be important therefore that these two improvements are constructed separately and at different times, so that entry/exit is maintained to the County garage at times.

The diversion of traffic to alternate garage entrances would only affect streets in the immediate vicinity of the County Garage block, but could potentially create temporary and short term significant traffic impacts.

Impacts on Transit Stops

Construction of the Project may require the temporary relocation of up to five bus stops. The construction of Parcel Q could require the relocation of the bus stop on eastbound First Street between Grand Avenue and Olive Street. This bus stop could be relocated within one or two blocks on First Street.

The construction of Parcel L/M-2 could require the relocation of the bus stop on southbound Grand Avenue just south of 2nd Street. This bus stop could be relocated within one or two blocks south on Grand Avenue.

The construction of Parcel W could require the relocation of the two bus stops on northbound Olive Street between 2nd Street and 1st Street, and the southbound bus stop on Hill Street between 1st Street and 2nd Street. These bus stops could be relocated within one or two blocks on Olive Street and on Hill Street.

Because all of these bus stops could be temporarily relocated within one-quarter mile of the original stop location, there would be no significant impacts on bus stop locations due to Project construction.

Impacts of Construction Worker Parking

The number of construction workers would vary throughout the construction period. It is estimated that typically on the order of 250 construction workers would be on-site daily, with a peak maximum of about 600 workers. Because of the downtown location near significant regional transit service, some construction workers may use transit. Construction workers who choose to drive to work will need to park at or near the Project site. It is unlikely that on-site parking will be provided for construction workers during the construction period, so they will need to park elsewhere.

The Project proposes to enter into some form of temporary arrangement with parking garages in the area of the Project, or with surface lot operators elsewhere in downtown or its periphery, to provide a sufficient supply of off-street spaces for the construction workers during Project construction, and to require all construction workers to use these designated parking spaces. With the implementation of this program, there would be no significant parking impacts due to construction worker parking.

6. Project Impact Analysis – Additional Residential Development Option

This chapter addresses potential transportation impacts of the Project with Additional Residential Development Option, including traffic impacts, Congestion Management Plan and freeway impacts, transit impacts, and parking impacts.

The methodology used was exactly the same as for the Project with County Office Building Option described in the previous Chapter, so methodology information is not repeated here. The following discussion focuses only on the results and on highlighting any differences between the Additional Residential Development Option and the County Office Building Option discussed in Chapter 5.

6.1 Roadway Traffic Impact Analysis – Project with Additional Residential Development Option

Results of the Impact Analysis

The intersection level of service analysis for the future with Project conditions is summarized in Table 6-1 and shown in Figure 6-1 for the A.M. and P.M. peak hours. Table 6-1 also compares the level of service for without Project and with Project conditions, shows the increase in V/C ratios at each intersection due to the Project, and identifies if the increase is significant .

A.M. Peak Hour Project Traffic Impacts

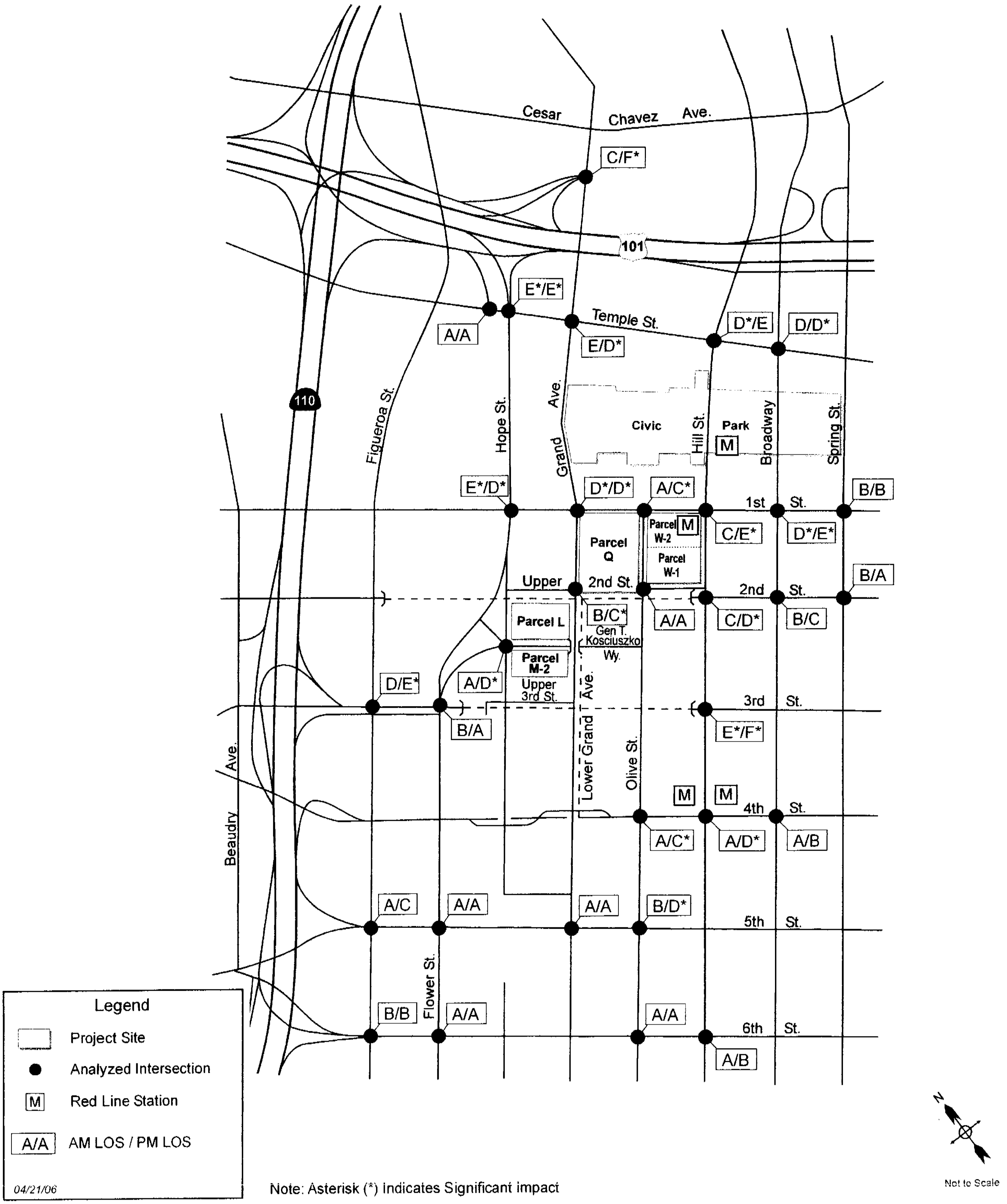
As shown in Table 6-1, the Project would result in a significant traffic impact at six intersections in the A.M. peak hour. These intersections are as follows (with the resultant LOS in parentheses):

▪ Grand Avenue / 1st Street	(LOS D)
▪ Hill Street / Temple Street	(LOS D)
▪ Broadway / 1st Street	(LOS D)
▪ Hope St / Temple St. / US-101 Ramps	(LOS E)
▪ Hope Street / 1st Street	(LOS E)
▪ Hill Street / 3rd Street	(LOS E)

Table 6-1 Intersection Level Of Service - Future With Project Conditions - Project with Additional Residential Development Option

4/21/2006

No.	Intersection	A.M Peak						P.M Peak					
		Future Without Project Condtions		Future With Project Conditions		Change in V/C	Significant Impact	Future Without Project Condtions		Future With Project Conditions		Change in V/C	Significant Impact
		V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
1	Figueroa St. / 3rd St.	0.827	D	0.838	D	0.011	No	0.965	E	0.980	E	0.015	Yes
2	Figueroa St. / 5th St.	0.487	A	0.493	A	0.006	No	0.781	C	0.790	C	0.009	No
3	Figueroa St. / 6th St.	0.626	B	0.629	B	0.003	No	0.650	B	0.658	B	0.008	No
4	I-110 Off Ramp / Temple St.	0.398	A	0.400	A	0.002	No	0.409	A	0.412	A	0.003	No
5	Hope St. / Temple St. / US-101 Ramps	0.902	E	0.921	E	0.019	Yes	0.971	E	0.999	E	0.028	Yes
6	Hope St. / 1st St.	0.925	E	0.935	E	0.010	Yes	0.733	C	0.832	D	0.099	Yes
7	Hope St. / GTK Way / 2nd Place	0.420	A	0.452	A	0.032	No	0.776	C	0.845	D	0.069	Yes
8	Flower St. / 3rd St.	0.671	B	0.678	B	0.007	No	0.546	A	0.564	A	0.018	No
9	Flower St. / 5th St.	0.439	A	0.449	A	0.010	No	0.517	A	0.529	A	0.012	No
10	Flower St. / 6th St.	0.528	A	0.535	A	0.007	No	0.498	A	0.513	A	0.015	No
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.693	B	0.722	C	0.029	No	0.994	E	1.068	F	0.074	Yes
12	Grand Ave. / Temple St.	0.930	E	0.925	E	-0.005	No	0.844	D	0.877	D	0.033	Yes
13	Grand Ave. / 1st St.	0.791	C	0.817	D	0.026	Yes	0.850	D	0.890	D	0.040	Yes
14	Grand Ave. / Upper 2nd St.	0.537	A	0.680	B	0.143	No	0.504	A	0.714	C	0.210	Yes
15	Grand Ave. / 5th St.	0.487	A	0.503	A	0.016	No	0.565	A	0.588	A	0.023	No
16	Olive St. / 1st St.	0.531	A	0.600	A	0.069	No	0.627	B	0.753	C	0.126	Yes
17	Olive St. / 2nd St.	0.283	A	0.386	A	0.103	No	0.406	A	0.599	A	0.193	No
18	Olive St. / 4th St.	0.437	A	0.491	A	0.054	No	0.653	B	0.743	C	0.090	Yes
19	Olive St. / 5th St.	0.623	B	0.661	B	0.038	No	0.812	D	0.851	D	0.039	Yes
20	Olive St. / 6th St.	0.402	A	0.412	A	0.010	No	0.486	A	0.513	A	0.027	No
21	Hill St. / Temple St.	0.762	C	0.811	D	0.049	Yes	0.933	E	0.938	E	0.005	No
22	Hill St. / 1st St.	0.744	C	0.760	C	0.016	No	0.911	E	0.941	E	0.030	Yes
23	Hill St. / 2nd St.	0.765	C	0.792	C	0.027	No	0.679	B	0.803	D	0.124	Yes
24	Hill St. / 3rd St.	0.968	E	0.986	E	0.018	Yes	1.018	F	1.050	F	0.032	Yes
25	Hill St. / 4th St.	0.518	A	0.543	A	0.025	No	0.760	C	0.802	D	0.042	Yes
26	Hill St. / 6th St.	0.457	A	0.467	A	0.010	No	0.586	A	0.603	B	0.017	No
27	Broadway / Temple St.	0.858	D	0.867	D	0.009	No	0.834	D	0.866	D	0.032	Yes
28	Broadway / 1st St.	0.824	D	0.863	D	0.039	Yes	0.841	D	0.918	E	0.077	Yes
29	Broadway / 2nd St.	0.613	B	0.617	B	0.004	No	0.748	C	0.767	C	0.019	No
30	Broadway / 4th St.	0.474	A	0.490	A	0.016	No	0.646	B	0.667	B	0.021	No
31	Spring St. / 1st St.	0.592	A	0.610	B	0.018	No	0.582	A	0.611	B	0.029	No
32	Spring St. / 2nd St.	0.609	B	0.612	B	0.003	No	0.509	A	0.518	A	0.009	No



Note: Asterisk (*) indicates Significant impact

Figure 6-1
Intersection Level of Service - Future With Project Conditions - Project with Additional Residential Development Option

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

Three of the six impacted intersections will continue to operate at LOS D with the Project. The remaining three impacted intersections will operate at LOS E, all of which would also operate at LOS E without the Project.

P.M. Peak Hour Traffic Impacts

As shown in Table 6-1, the Project would result in a significant traffic impact at seventeen intersections in the P.M. peak hour. These intersections are as follows (with the resultant LOS in parentheses):

▪ Grand Avenue / Upper 2nd Street	(LOS C)
▪ Olive Street / 1st Street	(LOS C)
▪ Olive Street / 4th Street	(LOS C)
▪ Hope Street / 1st Street	(LOS D)
▪ Hope Street / GTK Way / 2nd Place	(LOS D)
▪ Grand Avenue / Temple Street	(LOS D)
▪ Grand Avenue / 1st Street	(LOS D)
▪ Olive Street / 5th Street	(LOS D)
▪ Hill Street / 2nd Street	(LOS D)
▪ Hill Street / 4th Street	(LOS D)
▪ Broadway / Temple Street	(LOS D)
▪ Figueroa Street / 3rd Street	(LOS E)
▪ Hope St / Temple St. / US-101 Ramps	(LOS E)
▪ Hill Street / 1st Street	(LOS E)
▪ Broadway / 1st Street	(LOS E)
▪ Grand Avenue / US-101 / I-110 Ramps	(LOS F)
▪ Hill Street / 3rd Street	(LOS F)

Eleven of the seventeen impacted intersections will continue to operate at LOS D or better, with the Project. Four of the impacted intersections will operate at LOS E with the Project, three of which would also operate at LOS E without the Project (Figueroa Street / 3rd Street, Hope St / Temple St. / US-101 Ramps, and Hill Street / 1st Street). Two intersections, Grand Avenue / US-101 / I-110 Ramps, and Hill Street / 3rd Street will operate at LOS F with the Project, one of which (Grand Avenue / US-101 / I-110 Ramps) would operate at LOS E without the Project and one (Hill Street / 3rd Street) would operate at LOS F without the Project.

6.2 Project Driveway Analysis – Project with Additional Residential Development Option

Driveway Traffic Analysis

Projected driveway traffic volumes are shown in Figures 6-2 and 6-3 respectively. The results of the analysis are shown in Table 6-2 which shows the level of service for each approach for each driveway intersection.

As can be seen from Table 6-2, virtually all Project driveway intersection approaches would operate at LOS B or better, with only a few driveway movements operating at LOS or LOS D. No driveway intersection approach would operate at worse than LOS D. It is therefore concluded that the Project with Additional Residential Development Option would not cause any significant traffic impacts at Project driveway locations.

All Project driveways would be located exactly as proposed for the Project with County Office Building Option. Therefore, based on the same analysis, it is concluded that the Project driveways would not create hazardous conditions and would not create any significant impacts.

6.3 CMP and Regional Highway Analysis – Project with Additional Residential Development Option

CMP Arterial Monitoring Locations

A review of the 2004 CMP indicated the following arterial monitoring stations that are closest to the Project site:

- Sunset Boulevard and Alvarado Street
- Wilshire Boulevard and Alvarado Street
- Alameda Street and Washington Boulevard

A maximum of approximately two percent of Project trips are expected to use each of Sunset Boulevard, Wilshire Boulevard, and Alameda Street through these intersections, which represents 20 trips in the A.M. peak hour and 40 trips in the P.M. peak hour. As these volumes are all less than the CMP threshold of 50 or more trips in either the A.M. or P.M. peak hours, no further analysis is necessary.

CMP Freeway Monitoring Locations

A review of the 2004 CMP identified the following freeway monitoring locations that are closest to the Project site:

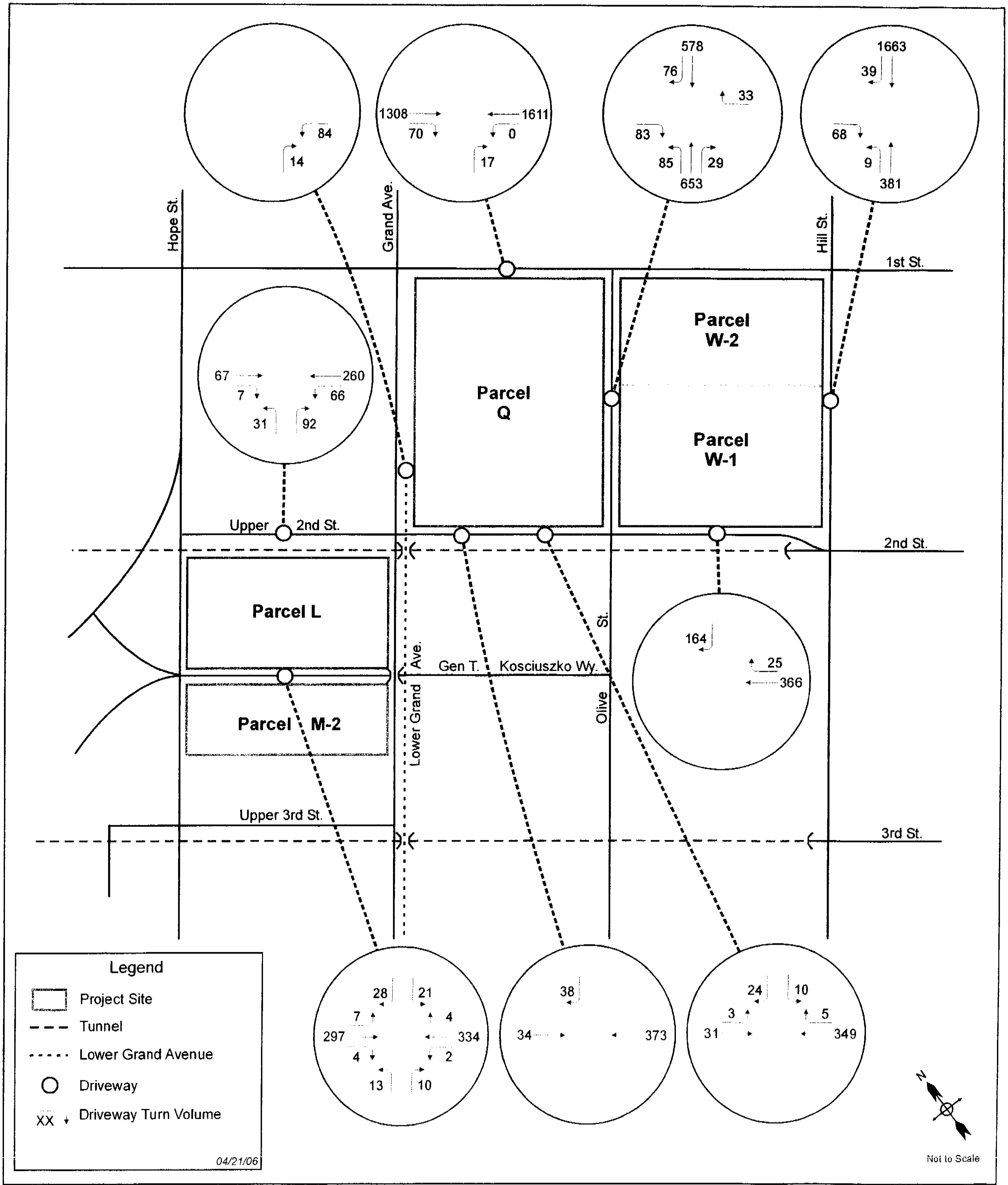


Figure 6-2
Project Driveway Volumes - AM Peak Hour - Project with Additional Residential Development Option

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

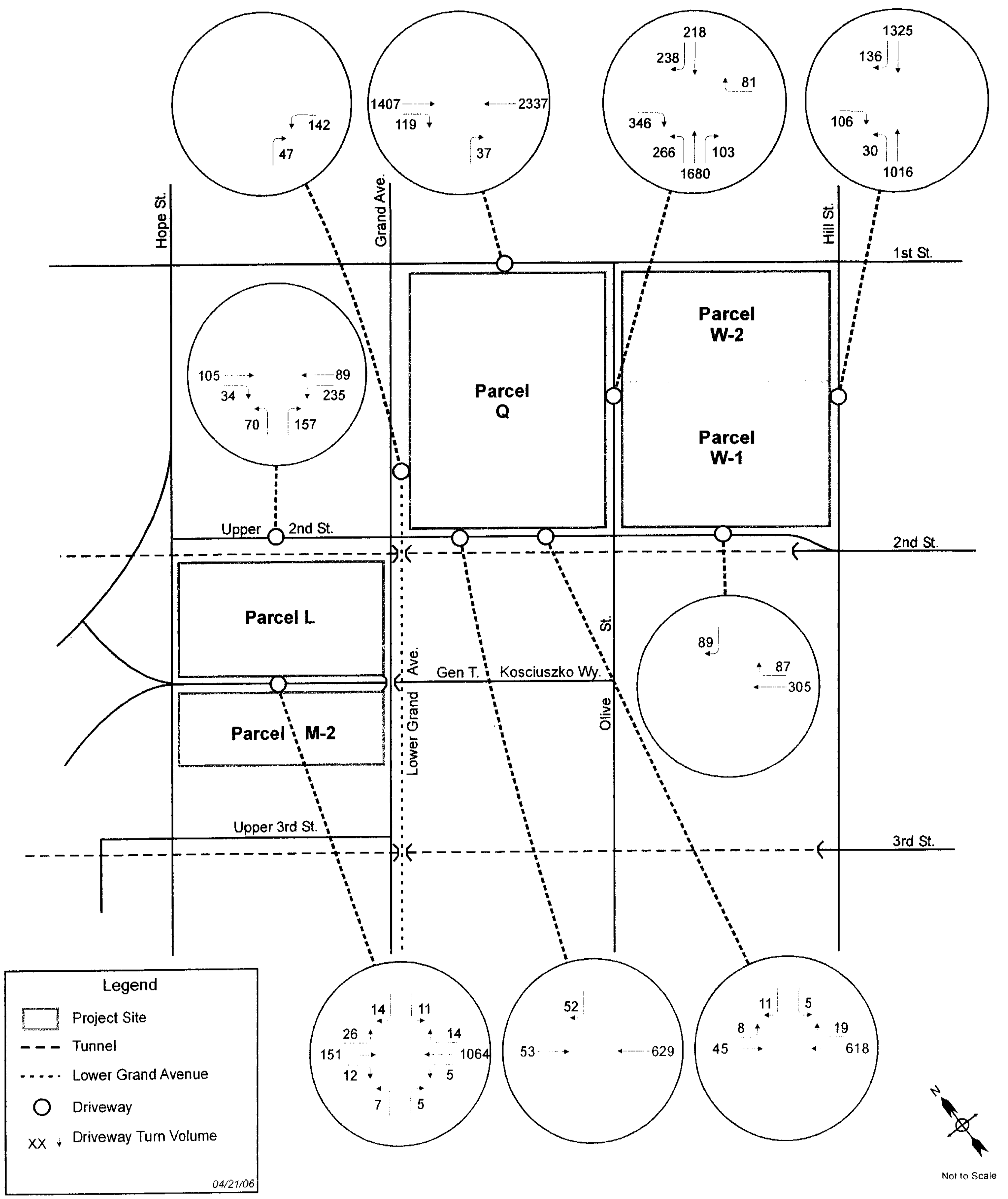


Figure 6-3
Project Driveway Volumes - PM Peak Hour - Project with Additional Residential Development Option

Grand Avenue Project

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Table 6-2 **Future With Project Conditions - Driveway Level of Service Project with Additional Residential Development Option** 4/21/2006

Parcel	Driveway		Future With Project - AM Peak Hour		Future With Project - PM Peak Hour	
			Delay (secs)	LOS	Delay (secs)	LOS
Q	1st Street Driveway	NB Right Turn	11.8	B	12.8	B
		NB Approach	11.8	B	12.8	B
		Worst Case LOS	**11.8**	**B**	**12.8**	**B**
Q	Upper 2nd St. Driveway (Mid block)	EB Left Turn	8.0	A	8.8	A
		SB Approach	10.0	A	11.7	B
		Worst Case LOS	**10.0**	**A**	**11.7**	**B**
Q	Upper 2nd St. Driveway (Closer to Grand Ave.)	SB Right Turn	9.5	A	10.7	B
		SB Approach	9.5	A	10.7	B
		Worst Case LOS	**9.5**	**A**	**10.7**	**B**
Q / W	Olive St. Driveway	NB Left Turn	9.2	A	9.2	A
		EB Right Turn	11.1	B	13.2	B
		WB Right Turn	9.8	A	15.0	B
		EB Approach	11.1	B	13.2	B
		WB Approach	9.8	A	15.0	B
		Worst Case LOS	**11.1**	**B**	**15.0**	**B**
W	Hill St. Driveway	NB Left Turn	14.7	B	13.2	B
		EB Right Turn	14.0	B	13.8	B
		EB Approach	14.0	B	13.8	B
		Worst Case LOS	**14.7**	**B**	**13.8**	**B**
W	Upper 2nd St. Driveway	SB Right Turn	12.1	B	10.9	B
		SB Approach	12.1	B	10.9	B
		Worst Case LOS	**12.1**	**B**	**10.9**	**B**
L / M2	Upper 2nd St. Driveway	NB Left Turn	11.1	B	17.3	C
		NB Right Turn	8.8	A	9.3	A
		WB Left Turn	7.4	A	7.9	A
		NB Approach	9.4	A	11.8	B
		Worst Case LOS	**9.4**	**A**	**11.8**	**B**
L / M2	GTK Driveway	NB Left Turn	13.2	B	18.0	C
		NB Right Turn	9.2	A	8.7	A
		SB Left Turn	13.4	B	33.9	D
		SB Right Turn	9.4	A	12.5	A
		EB Left Turn	7.9	A	10.7	B
		WB Left Turn	7.8	A	7.5	A
		NB Approach	11.4	B	14.1	B
		SB Approach	11.1	B	21.9	C
		Worst Case LOS	**11.4**	**B**	**21.9**	**C**

- US-101 south of Santa Monica Boulevard
- US-101 north of Vignes Street
- SR-110 at Alpine Street
- SR-110 south of US-101
- SR-110 at Slauson Street
- I-10 west of Vermont Avenue
- I-10 at East LA City Limit (nr. Indiana Street)
- SR-60 east of Indiana Street
- I-5 north of Stadium Way

Additional Freeway Analysis Locations

In order to more fully investigate the potential impact of the Project on the freeway system, some additional analysis locations were selected including a number of key locations on the mainline freeways nearest the Project site and surrounding the downtown area where Project traffic would be most highly concentrated and most likely to cause potential traffic impacts. These additional analysis locations were as follows:

- I-10 east of Los Angeles Street
- US-101 between Alvarado Street and Glendale Boulevard
- US-101 between Grand Avenue and Hill Street
- SR-110 between Solano Avenue and Hill St/Stadium Way
- SR-110 between Olympic Blvd and Pico Boulevard

Freeway Analysis

The freeway impact analysis at all these locations (including both CMP and non-CMP locations) is shown in Table 6-3 for the A.M peak hour and Table 6-4 for the P.M. peak hour.

The number of Project vehicle trips expected to pass through the four CMP monitoring locations closest to the Project was estimated based on the Project trip distribution (as shown in Figures 4-7 and 4-8), and the Project trip generation (shown in Table 4-5). This analysis showed (see Tables 6-3 and 6-4) that the highest number of trips at the CMP locations closest to the Project site in either peak hour (in either direction) was 90 trips in the P.M. peak hour on the US-101 south of Santa Monica Boulevard, 67 trips in the P.M. peak hour on SR-110 at Alpine Street, 118 trips in the P.M. peak hour on US-110 north of Vignes Street, and 38 trips in the P.M. peak hour on SR-110 south of US-101.

The number of trips passing through CMP monitoring locations further from the Project site, as shown in Tables 6-3 and 6-4, ranged from 38 to 101 trips in the P.M. peak hour.

Table 6-3 Freeway Impact Analysis - AM Peak Hour - Project with Additional Residential Development Option

4/21/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2006)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
1	I-10 at Budlong Ave. [1]	Yes	EB	17,350	12,500	1.388	F(2)	19,165	12,500	1.533	F(3)	32	19,197	12,500	1.536	F(3)	0.003	No
			WB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	58	20,626	12,500	1.650	F(3)	0.005	No
2	I - 10 East of Los Angeles Street [2]	No	EB	6,490	8,000	0.811	D	7,169	8,000	0.896	D	0	7,169	8,000	0.896	D	0.000	No
			WB	8,600	8,000	1.075	F(0)	9,500	8,000	1.187	F(0)	0	9,500	8,000	1.187	F(0)	0.000	No
3	I - 10 at East Los Angeles City Limit [1]	Yes	EB	6,750	12,000	0.563	C	7,456	12,000	0.621	C	25	7,481	12,000	0.623	C	0.002	No
			WB	11,325	12,000	0.944	E	12,510	12,000	1.042	F(0)	12	12,522	12,000	1.043	F(0)	0.001	No
4	US - 101 south of Santa Monica Blvd. [1]	Yes	NB	7,145	8,000	0.893	D	7,893	8,000	0.987	E	29	7,922	8,000	0.990	E	0.004	No
			SB	11,100	8,000	1.388	F(2)	12,261	8,000	1.533	F(3)	53	12,314	8,000	1.539	F(3)	0.007	No
5	US - 101 from Alvarado St. to Gendale Blvd. [2]	No	NB	7,776	8,000	0.972	E	8,590	8,000	1.074	F(0)	29	8,619	8,000	1.077	F(0)	0.004	No
			SB	8,773	8,000	1.097	F(0)	9,691	8,000	1.211	F(0)	45	9,736	8,000	1.217	F(0)	0.006	No
6	US - 101 Grand Ave. to Hill St. [2]	No	NB	7,446	8,000	0.931	E	8,225	8,000	1.028	F(0)	-5	8,220	8,000	1.028	F(0)	-0.001	No
			SB	5,185	8,000	0.648	C	5,727	8,000	0.716	C	76	5,803	8,000	0.725	C	0.010	No
7	US - 101 north of Vignes St. [1]	Yes	NB	13,872	10,000	1.387	F(2)	15,323	10,000	1.532	F(3)	38	15,361	10,000	1.536	F(3)	0.004	No
			SB	5,333	8,000	0.667	C	5,891	8,000	0.736	C	77	5,968	8,000	0.746	C	0.010	No
8	SR - 110 from Solano to Hill St. / Stadium Way [2]	No	NB	4,623	6,000	0.771	D	5,107	6,000	0.851	D	53	5,160	6,000	0.860	D	0.009	No
			SB	7,314	6,000	1.219	F(0)	8,079	6,000	1.347	F(1)	29	8,108	6,000	1.351	F(2)	0.005	No
9	SR - 110 at Alpine St. [1]	Yes	NB	4,710	6,000	0.785	D	5,203	6,000	0.867	D	40	5,243	6,000	0.874	D	0.007	No
			SB	8,407	6,000	1.401	F(2)	9,287	6,000	1.548	F(3)	22	9,309	6,000	1.551	F(3)	0.004	No
10	SR - 110 south of US - 101 [1]	Yes	NB	8,283	8,000	1.035	F(0)	9,150	8,000	1.144	F(0)	21	9,171	8,000	1.146	F(0)	0.003	No
			SB	11,131	8,000	1.391	F(2)	12,296	8,000	1.537	F(3)	13	12,309	8,000	1.539	F(3)	0.002	No
11	SR - 110 from Olympic Blvd. to Pico Blvd. [2]	No	NB	6,848	8,000	0.856	D	7,564	8,000	0.946	E	42	7,606	8,000	0.951	E	0.005	No
			SB	10,833	8,000	1.354	F(2)	11,966	8,000	1.496	F(3)	76	12,042	8,000	1.505	F(3)	0.010	No

Table 6-3 Freeway Impact Analysis - AM Peak Hour - Project with Additional Residential Development Option

4/21/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2006)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
12	SR - 110 at Slauson Ave. [1]	Yes	NB	11,321	8,000	1.415	F(2)	12,505	8,000	1.563	F(3)	32	12,537	8,000	1.567	F(3)	0.004	No
			SB	9,275	8,000	1.159	F(0)	10,245	8,000	1.281	F(1)	59	10,304	8,000	1.288	F(1)	0.007	No
13	SR - 60 at Indiana Street [1]	Yes	EB	5,090	12,000	0.424	B	5,623	12,000	0.469	B	25	5,648	12,000	0.471	B	0.002	No
			WB	16,650	12,000	1.388	F(2)	18,392	12,000	1.533	F(3)	12	18,404	12,000	1.534	F(3)	0.001	No
14	I - 5 north of Stadium Way [1]	Yes	NB	9,390	10,000	0.939	E	10,372	10,000	1.037	F(0)	26	10,398	10,000	1.040	F(0)	0.003	No
			SB	13,875	10,000	1.388	F(2)	15,327	10,000	1.533	F(3)	14	15,341	10,000	1.534	F(3)	0.001	No

Notes:

1. Existing demand (factored from 2003 to 2005 conditions) and capacity obtained from LACMTA "2004 Congestion Management Program for Los Angeles County".
2. Existing demand (factored from 2004 to 2005 conditions) from Caltrans " 2004 California State Highway Traffic Volumes". Existing capacity calculated using 2000 vehicles per lane.

Table 6-4 Freeway Impact Analysis - PM Peak Hour - Project with Additional Residential Development Option

4/21/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2005)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
1	I-10 at Budlong Ave. [1]	Yes	EB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	101	20,669	12,500	1.654	F(3)	0.008	No
			WB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	76	20,644	12,500	1.652	F(3)	0.006	No
2	I - 10 East of Los Angeles Street [2]	No	EB	9,020	8,000	1.128	F(0)	9,964	8,000	1.245	F(0)	0	9,964	8,000	1.245	F(0)	0.000	No
			WB	7,080	8,000	0.885	D	7,821	8,000	0.978	E	0	7,821	8,000	0.978	E	0.000	No
3	I - 10 at East Los Angeles City Limit [1]	Yes	EB	12,365	12,000	1.030	F(0)	13,659	12,000	1.138	F(0)	33	13,692	12,000	1.141	F(0)	0.003	No
			WB	9,055	12,000	0.755	C	10,002	12,000	0.834	D	38	10,040	12,000	0.837	D	0.003	No
4	US - 101 south of Santa Monica Blvd. [1]	Yes	NB	11,100	8,000	1.388	F(2)	12,261	8,000	1.533	F(3)	69	12,330	8,000	1.541	F(3)	0.009	No
			SB	10,280	8,000	1.285	F(1)	11,356	8,000	1.419	F(2)	90	11,446	8,000	1.431	F(2)	0.011	No
5	US - 101 from Alvarado St. to Gendale Blvd. [2]	No	NB	7,623	8,000	0.953	E	8,421	8,000	1.053	F(0)	60	8,481	8,000	1.060	F(0)	0.008	No
			SB	8,104	8,000	1.013	F(0)	8,952	8,000	1.119	F(0)	90	9,042	8,000	1.130	F(0)	0.011	No
6	US - 101 Grand Ave. to Hill St. [2]	No	NB	5,951	8,000	0.744	C	6,574	8,000	0.822	D	73	6,647	8,000	0.831	D	0.009	No
			SB	7,830	8,000	0.979	E	8,649	8,000	1.081	F(0)	130	8,779	8,000	1.097	F(0)	0.016	No
7	US - 101 north of Vignes St. [1]	Yes	NB	6,693	10,000	0.669	C	7,393	10,000	0.739	C	118	7,511	10,000	0.751	C	0.012	No
			SB	11,099	8,000	1.387	F(2)	12,260	8,000	1.533	F(3)	102	12,362	8,000	1.545	F(3)	0.013	No
8	SR - 110 from Solano to Hill St. / Stadium Way [2]	No	NB	5,213	6,000	0.869	D	5,758	6,000	0.960	E	66	5,824	6,000	0.971	E	0.011	No
			SB	6,231	6,000	1.039	F(0)	6,883	6,000	1.147	F(0)	74	6,957	6,000	1.159	F(0)	0.012	No
9	SR - 110 at Alpine St. [1]	Yes	NB	9,026	6,000	1.504	F(3)	9,970	6,000	1.662	F(3)	53	10,023	6,000	1.671	F(3)	0.009	No
			SB	8,407	6,000	1.401	F(2)	9,287	6,000	1.548	F(3)	67	9,354	6,000	1.559	F(3)	0.011	No
10	SR - 110 south of US - 101 [1]	Yes	NB	12,007	8,000	1.501	F(3)	13,263	8,000	1.658	F(3)	31	13,294	8,000	1.662	F(3)	0.004	No
			SB	11,131	8,000	1.391	F(2)	12,296	8,000	1.537	F(3)	38	12,334	8,000	1.542	F(3)	0.005	No
11	SR - 110 from Olympic Blvd. to Pico Blvd. [2]	No	NB	7,722	8,000	0.965	E	8,530	8,000	1.066	F(0)	131	8,661	8,000	1.083	F(0)	0.016	No
			SB	9,231	8,000	1.154	F(0)	10,197	8,000	1.275	F(1)	101	10,298	8,000	1.287	F(1)	0.013	No

Table 6-4 Freeway Impact Analysis - PM Peak Hour - Project with Additional Residential Development Option

4/21/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2005)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
12	SR - 110 at Slauson Ave. [1]	Yes	NB	8,550	8,000	1.069	F(0)	9,445	8,000	1.181	F(0)	101	9,546	8,000	1.193	F(0)	0.013	No
			SB	12,155	8,000	1.519	F(3)	13,427	8,000	1.678	F(3)	79	13,506	8,000	1.688	F(3)	0.010	No
13	SR - 60 at Indiana Street [1]	Yes	EB	15,425	12,000	1.285	F(1)	17,039	12,000	1.420	F(2)	33	17,072	12,000	1.423	F(2)	0.003	No
			WB	6,445	12,000	0.537	B	7,119	12,000	0.593	C	38	7,157	12,000	0.596	C	0.003	No
14	I - 5 north of Stadium Way [1]	Yes	NB	12,855	10,000	1.286	F(1)	14,200	10,000	1.420	F(2)	33	14,233	10,000	1.423	F(2)	0.003	No
			SB	10,560	10,000	1.056	F(0)	11,665	10,000	1.166	F(0)	37	11,702	10,000	1.170	F(0)	0.004	No

Notes:

1. Existing demand (factored from 2003 to 2005 conditions) and capacity obtained from LACMTA "2004 Congestion Management Program for Los Angeles County".
2. Existing demand (factored from 2004 to 2005 conditions) from Caltrans " 2004 California State Highway Traffic Volumes". Existing capacity calculated using 2000 vehicles per lane.

As shown in Tables 6-3 and 6-4, the Project would thus add less than the CMP threshold of 150 or more trips in either direction at all CMP monitoring locations during the A.M. and P.M. peak hours. No further CMP analysis is necessary according to the CMP guidelines. However, all the freeway analysis locations were investigated in the following analysis.

Freeway Mainline Impact Analysis

The impact of the added Project trips would not change the level of service at any of the analyzed locations, and the incremental increase in the D/C ratio would be less than significant at all locations, as also shown in Tables 6-3 and 6-4. It is concluded that the Project with Additional Residential Development Option would cause no significant traffic impacts on the freeway system.

CMP Transit Impact Analysis

Transit Analysis

The number of transit trips that would be generated by the Project is summarized in Table 6-5.

Because of the nature of the Project land uses, there would be a higher number of transit trips in the P.M. peak hour. As Table 5-6 shows, there would be approximately 195 A.M. peak hour transit trips generated by the Project and about 363 P.M. peak hour transit trips.

The capacity of the transit system service to the Project area was also estimated and is summarized in Table 5-7, which identifies transit lines, peak period headway, vehicle (bus and train) capacities and overall peak period capacity.

During the P.M. peak hour (the highest Project trip volume) there would be approximately 363 transit trips generated by the Project, of which about 163 would be outbound from the Project and about 200 trips would be inbound to the Project. The peak direction total of 200 trips would represent about 0.9% of the 23,140 person trip transit capacity directly serving the Project area, and about 0.6% of the total 36,000 person trip transit capacity serving the Bunker Hill/Civic Center area (including all rail service)

Because Project trips would represent very small proportions of the overall transit system capacity, it is concluded that the Project would not cause the capacity of the transit system to be substantially exceeded and therefore that the Project with Additional Residential Development Option would not create any significant impacts on the transit systems serving the Project area and downtown.

Table 6-5

Transit Trips Generated by The Project
Project with Additional Residential Development Option

4/21/2006

Land Use	Base (Unadjusted) [1] Vehicle Trips		Person Trips [2]		% By Transit [3]	Transit Trips					
						AM Peak Hour			PM Peak Hour		
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		Total	In [4]	Out [4]	Total	In [4]	Out [4]
Condominiums	703	770	984	1,078	5%	49	9	40	54	33	21
Apartments	160	187	224	262	25%	56	14	42	66	40	26
Hotel	143	162	200	227	20%	40	24	16	45	24	21
Office	0	0	0	0	40%	0	0	0	0	0	0
Retail	599	2,110	839	2,954	5%	42	26	16	148	71	77
Restaurant	54	502	76	703	5%	4	2	2	35	24	11
Event Facility	0	18	0	25	5%	0	0	0	1	1	0
Health Club	61	203	85	284	5%	4	2	2	14	7	7
Total	1,720	3,952	2,408	5,533		195	77	118	363	200	163

1. From trip generation tables in Appendix A.
2. Conversion factor of 1.4 from vehicle trips to person trips, per CMP guidelines.
3. From trip generation tables in Appendix A.
4. In/out distribution from trip generation tables in Appendix A.

6.4 Civic Park Analysis – Project with Additional Residential Development Option

The Civic Park component of the Project would be no different under this Project Option. Refer to Section 5.4 for a discussion of potential Civic Park impacts.

6.5 Construction Impacts

The construction impacts of this Project Option are not expected to be substantially different from the County Office Building Option, because the only change would be to provide a residential tower in place of on office tower so construction procedures would be very similar. Refer to Section 5.5 for a discussion of potential Project construction impacts.

7. Parking Analysis – Project With County Office Building Option

This report section addresses the proposed parking supply for the Project, and provides a comparison to the parking code requirements for the project and to the estimated project parking demand. It also addresses the loss of parking as development replaces existing parking on the Project parcels.

Significant Impact Thresholds

Based on factors in the *"CEQA Thresholds Guide"*, City of Los Angeles (1998), the following criteria were established to determine if any project parking impacts would be significant:

- The Project would be inconsistent with adopted codes, plans or policies.
- The Project would provide substantially less parking than needed, based on estimated demand.
- The Project would result in a substantial permanent loss of on-street parking.

7.1 Proposed Parking Supply – County Office Building Option

The Project proposes to provide parking on each of the four parcels, in below-grade and/or above grade parking garages. The Project would provide a total of at least 5,035 parking spaces on-site. An additional 983 parking spaces would be provided off-site for the County Office Building by the County as part of their existing parking supply in the Civic Center area. The proposed on-site parking supply is summarized in Table 7.1.

The Parcel Q garage would provide approximately 1,510 total parking spaces. It would include 755 private residential parking spaces, comprised of 720 resident spaces and 35 guest parking spaces. This garage would also provide 755 public commercial parking spaces to serve all of the commercial (non-residential) uses. Within the garage there would be one level of parking at-grade (Olive Street level), one level above grade, and five levels below grade.

The Parcel W-1/W-2 garage would provide about 1,955 total parking spaces. It would include 1,070 private residential parking spaces, comprised of 1,020 resident spaces and 50 guest parking spaces. This garage would also provide 885 commercial parking spaces of which 681 spaces would be allocated to the County office tower and the remaining 204 spaces would be for the retail uses.

Table 7.1 Proposed Project Parking Supply - County Office Building Option

Parcel	Residential Parking Supply	Commercial Parking Supply	Total Parking Supply
Parcel Q	755	755	1,510
Parcel W-1/W-2	1,070	885	1,955
Parcel L/M-2	1,280	290	1,570
Total	3,105	1,930	5,035

Note: An additional 983 spaces would be provided off-site for Parcel W-1/W-2, for a total parking supply of 6,018 spaces.

The Parcel L/M-2 garage would provide a total of 1,570 parking spaces. It would include 1,280 private residential parking spaces, comprised of 1,220 resident spaces and 60 guest parking spaces. This garage would also include 290 commercial parking spaces for the retail uses on the block.

Parking Supply Strategy

The parking strategy for the Project is as follows:

- to provide sufficient parking for the Project's needs and for it to be competitive and viable in the market place,
- to not undermine transit goals and transit use by providing too much parking,
- to provide for an efficient parking supply that allows for shared parking between commercial uses and between different Project parcels within the Project, where feasible,
- to provide secure and dedicated parking for the residential uses, and for the County Office Building
- provide sufficient parking to meet City Municipal Code requirements.

7.2 City Parking Requirements

The parking requirements for the project are controlled by the City Municipal Code and the City Planning Department Deputy Advisory Agency.

The City Municipal Code

The Project is located in downtown Los Angeles, in an area for which a number of code exceptions apply and that reflect the higher density of downtown, the proximity to other land uses and higher walking levels, and the proximity to extensive transit service. LAMC 12.21 A.4 (p).(1) provides for an exception for the Central Area for lower residential and hotel parking requirements. LAMC 12.21 A.4. (i) 3 provides for an exception for the Downtown Business District, for lower parking requirements for business, commercial, and industrial buildings and for auditoriums. The Project is located within both these areas. The LAMC parking requirements for the land uses in the Project are shown in Table 7.2.

Table 7.2 LAMC Parking Requirements by Land Use

Land Use	Parking Requirement	Note
Residential 1- Bed	1 space per D.U	1
2 -Bed	1 space per D.U	1
3- Bed	1.25 spaces per D.U	1
Affordable Residential	1 space per D.U	6
Hotel – Rooms	1 space per two guest rooms for first 20 rooms; plus 1 space per guest room in excess of 20 but not exceeding 40; plus 1 space per each six guest rooms over 40.	2
Hotel – Meeting Space	10 spaces per 1,000 s.f	3
Retail	1 space / 1,000 s.f.	4
Restaurant	1 space / 1,000 s.f.	4
Health Club	1 space / 1,000 s.f.	4
Event Facility	1 space per 10 seats	5
Office	1 space / 1,000 s.f.	4

Notes.
1. LAMC 12.21 A.4 (p) (1). Exception for Central City Area.
2. LAMC 12.21.A.4 (p) (2). Exception for Central City Area.
3. LAMC 12.21.A.4 (i).(1). Exception for Downtown Business District.
4. LAMC 12.21.A.4.(i).(3). Exception for Downtown Business District.
5. LAMC 12.21.A.4.(i).(1). Exception for Downtown Business District.
6. LAMC 12.22,A.25.(d).(2) Exception for Restricted Affordable Units

CRA Peripheral Parking Policy

Further discussion is necessary for office parking requirements. LAMC 12.21 A.4. (i) 3 requires 1.0 parking space per 1,000 sq. ft. of office use in the Downtown Business District. While not in the Municipal Code, there is an additional CRA Policy for office buildings in an area defined as the Traffic Impact Zone (bounded by the Hollywood Freeway (US-101) to the north, Broadway on the east, Olympic Boulevard to the south, and the Harbor Freeway (SR-110) to the west). This policy requires that in this zone, a maximum of 0.6 spaces per 1,000 sq. ft. of office use be provided on-site and the remaining 0.4 spaces per 1,000 sq. ft. be provided in an off-site location in one of three designated "peripheral parking" zones on the edge of the downtown.

This policy, known as the "Peripheral Parking Policy" was adopted in the late nineteen-eighties, but has rarely been applied because there have been virtually no office buildings built in the Downtown since it was adopted. The CRA is currently conducting a comprehensive study of parking in the Downtown that is reviewing parking needs, parking supply, and parking management in the downtown. The results and any resulting policy changes are unlikely to be completed in the timeframe of this EIR. However, the CRA has said that it is committed to revisiting and rescinding the Peripheral Parking Policy in its present form. No further details are available at this time, but it seems that the most likely change is to at least eliminate the requirement for 0.4 spaces off-site in a designated peripheral parking zone. It is unclear if other off-site alternatives for 0.4 spaces per 1,000 sq. ft. will be introduced, or if the requirement for 0.4 spaces per 1,000 sq. ft. to be located off-site will be changed.

The following analysis has assumed that the overall code requirement will continue to be 1.0 space per 1,000 sq. ft. of office use, as per the LAMC, and that there will no longer be a requirement for 0.4 spaces per 1,000 sq. ft. to be provided off-site, and that there will no longer be a requirement to provide any off-site spaces in designated peripheral parking zones.

All of the above provisions have been taken into account in calculating parking requirements for the Project.

The City Planning Department Deputy Advisory Agency

The City Planning Department Deputy Advisory Agency has issued a Residential Parking Policy for Division of Land – No AA 2000-1 (May, 2000), identifying a standard of two parking spaces per dwelling unit and ¼ space for guest parking in non-parking congested areas, for condominium projects. This Project is located in a non-parking congested area.

However, while this policy may be appropriate in other more suburban parts of the city (for which it was developed), it is far less appropriate in the Central City downtown area. The proposed Project is very close to many bus transit lines and DASH service, and includes two portals to the Civic Center Red Line station (at 1st Street & Hill Street on Parcel W-2, and at the Court of Flags on the Civic Mall - see Section 2.4 Existing Transit Service, of this report). The project is within walking distance of thousands of jobs in the downtown. Because many trips can be made by transit and walking, there is less need for a car in a downtown environment (a major attraction to people purchasing residential units in the downtown), and therefore less of a need for parking spaces.

For completeness, the following analysis addresses parking needs for the residential uses both under the LAMC and under the Deputy Advisory Agency AA-2000-1 Residential Policy.

7.2.1 Parking Requirements based on the City Planning Department Deputy Advisory Agency AA-2000-1 Residential Policy and on the City Code for Commercial Uses – Project with County Office Building Option

Overall Parking for the Project

A summary of parking code and Deputy Advisory Agency Policy requirements is shown in Table 7.3 by residential and commercial parking totals for each development parcel. Detailed calculations of parking code and Advisory Agency Policy requirements are shown in Table B-1 and B-2 in Appendix B.

Overall the Deputy Advisory Agency Policy and the City Code would require a total of 5,406 spaces be provided by the Project. The proposed Project would provide 5,035 spaces, which would be 371 spaces less than the overall requirement. However the Project would provide more commercial parking supply than required by code, and less residential supply than the overall Advisory Agency requirement.

In total, the Deputy Advisory Agency Residential Policy (DAARP) would require 4,121 residential parking spaces to be provided. The Project proposes to provide 3,105 residential spaces, which would be 1,016 less than the policy requirement (see the later discussion in this Chapter as to why the DAARP is not appropriate for projects in downtown).

Also, in total, the City Code would require a total of 1,285 commercial parking spaces. The Project proposes to provide 1,930 commercial spaces which would be 645 more than the code requirement.

Table 7-3 Summary of Parking Requirements and Proposed Parking Supply Project with County Office Building Option

5/23/2006

As Per City Code Parking Requirement and CDP Advisory Agency AA-2000-1

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided [1]	Difference	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference
Residential	1,000	755	-245	1,421	1,070	-351	1,700	1,280	-420	4,121	3,105	-1,016
Commercial	429	755	326	755	885	130	101	290	189	1,285	1,930	645
Total	1,429	1,510	81	2,176	1,955	-221	1,801	1,570	-231	5,406	5,035	-371

Source: Table B-1 City Code Parking Requirement and CDP Advisory Agency AA-2000-1, Appendix B.

1. Excludes 683 off-site spaces for County Office Building

As Per City Code Parking Requirement

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided [1]	Difference	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference
Residential	506	755	249	719	1,070	351	860	1,280	420	2,085	3,105	1,020
Commercial	429	755	326	755	885	130	101	290	189	1,285	1,930	645
Total	935	1,510	575	1,474	1,955	481	961	1,570	609	3,370	5,035	1,665

Source: Table B-2 City Code Parking Requirement, Appendix B.

1. Excludes 683 off-site spaces for County Office Building

Parking by Parcel

As shown in Table 7.3, for Parcel Q the Deputy Advisory Agency Residential Policy (DAARP) would require 1,000 residential parking spaces to be provided. The Project proposes to provide 755 residential spaces, which would be 245 less than the policy requirement.

Also, for Parcel Q, the City Code would require a total of 429 commercial parking spaces. The Project proposes to provide 755 commercial spaces, which would be 326 more than the code requirement.

For Parcel W-1/W-2, the Deputy Advisory Agency Residential Policy (DAARP) would require 1,421 residential parking spaces to be provided. The Project proposes to provide 1,070 residential spaces, which would be 351 less than the policy requirement.

Also, for Parcel W-1/W-2, the City Code would require a total of 755 commercial parking spaces. The Project proposes to provide 885 commercial spaces, which would be 130 more than the code requirement. It is assumed that the Project would provide all of the 1.0 spaces per 1,000 s.f. required for office parking on-site.

For Parcel L/M-2, the Deputy Advisory Agency Residential Policy (DAARP) would require 1,700 residential parking spaces to be provided. The Project proposes to provide 1,280 residential spaces, which would be 420 less than the policy requirement.

Also, for Parcel L/M-2, the City Code would require a total of 101 commercial parking spaces. The Project proposes to provide 290 commercial spaces, which would be 189 more than the code requirement.

7.2.2 Parking Requirements based on the City Municipal Code for Both Residential and Commercial Uses – Project with County Office Building Option

A summary of parking code requirements for all Project uses is shown in Table 7.3 by residential and commercial parking totals for each development parcel. Detailed calculations of parking code requirements are again shown in Table B-1 and B-2 in Appendix B. While the LAMC requirements for residential parking are lower than the DAARP requirements shown in the preceding section, the requirements for non-residential uses are the same as in the preceding section. For consistency purposes, and ease of understanding, both residential and non-residential uses and total project requirements are also discussed in the following section.

Overall Parking for the Project

Overall the City Code would require a total of 3,370 spaces be provided by the Project. The proposed Project would provide 5,035 spaces, which would be 1,665 spaces more than the overall code requirement. The Project would provide both more residential and more commercial parking supply than required by code.

In total, the City Code would require 2,085 residential parking spaces to be provided. The Project proposes to provide 3,105 residential spaces, which would be 1,020 more than the code requirement.

Also, in total, the City Code would require a total of 1,285 commercial parking spaces. The Project proposes to provide 1,930 commercial spaces, which would be 645 more than the code requirement.

Parking by Parcel

For Parcel Q, the City Code would require 506 residential parking spaces to be provided. The Project proposes to provide 755 residential spaces, which would be 249 more than the code requirement.

Also, for Parcel Q, the City Code would require a total of 429 commercial parking spaces. The Project proposes to provide 755 commercial spaces, which would be 326 more than the code requirement.

For Parcel W-1/W-2, the City Code would require 719 residential parking spaces to be provided. The Project proposes to provide 1,070 residential spaces, which would be 351 more than the code requirement.

Also, for Parcel W-1/W-2, the City Code would require a total of 755 commercial parking spaces. The Project proposes to provide 885 commercial spaces, which would be 130 more than the code requirement. It is assumed that the Project would provide all of the 1.0 spaces per 1,000 s.f. required for office parking on-site

For Parcel L/M-2, the City Code would require 860 residential parking spaces to be provided. The Project proposes to provide 1,280 residential spaces, which would be 420 more than the code requirement.

Also, for Parcel L/M-2, the City Code would require a total of 101 commercial parking spaces. The Project proposes to provide 290 commercial spaces, which would be 189 more than the code requirement.

7.2.3 Conclusions on Parking Requirements – Project with County Office Building Option

The above analysis has looked at parking requirements for the Project with both the Deputy Advisory Agency Policy for residential uses and with the City Code for residential uses.

Advisory Agency Policy for Residential Condominiums

Given the downtown urban location, the Parking Code is the more appropriate criteria for determining parking need than the Advisory Agency policy. The Project Applicant will seek a variance/exception from this policy. The proposed Project includes two portals to the Civic Center Red Line station (at 1st Street & Hill Street on Parcel W-2, and on the Court of Flags in the Civic Mall), and is very close to many bus transit lines and DASH service, as discussed in Section 2.4 Existing Transit Service. The project is within walking distance of thousands of jobs in the downtown. Because many trips can be made by transit and walking, there is less need for a car in the downtown environment (a major attraction to people purchasing residential units in the downtown), and therefore less of a need for parking spaces. The Project is targeted to individuals and households attracted to a downtown location with employment and urban amenities accessible by walking or by public transit.

The proposed parking ratios are the result of a careful consideration by an experienced national developer of what the market will support, and are based on recent experience in the residential development market in Downtown Los Angeles and on the West Coast of the United States, as outlined below.

The Project proposes to provide an overall ratio of 1.51 parking spaces per unit for condominiums. This ratio is based on a provision of 1 parking space per bedroom for condominiums. These ratios are consistent with recent experience with other built and planned residential projects in the downtown.

The Grand Promenade Project, of residential apartments, on Grand Avenue at Upper 3rd Street, which has a parking ratio of about 1.5 spaces per unit, has been in operation for a number of years. More recently, in the last two years, the City of Los Angeles Department of City Planning, in recognizing that its citywide DAA Condominium Parking Policy is not appropriate to the unique characteristics of Downtown Los Angeles, has approved numerous high-rise condominium projects with parking ratios at or about 1.5 spaces per unit. These have included the following key projects: the 9th and Figueroa Project at 900 South Figueroa Project, with 620 condominiums and 957 parking spaces, for a ratio of 1.52

spaces per dwelling unit[17]; the Lot 114 (Evo) Project at 1155 South Grand Avenue, with 311 condominiums and 425 parking spaces, for a ratio of 1.37 spaces per dwelling unit[18]; and the 8th & Grand Project at 710-798 South Grand Avenue, with 875 condominiums and 1,313 parking spaces, for a ratio of 1.5 spaces per unit[19].

Other Projects recently approved or constructed in the Downtown Area include: the Flower Street Lofts (condominiums), which has 91 units and 91 parking spaces for a ratio of 1.0 spaces per unit (approved April, 2002); the Metropolitan Lofts (apartments) at Flower Street and 11th Street, which has 264 units and approximately 376 parking spaces for a ratio of 1.4 spaces per unit (approved December 2003); the Hanover Project, under construction at Figueroa Street and Olympic Boulevard, with 156 apartments and 228 parking spaces for a ratio of 1.46 spaces per unit (approved June, 2005); the Elleven and Luma projects, under construction at 11th and Grand, which has 417 condominiums units and 578 parking spaces for a ratio of 1.37 spaces per unit in Phase I and 1.43 spaces per unit in Phase II (approved July, 2004)); and the recently approved Figuroa South Project at Figueroa and 12th Street which has 648 condominiums and 900 parking spaces for a ratio of 1.39 spaces per unit.

The recent experience at the Elleven and Luma Projects in South Park (see above) with parking supply ratios of 1.37 and 1.45 spaces per unit which have recently successfully sold out quickly with buyers finding the parking ratios acceptable for their needs[20], indicates that the market is requiring less parking in dense urban locations close to transit than in more suburban locations.

This experience follows that of numerous residential projects in other cities in the Western United States that are currently in operation with residential parking supply ratios that are similar to or less than the Proposed Project. For example, in Portland, Oregon, The Avenue Condominiums comprises 166 units in eight stories with 184 parking spaces for a parking supply ratio of 1.11 spaces per unit, The Edge Lofts comprise 114 units in 11 stories with 141 parking spaces for a ratio of 1.24 parking spaces per unit., and The Henry Condominiums, comprise 123 units in 16 stories with 153 parking spaces for a ratio of 1.24 spaces per unit. These projects, in the downtown Portland area, take care of all their residential parking needs on-site within the supply provided.

It is therefore concluded that the proposed Project's residential parking supply would be adequate and parking impacts would not be expected. While the proposed residential supply would be less than the Advisory Agency Policy requirements, the Proposed Project will seek an exception from that policy. With an exception, which would be granted after

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[17] City of Los Angeles, Approval for Vesting Tentative Tract Map No. 62367, July 5, 2005; and Approval for Site Plan and Zoning Variance, September 26, 2005.

[18] City of Los Angeles, Approval for Vesting Tentative Tract Map No. 62799, July 28, 2005.

[19] City of Los Angeles, Approval for Vesting Tentative Tract Map No. 62522, February 24, 2006.

[20] South Park Group, February, 2006

certification of the Final EIR by the Lead Agency, but concurrently with action on the entitlements requested from the City, there would be no significant residential parking impacts. However, until the exception is granted, the conservative position is that for the purposes of CEQA there would be a significant impact.

City Municipal Code

The proposed Project would provide 3,105 residential parking spaces compared to a code requirement of 2,085 spaces. It would also provide 1,930 commercial parking spaces compared to a code requirement of 1,285 spaces. Because the proposed Project parking supply will considerably exceed the code requirements, it is concluded that the Project is consistent with the Municipal Code requirements, and that there would be no significant parking impacts with respect to the Municipal Code requirements.

7.3 Analysis of Project Parking Demand and Proposed Supply – Project with County Office Building Option

This section provides an analysis of estimated parking demand for the Project and a comparison to the proposed Project parking supply. It looks at residential and commercial parking separately, because residential parking will be accessed only by residents and will not be shared with commercial uses.

7.3.1 Residential Parking Demand

Because the Project is located in downtown Los Angeles, residential parking demand will be lower than is typical for other (suburban) locations. The Project will be located directly adjacent to and near to major transit services serving the whole Los Angeles region. It will be close to multiple destinations within walking distance, including jobs (office buildings), housing, and entertainment uses. The Project will attract homeowners who are looking for an urban lifestyle – one where people can walk or use transit to get to many destinations, and thus have less of a need for a car. Nevertheless however, residents will still make some trips by car and will need to own cars, albeit at a less than typical level.

The Project proposes to provide an average of 1.51 spaces per dwelling unit for condominiums (and one space per bedroom). As discussed extensively in the preceding section, these supply ratios are consistent with recent market experience of other built, under construction, or planned residential projects in the downtown. The Project also proposes to provide guest parking in addition to these resident supply ratios.

It is therefore concluded that the residential parking supply will be sufficient and there will be no significant parking demand impacts for the residential uses.

7.3.2 Commercial Parking Demand

The remainder of the Project uses will comprise commercial uses, including the hotel, retail, restaurant, and office uses, as well as the health club and the event facility.

Parking Analysis Methodology

The analysis of the commercial parking demand starts with basic parking demand rates for these uses from professional sources such as the Urban Land Institute[21] and the Institute of Transportation Engineers[22]. These rates are for suburban locations, and so were adjusted to reflect the conditions of this Project and its location in downtown Los Angeles. These adjustments were applied in a similar fashion to the trip generation adjustments discussed earlier, and allow for internal interaction between uses within the Project, use of transit, and walking between the Project and adjacent and nearby uses in the Downtown.

For example, some of the restaurant customers in the Project will come from the residential towers in the Project. Other restaurant customers will walk-in from nearby office and residential buildings, as well as being visitors to the Disney Concert Hall and the Music Center, and so may already have parked at those locations. This will also apply to the retail uses (shoppers for example may come to the Project to eat at a restaurant but also do some shopping, or may already be in the area for another reason), and to the Health Club (where a high proportion of patrons are expected to come from the residential component of the Project and from adjacent residential and office uses in the downtown). So some of the visitors to the Project will not need to park a car, because they will already have parked either in the Project or somewhere else.

The analysis also needs to account for the fact that parking need varies by time of day, and that the peak parking need for each use does not necessarily occur at the same time. To the extent that different uses peak at different times, the parking supply can be shared between different uses.

The overall parking supply need is thus often less than the simple additive total of the peak demand for each individual use because of this peaking of different uses at different times and the shared parking opportunities.

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[21] Urban Land Institute, *Shared Parking*, Washington D.C., 1983.

[22] Institute of Transportation Engineers, *Parking Generation, 3rd Edition*, Washington D.C., 2004.

The analysis considered all of the above factors. It also considered the variation in parking by month of the year, and addressed the peak month and the typical month of the year. It also looked at both the weekday and the weekend parking demand. The details of the parking demand analysis are contained in Appendix B. The following discussion provides a summary of the results and conclusions.

Analysis – Parking Demand by Month of Year

The first step of the analysis was to review parking demand by month of the year. This analysis is summarized in Table 7.4, which shows the estimated parking demand by parcel for each month of the year.

The peak month of parking demand will occur in December for all three Project parcels. However there will be comparatively little variation by month of the year, with only about a 12% variation in total weekday demand during the year. The months of June and July will also have parking demand levels very similar to the peak month.

The subsequent analysis focuses on the peak month, to provide for a conservative (worst case) evaluation. However, because of the small amount of variation in monthly demand, the parking supply will be utilized to very similar levels at all times of the year, and there will not be a significant amount of unused parking spaces during "off-peak" months.

Analysis – Parking Demand by Time of Day, and By Weekday - Weekend

Having determined the peak month of parking demand the analysis was then refined to account for time of day fluctuations and for shared parking opportunities. The results are summarized in Table 7.5 which shows the estimated parking demand by time of day for each parcel and for the Project as a whole. The time of peak parking demand will vary by parcel, as it is a function of land use type – which varies by parcel.

Parcel Q

The peak weekday parking demand – which is driven by the retail and restaurant uses - will be 982 spaces, and will occur during the evening. During the daytime, the highest parking demand will be 753 spaces and will occur just after midday. Weekend peak parking demand will be marginally higher at 1,013 spaces, also in the evening period, with the highest daytime demand at 900 spaces. As shown in Table 7.5, parking demand will therefore be relatively consistent throughout much of the day and evening and between weekday and weekend days, but generally will be lower during the daytime.

Table 7-4 Monthly Variation in Commercial Parking Demand
Project with County Office Building Option

4/23/2006

A. Weekday

Month	Total Commercial Parking Demand			
	Parcel Q	Parcel W-1/W-2	Parcel L / M-2	Total Project
January	935	1,827	228	2,990
February	905	1,823	222	2,950
March	968	1,842	250	3,060
April	982	1,842	250	3,074
May	998	1,846	256	3,100
June	1,065	1,858	272	3,195
July	1,065	1,858	272	3,195
August	997	1,846	255	3,098
September	979	1,843	249	3,071
October	972	1,843	249	3,064
November	959	1,851	260	3,070
December	1,074	1,890	314	3,278

B. Weekend

Month	Total Commercial Parking Demand			
	Parcel Q	Parcel W-1/W-2	Parcel L / M-2	Total Project
January	1,124	459	301	1,884
February	1,099	454	294	1,847
March	1,194	479	330	2,003
April	1,219	479	330	2,028
May	1,239	484	338	2,061
June	1,320	499	359	2,178
July	1,341	499	359	2,199
August	1,257	485	337	2,079
September	1,234	480	330	2,044
October	1,226	480	330	2,036
November	1,218	490	344	2,052
December	1,370	542	415	2,327

Notes:

1. Parking demand estimates prior to analysis of shared parking potential.
2. Based on monthly data for individual uses in "Shared Parking", Urban Land Institute, Washington D.C, 1983.

Table 7-5 Commercial Shared Parking Demand by Time of Day
Project with County Office Building Option

4/23/2006

A. Weekday

Time	Total Commercial Parking Demand				Office [1]	Total
	Parcel Q	Parcel W-1/W-2	Parcel L / M-2	Total Project	Parcel W-1/W-2	Project Need
6:00 AM	213	0	0	213	1,664	1,877
7:00 AM	240	11	15	266	1,664	1,930
8:00 AM	318	25	34	377	1,664	2,041
9:00 AM	430	57	78	565	1,664	2,229
10:00 AM	488	96	131	715	1,664	2,379
11:00 AM	567	126	172	865	1,664	2,529
12:00 PM	655	153	211	1,019	1,664	2,683
1:00 PM	753	171	238	1,162	1,664	2,826
2:00 PM	709	160	222	1,091	1,664	2,755
3:00 PM	692	158	219	1,069	1,664	2,733
4:00 PM	667	141	195	1,003	1,664	2,667
5:00 PM	747	146	205	1,098	1,664	2,762
6:00 PM	864	165	232	1,261	1,664	2,925
7:00 PM	976	181	254	1,411	1,664	3,075
8:00 PM	982	178	251	1,411	1,664	3,075
9:00 PM	904	147	210	1,261	1,664	2,925
10:00 PM	741	105	152	998	1,664	2,662
11:00 PM	518	68	99	685	1,664	2,349
12:00 AM	388	38	56	482	1,664	2,146

1. Represents total office parking need. Spaces cannot be shared.

B. Weekend

Time	Total Commercial Parking Demand				Office [1]	Total
	Parcel Q	Parcel W-1/W-2	Parcel L / M-2	Total Project	Parcel W-1/W-2	Project Need
6:00 AM	216	0	0	216	1,664	1,880
7:00 AM	233	7	9	249	1,664	1,913
8:00 AM	345	19	26	390	1,664	2,054
9:00 AM	465	53	73	591	1,664	2,255
10:00 AM	530	79	107	716	1,664	2,380
11:00 AM	650	125	170	945	1,664	2,609
12:00 PM	773	164	225	1,162	1,664	2,826
1:00 PM	869	194	268	1,331	1,664	2,995
2:00 PM	900	202	279	1,381	1,664	3,045
3:00 PM	898	202	279	1,379	1,664	3,043
4:00 PM	859	186	257	1,302	1,664	2,966
5:00 PM	841	177	247	1,265	1,664	2,929
6:00 PM	939	191	270	1,400	1,664	3,064
7:00 PM	985	188	267	1,440	1,664	3,104
8:00 PM	1,013	185	263	1,461	1,664	3,125
9:00 PM	946	161	231	1,338	1,664	3,002
10:00 PM	878	153	220	1,251	1,664	2,915
11:00 PM	634	103	152	889	1,664	2,553
12:00 AM	497	68	102	667	1,664	2,331

1. Represents total office parking need. Spaces cannot be shared.

Parcel W-1/W-2

The peak weekday parking demand – which is driven very largely by the office use on this block - will be 1,835 spaces, and will occur in the early afternoon. This demand will be comprised of 1,664 spaces for the office building and 171 spaces for the commercial (retail/restaurant) uses. The shared parking analysis does not include the office parking spaces, as those spaces will only be available to users of the County office building, and could not be shared by the public for parking for other uses at any time because of County policies regarding security procedures for its office building. The office parking need was thus represented as a constant 1,664 spaces at all times in this analysis, although in reality it would be much lower in the evenings and weekends.

Parking need in the evening will be slightly higher at 1,845 spaces, comprised of the 1,664 space dedicated supply for the County office building and 181 spaces for the commercial uses. The weekend parking need will be very similar, with a total of 1,866 spaces for the weekend midday (1,664 spaces dedicated for the office building and 202 spaces for commercial uses); and a total of 1,855 spaces for the weekend evening period (1,664 dedicated spaces for the office building and 191 spaces for the commercial uses).

As shown in Table 7-5, the parking demand will therefore be relatively constant for the commercial uses for this parcel, not only during the day but also between weekday and weekend days.

Parcel L/M-2

The peak weekday parking demand – which is driven by the retail and restaurant uses - will be 254 spaces, and will occur during the evening. During the daytime, the highest parking demand will be 238 spaces and will occur just after midday. Weekend parking demand will be marginally higher with a peak of 279 spaces occurring in the mid-afternoon, and with the highest evening demand at 267 spaces after 7pm. Parking demand on this parcel will therefore be relatively consistent throughout the day and evening and between weekday and weekend days, and generally will be slightly higher at weekends.

Overall Project

As shown in Table 7.5, for the Project as a whole the weekday parking demand will peak at 2,826 spaces in the early afternoon, with the highest evening parking need at 3,075 spaces (demand for 1,411 commercial parking spaces and 1,664 dedicated office spaces). At weekends, the parking need will peak at 3,045 spaces in the early afternoon (demand for 1,381 commercial spaces and 1,664 dedicated office spaces), with the highest evening parking need at 3,125 spaces (1,461 commercial spaces and 1,664 dedicated office spaces). The overall Project parking demand is heavily skewed by the office use on Parcel W-1/W-2, which is the single largest parking demand of all the non-residential uses in the Project.

Analysis – Comparison of Parking Demand to Parking Supply

The final step in the parking analysis was to compare the estimated parking demand to the proposed parking supply. Again, this was done separately for each parcel in the Project, and addressed the individual peak parking demand for each parcel for both the weekday and the weekend. This analysis therefore allows for shared parking within a parcel, but not for shared parking between parcels. The results are summarized in Table 7.6.

Parcel Q

The proposed commercial parking supply for Parcel Q is 755 spaces. As shown in Table 7.6, the Parcel Q garage supply will be adequate to accommodate the peak weekday daytime parking demand of 753 spaces. However, the supply would be 227 spaces less than the peak weekday evening parking demand of 982 spaces, would be 145 spaces less than the weekend daytime peak demand of 900 spaces, and 258 spaces less than the peak weekend evening parking demand of 1,013 spaces. The parking deficits that will occur in the evenings and weekends, cannot be accommodated by the parking supply on other Project blocks as there would be virtually no surplus supply on those blocks (see following discussion and Table 7.6). However, at evenings and weekends there are considerable amounts of unused parking in the Civic Center area – primarily in the various office building garages in the area – so there would be adequate parking available to accommodate the relatively small shortfalls from Parcel Q.

Parcel W-1/W-2

The proposed on-site parking supply for Parcel W-1/W-2 is 885 spaces. This will comprise 681 spaces exclusively for the County office building, and 204 spaces for the retail/restaurant uses. A further 983 spaces will be provided off-site to meet the parking needs of the County office building, for a total supply for Parcel W-1/W-2 of 1,868 spaces.

The County has determined there are sufficient spaces available in its Civic Center parking supply to accommodate the off-site need of 983 parking spaces for the County office building[23]. These spaces could be accommodated in various currently under-utilized County parking locations, including the Walt Disney Concert Hall garage (with tandem parking operations), in County Lot 45 (on N. Spring Street) in County Lot 58 (on N. Alameda Street), and potentially in the Civic Mall (Lot 18) to the extent spaces are not needed for the potential backfill and/or re-use of the County HOA building.

As shown in Table 7.6, this total supply will accommodate Project needs at all times during the weekday and the weekend. It will meet the needs for County office parking of

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[23] County of Los Angeles Civic Center Parking Summary, October, 2005, and Communication from CAO's Office, April, 2006.

Table 7-6

Comparison of Peak Parking Demands and Proposed Parking Supply
Project with County Office Building Option

4/23/2006

A. Total Project

Period	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Demand	Supply	Difference	Demand	Supply [1]	Difference	Demand	Supply	Difference	Demand	Supply	Difference
Weekday - Day	753	755	2	1,835	1,868	33	238	290	52	2,826	2,913	87
- Eve	982	755	-227	1,845	1,868	23	254	290	36	3,081	2,913	-168
Weekend - Day	900	755	-145	1,866	1,868	2	279	290	11	3,045	2,913	-132
- Eve	1,013	755	-258	1,855	1,868	13	270	290	20	3,138	2,913	-225

1. Includes 983 off-site spaces for County Office Building.

B. Parcel W-1/W-2 Office Parking Only

Period	Parcel W-1/W-2		
	Demand	Supply [1]	Difference
Weekday - Day	1,664	1,664	0
- Eve	1,664	1,664	0
Weekend - Day	1,664	1,664	0
- Eve	1,664	1,664	0

1. Includes 983 off-site spaces for County Office Building.

C. Parcel W-1/W-2 Commercial Parking Only

Period	Parcel W-1/W-2		
	Demand	Supply	Difference
Weekday - Day	171	204	33
- Eve	181	204	23
Weekend - Day	202	204	2
- Eve	191	204	13

1,664 spaces. The on-site retail commercial parking supply of 204 spaces will also meet the commercial parking demand with a 33 space surplus during the weekday daytime, a 23 space surplus during the weekday evening, a 2 space surplus during the weekend daytime, and 13 space surplus during the weekend evening, as shown in Table 7-6.

Parcel L/M-2

The proposed commercial parking supply for Parcel L/M-2 is 290 spaces. As shown in Table 7.6, the Parcel L/M-2 garage will accommodate the peak weekday daytime parking demand of 238 spaces, the weekday evening parking demand of 254 spaces, the peak weekend evening parking demand of 270 spaces, and the peak weekend daytime parking demand of 279 spaces. There will be small surpluses of between 11 and 52 parking spaces (as shown in Table 7.6), depending on the time period.

Overall Project

Combining the individual peak parking characteristics of each development parcel, the peak commercial parking demand for the total project, as shown in Table 7-6, is estimated at 2,826 spaces on a weekday daytime. The peak parking need is estimated at 3,081 spaces on a weekday evening, at 3,045 spaces on a weekend daytime, and at 3,138 spaces on a weekend evening (although all these include the 1,664 dedicated County spaces).

The proposed parking supply will be sufficient to accommodate the projected parking demand for development on Parcels W-1/W-2 and L/M-2 at all times. While the proposed parking supply for Parcel Q will be sufficient to accommodate projected demand during the weekday daytime, it will not be sufficient during weekday evenings and at weekends when it will be between 145 spaces and 258 spaces short. The small parking supply surpluses on Parcels W-1/W-2 and L/M-2 will not be sufficient to accommodate the Parcel Q shortfalls. These small surpluses would not even be available to Parcel Q until the developments were built on Parcels W-1/W-2 and L/M-2. Even when those parcels were built, the small surpluses would most likely be made available general public parking in the area rather than specifically being assigned to other development parcels.

Conclusions on Parking Demand and Supply – County Office Building Option

The overall parking supply will come very close to meeting the estimated peak parking demands of the Project. The Parcel Q parking garage will accommodate the peak daytime parking demands, but will be short by 145 to 258 spaces on weekday evenings and at weekends.

The Parcel W-1/W-2 garage will provide adequate parking to meet retail commercial demands. In conjunction with County-provided off-site parking the garage office supply will also be sufficient to meet the office building parking demands.
The Parcel L/M-2 garage will provide adequate parking for the retail commercial parking demands at all times, with small surpluses of 11 to 52 spaces at different times.

The weekday evening and weekend deficits in commercial parking on Parcel Q can not be accommodated on other Project parcels However, they could be easily accommodated by the considerable surplus parking capacity that exists at evenings and weekends in many of the parking garages on Bunker Hill – particularly the office building garages within a few blocks of the Proposed Project. Use of this publicly available parking would be an effective use of existing resources and avoid providing an over-supply of parking in the area.

Based on the above analysis, it is concluded there would be no significant off-street parking supply impacts due to the Project with County Office Building Option.

7.4 Changes to Existing Parking Supply in the Area of the Project

7.4.1 Off-Street Parking

The Existing Parking Supply

There is a considerable amount of existing parking supply in the vicinity of the Proposed Project, with twenty-one off-site parking facilities in the area bounded by Hope Street and /Flower St on the west, Temple Street on the north, Spring Street on the east, and 4th Street on the south. Some of these are surface parking lots but the majority are parking structures. These facilities were discussed earlier in Chapter 2 and identified in Figure 2-7 and Table 2-4.

There are approximately 15,950 parking spaces in these twenty-one locations. Of these approximately 1,100 are in surface lots and the remaining 14,850 spaces are in garages. Approximately 7,000 of the total 15,950spaces are owned and operated by the County of Los Angeles. Of these 7,000 spaces, approximately 2,900 are reserved for County official business and employees and are not available to the general public. (The County also owns an additional 1,500 spaces in the Civic Center area but outside the area defined in Figure 2-7 and Table 2-4). Approximately 6,900 of the total 15,950 parking spaces are located in major high-rise office towers on Bunker Hill.

The County currently owns and operates 1,958 parking spaces in the Civic Mall, of which 1,609 are in subterranean garages and 349 are in surface parking). The westernmost garage (County Lot 18), between Grand Avenue and Hill Street has 1,274 parking spaces, with large helical parking entrance/exit ramps on both Grand Avenue and Hill Street. The middle section of the Mall between Hill Street and Broadway includes a subterranean garage (County Lot 10) under the Court of Flags with 646 parking spaces. However, since the Northridge earthquake, the lower two levels of this garage have not been used so the parking capacity is currently limited to 321 spaces. At the easternmost send of the Civic Mall is a 349 space surface parking lot (County Lot 11) off of Spring Street for the County Criminal Court Building.

Changes to the Existing Off-Street Parking Supply – Development Parcels

The development parcels (Parcel Q, Parcel W-1/W-2, and Parcel L/M-2) are all currently used for parking. The amounts and types of parking are shown in Table 7.7.

Table 7-7. Existing Parking Supply to be Removed by the Project

Parcel	Lot	Number of Spaces	Type of Parking
Parcel Q	County Lot 17	1,062 (849 usable)	Public parking - Jurors (913 spaces, 700 usable) Public parking - Courthouse Visitors (149 spaces)
Parcel W-1/W-2	County Lot 26	225	Public parking
	Private Lot	83	Public parking
	Private Lot	62	Public parking
Parcel L	Private (5-Star) Lot	215	Public parking
Parcel M-2	Private (Prestige) Lot	160	Public parking
TOTAL		1,807 (1,594 usable)	

As shown in Table 7.7, there are a total of 1,807 existing parking spaces (only 1,594 usable) currently located on the Project site. These are comprised of:

- 913 juror parking spaces and 149 County Courthouse visitor parking spaces currently provided by the County in the temporary parking structure in County Lot 17 on Parcel Q. For the last few years, only 700 juror spaces are usable because construction trailers have been using part of the site – so that number is used in subsequent analyses) ;
- 225 surface parking spaces currently provided by the County in County Lot 26 on Parcel W-1/W-2, and open to the general public for all uses;
- 145 parking spaces in two privately operated surface parking lots on Parcel W that are open to the general public for all uses, and
- 375 parking spaces in two privately operated surface public parking lots on Parcel L/M-2 that are open to the general public for all uses.

In summary there are 700 juror parking spaces, 374 publicly provided parking spaces, and 520 privately provided parking spaces existing today on the Project site. The Proposed Project would remove all the above-identified off-street parking supply on Parcels Q, W-1/W-2, and L/M-2.

Impacts of Removal of Existing Off-Street Parking – Development Parcels

As the County has a responsibility to provide juror parking, the 700 juror parking spaces on County Lot 17 will need to be replaced. The County has also expressed a desire to replace the 374 other public parking spaces it provides in Lot 17 and Lot 26. The County has determined[24] that the parking supply in County Lot 17 on Parcel Q (1,062 spaces) and in County Lot 26 on Parcel W-1/W-2 (225 spaces) can be replaced by existing County facilities in the Civic Center area which have sufficient daytime parking capacity available to absorb this demand of 1,074 spaces – primarily in the Walt Disney Concert Hall garage (County Lot 16). The Walt Disney Concert Hall garage has a total of 1,730 spaces and is currently very under-utilized during the day. The County also has the ability to increase the supply to 2,288 spaces with tandem parking operations. In the night time when the garage is used for Concert Hall events there is virtually no current parking usage of County Lots 17 and 26. There would therefore be no significant impacts from the loss of these parking spaces due to the Project.

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[24] Letter from Chief Administrative Officer to Board of Supervisors August, 2005, and Letter from Chief Administrative Officer to Grand Avenue Committee, November, 2005.

There are no plans to replace the remaining 520 parking spaces in the four privately operated surface lots on Parcels W-1/W-2 and L/M-2. These parking spaces are in general public use, with no specific designation or relation to specific buildings or uses in the Civic Center and Bunker Hill areas. They are not "by-right" uses of the underlying land, but are in effect a temporary use of the land, until a higher and better use is identified for these parcels. For these reasons there is no obligation to replace these parking spaces.

The 520 such off-street parking spaces that will be removed represent about 3% of the overall parking supply in the immediate area of Bunker Hill and the Civic Center (identified above). As the previous analysis has shown, there would be virtually no parking spaces available in the Project's parking garages for non-Project parking during the weekday daytime. However, as parking spaces are generally available (based on drive-by and drive/walk-thru general observations) in a number of other parking facilities in the general area (such as the Music Center Parking Garage, the Cathedral of Our Lady of the Angels garage) as well as in other adjacent parts of downtown, those people currently using the privately operated surface lots on Parcels W-1/W-2 and L/M-2 would be expected to either find alternate locations for parking or perhaps use transit. Because of this, and the fact that the loss of parking spaces is a very small proportion of the overall parking supply in the immediate area of the Project, it is concluded there will be no significant impacts from the removal of off-street parking spaces on the Project development parcels.

Changes to the Existing Off-Street Parking Supply – Civic Park

The Proposed Civic Park conceptual design would not result in any significant changes to the parking supply in the Civic Mall.

The Conceptual Plan would reconfigure the upper sections of the existing helical ramps to the Civic Mall garage (County Lot 18) at both Grand Avenue and Hill Street. However no reduction in the parking capacity of the garage is anticipated.

The Conceptual Plan would repair the lower two levels of the Court of Flags garage (County Lot 10) and thereby add 325 usable parking spaces to the parking supply.

The Conceptual Plan would replace the existing 349 space surface parking lot (County Lot 11) on Spring Street at the eastern end of the Civic Mall with a large paved and landscaped plaza for civic and community activities. The existing parking could be accomodated in the refurbished Court of Flags garage (gain of 325 spaces), and other County lots[25]. The

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[25] Letter from Chief Administrative Officer to Board of Supervisors August, 2005, and Letter from Chief Administrative Officer to Grand Avenue Committee, November, 2005.

net result of the Civic Park Conceptual Plan would be a slight reduction in the number of parking spaces in the three-block area from 1,958 spaces to 1,934 spaces.

Impacts of Removal of Existing Off-Street Parking – Civic Park

While there would thus be a small decrease of 24 parking spaces in the parking supply in the Civic Mall, this would not be a significant impact as it would represent only 1% of the total 1,958 spaces currently provided in the Civic Mall. As all parking spaces are managed and operated by the County, and as they have a significant number of other parking spaces in other parking lots in the Civic Center area, they will be able to adequately identify replacement parking in those facilities.. It is therefore concluded that there would be no significant impacts from the very minor changes in the off-street parking supply in the Civic Mall/Park area.

7.4.2 On-Street Parking

The Existing Parking Supply

There is very little on-street parking supply in the area of the Project. On the streets adjacent to the development parcels in the Project there are only a total of 33 on street parking spaces. Table 7.8 summarizes the number of existing on-street parking spaces on each block face of the Project site. This on-street parking supply is generally metered, with a two-hour time restriction between 8am and 6pm., except for 1st Street when the time limits are 9am to 4pm.

To the north of the Project, there is similarly very little on-street parking in the Civic Center area. To the south of the Project, there is more on-street parking, with on-street spaces provided along Hope Street, Grand Avenue and Olive Street.

Changes to the Existing On-Street Parking Supply

The number of on-street parking spaces may be reduced by the Project – due to the provision of new project driveways and/or passenger loading zones.

At a minimum, an estimated 15 on-street parking spaces would have to be removed to accommodate the width of new driveways and some distance either side of the driveways to allow visibility for turning vehicles.

At a maximum, all 33 on-street parking spaces adjacent to the Project may have to be removed due to new driveways, passenger loading zones, and to facilitate turning traffic at driveways.

Table 7.8 Existing On-Street Parking Adjacent to Project

Parcel	Street	# of On-Street Spaces	Type of Parking
Q	Olive St.	0	
	2nd St.	0	
	Grand Ave.	0	
	1st St.	5	Metered 2 Hr. 9am to 4pm
W-1/W-2	Hill St.	0	
	2nd St.	8	No Parking 8am to 5pm
	Olive St.	0	
	1st St.	0	
L/M-2	Grand Ave.	10	Metered 2 Hr. 8am to 6pm
	GTK Way N.	0	
	GTK Way S.	10	Metered 2 Hr. 8am to 6pm
	Lower Grand Ave.	0	
	Hope St.	0	
	2nd St.	0	
TOTAL		33	

Impacts of Removal of Existing On-Street Parking

The Project could therefore cause the removal of between 15 and 33 on-street parking spaces adjacent to the Project development parcels. There is currently an extensive amount of off-street parking provided in the Bunker Hill and Civic Center areas – much of which is available to the public, and which could accommodate an additional 33 space demand. In addition, the Project would be providing additional off-street parking spaces, and the preceding analysis has shown that there would be surplus parking of 52 spaces in the Parcel L/M-2 garage during the weekday daytime, a surplus of 36 spaces during weekday evenings, and a surplus of 11 to 20 spaces on weekends – which could at most times also accommodate this relocated demand.

It is therefore concluded that there would be no significant impacts from the potential removal of any on-street parking spaces adjacent to the Project development parcels.

8. Parking Analysis - Project with Additional Residential Development Option

This report section addresses the proposed parking supply for the Project with Additional Residential Development Option, and provides a comparison to the parking code requirements for this Project Option and to the estimated project parking demand. It addresses only those elements of the Project that differ for this option, i.e. Parcel W-1/W-2. All other elements of the parking analysis remain the same as described in Chapter 7 of this report.

8.1 Proposed Parking Supply – Additional Residential Development Option

The Project proposes to provide parking on each of the four parcels, in below-grade and/or above grade parking garages. The Project would provide a total of at least 5,255 parking spaces on-site. The proposed parking supply is summarized in Table 8.1.

Table 8.1 Proposed Project Parking Supply – Additional Residential Development Option

Parcel	Residential Parking Supply	Commercial Parking Supply	Total Parking Supply
Parcel Q	755	755	1,510
Parcel W-1/W-2	1,971	204	2,175
Parcel L/M-2	1,280	290	1,570
Total	4,006	1,249	5,255

The Parcel W-1/W-2 garage would provide about 2,175 total parking spaces. It would include 1,971 private residential parking spaces, comprised of 1,879 resident spaces and 92 guest parking spaces. This garage would also provide about 204 commercial parking spaces for the retail uses.

The Parcel Q garage and the Parcel L/M-2 garage would be as defined in Chapter 4, and Chapter 7.

8.2 City Parking Requirements – Additional Residential Option

The parking requirements for the project are controlled by the City Municipal Code and the City Planning Department Deputy Advisory Agency, and were calculated as described in Chapter 5 of this report.

8.2.1 Parking Requirements based on the City Planning Department Deputy Advisory Agency AA-2000-1 Residential Policy and on the City Code for Commercial Uses - Project with Additional Residential Development Option

Parking by Parcel

For Parcel W-1/W-2, the Deputy Advisory Agency Residential Policy (DAARP) would require 2,621 residential parking spaces to be provided. The Project proposes to provide 1,971 residential spaces, which would be 650 less than the policy requirement. (See the discussion in Section 7.2 of this report regarding how this policy is not appropriate to the downtown area).

Overall Parking for the Project

A summary of parking code and Deputy Advisory Agency Policy requirements is shown in Table 8.2 by residential and commercial parking totals for each development parcel. Detailed calculations of parking code and Advisory Agency Policy requirements are shown in Table B-9 and B-10 in Appendix B.

Overall the Deputy Advisory Agency Policy and the City Code would require a total of 5,925 spaces to be provided by the Project. The proposed Project would provide 5,255 spaces, which would be 670 spaces less than the overall requirement. However the Project would provide more commercial parking supply than required by code, and less residential supply than the overall Advisory Agency requirement.

In total, the Deputy Advisory Agency Residential Policy (DAARP) would require 5,321 residential parking spaces to be provided. The Project proposes to provide 4,006 residential spaces, which would be 1,315 less than the policy requirement (see the discussion in Section 7.2 of this report as to why the DAARP is not appropriate for projects in downtown, and the proposed residential parking supply would be adequate).

Table 8-2 **Summary of Parking Requirements and Proposed Parking Supply Project with Additional Residential Development Option**

5/23/2006

As Per City Code Parking Requirement and CDP Advisory Agency AA-2000-1

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference
Residential	1,000	755	-245	2,621	1,971	-650	1,700	1,280	-420	5,321	4,006	-1,315
Commercial	429	755	326	74	204	130	101	290	189	604	1,249	645
Total	1,429	1,510	81	2,695	2,175	-520	1,801	1,570	-231	5,925	5,255	-670

Source: Table B-9 City Code Parking Requirement and CDP Advisory Agency AA-2000-1, Appendix B.

As Per City Code Parking Requirement

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference	Parking Required	Parking Provided	Difference
Residential	506	755	249	1,326	1,971	645	860	1,280	420	2,692	4,006	1,314
Commercial	429	755	326	74	204	130	101	290	189	604	1,249	645
Total	935	1,510	575	1,400	2,175	775	961	1,570	609	3,296	5,255	1,959

Source: Table B-10 City Code Parking Requirement, Appendix B.

Also, in total, the City Code would require a total of 604 commercial parking spaces. The Project proposes to provide 1,249 commercial spaces which would be 645 more than the code requirement.

8.2.2 Parking Requirements based on the City Municipal Code for Both Residential and Commercial Uses

A summary of parking code requirements for all Project uses is shown in Table 8.2 by residential and commercial parking totals for each development parcel. Detailed calculations of parking code requirements are again shown in Table B-9 and B-10 in Appendix B. While the LAMC requirements for residential parking are lower than the DAARP requirements shown in the preceding section, the requirements for non-residential uses are the same as in the preceding section. For consistency purposes, and ease of understanding, both residential and non-residential uses and total project requirements are also discussed in the following section.

Parking by Parcel

For Parcel W-1/W-2, the City Code would require 1,326 residential parking spaces to be provided. The Project proposes to provide 1,971 residential spaces, which would be 645 more than the policy requirement.

Also, for Parcel W-1/W-2, the City Code would require a total of 74 commercial parking spaces. The Project proposes to provide 204 commercial spaces, which would be 130 more than the code requirement.

Overall Parking for the Project

Overall the City Code would require a total of 3,296 spaces be provided by the Project. The proposed Project would provide 5,255 spaces, which would be 1,959 spaces more than the overall code requirement. The Project would provide both more residential and more commercial parking supply than required by code.

In total, the City Code would require 2,692 residential parking spaces to be provided. The Project proposes to provide 4,006 residential spaces, which would be 1,314 more than the code requirement.

Also, in total, the City Code would require a total of 604 commercial parking spaces. The Project proposes to provide 1,249 commercial spaces, which would be 645 more than the code requirement.

8.2.3 Conclusions on Parking Requirements – Project with Additional Residential Development Option

Advisory Agency Policy for Residential Condominiums

As described earlier in Section 7.2.3 of this report, given the downtown urban location, the Parking Code is the more appropriate criteria for determining parking need than the Advisory Agency policy. Section 7.2.3 also explained why the residential parking supply ratio is considered to be adequate.

It is therefore concluded that the proposed Project's residential parking supply would be adequate and parking impacts would not be expected. While the proposed residential supply would be less than the Advisory Agency Policy requirements, the Proposed Project will seek an exception from that policy. With an exception, which would be granted after certification of the Final EIR by the Lead Agency and concurrently with consideration of other Project entitlements by the City, there would be no significant residential parking impacts. However, until the exception is granted, the conservative position is that for the purposes of CEQA there would be a significant impact.

City Municipal Code

The proposed Project would provide 4,006 residential parking spaces compared to a code requirement of 2,692 spaces. It would also provide 1,249 commercial parking spaces compared to a code requirement of 604 spaces. Because the proposed Project parking supply will considerably exceed the code requirements, it is concluded that the Project is consistent with the Municipal Code requirements, and that there would be no significant parking impacts with respect to the Municipal Code requirements.

8.3 Analysis of Project Parking Demand and Proposed Supply – Project with Additional Residential Development Option

This section provides an analysis of estimated parking demand for the Project with Additional Residential Development Option and a comparison to the proposed Project parking supply. It looks at residential and commercial parking separately, because residential parking will be accessed only by residents and will not be shared with commercial uses.

8.3.1 Residential Parking Demand

For the same reasons discussed in Section 7.3.1 of this report, it is concluded that the residential parking supply will be sufficient and there will be no significant parking demand impacts for the residential uses.

8.3.2 Commercial Parking Demand

For the remainder of this Project Option the only difference to the Project with County Office Building Option is that there will be no office building. The other commercial uses will remain the same as for the Proposed Project, i.e. hotel, retail, and restaurant uses, as well as the health club and the event facility.

Parking Analysis Methodology

The analysis of the commercial parking demand is therefore very similar to that described in Section 7.3.2 of this report and uses the same methodology. The analysis differs only for Parcel W-1/W-2. The seasonal variations in parking demand would be very similar to those discussed in Section 7.3.2, as the office building in the Project with County Office Building Option has virtually no seasonal variation.

Analysis – Parking Demand by Time of Day, and By Weekday - Weekend

Table 8.3 shows the estimated parking demand by time of day for each parcel and for the Project as a whole. The parking demand for Parcels Q and L/M-2 is the same as in Section 7.3.2.

Parcel W-1/W-2

The peak weekday parking demand will be 181 spaces, and will occur in the evening. The peak parking need in the weekday daytime will be slightly lower at 171 spaces at lunchtime. The weekend parking need will be very similar, with a total of 202 spaces for the weekend mid-afternoon and a peak total of 191 spaces for the weekend evening period.

Parking demand will therefore be relatively constant for the commercial uses for this parcel, not only during the day but also between weekday and weekend days.

Overall Project

As shown in Table 8.3, for the Project as a whole the weekday parking demand will peak at 1,162 spaces in the early afternoon, with the highest evening parking need at 1,411 spaces. At weekends, the parking need will peak at 1,381 spaces in the early afternoon, with the highest evening parking need at 1,461 spaces.

Analysis – Comparison of Parking Demand to Parking Supply

The final step in the parking analysis was to compare the estimated parking demand to the proposed parking supply. Again, this was done separately for each parcel in the Project,

Table 8-3 Commercial Shared Parking Demand by Time of Day Project with Additional Residential Development Option

4/24/2006

A. Weekday

Time	Total Commercial Parking Demand			
	Parcel Q	Parcel W-1/W-2	Parcel L / M-2	Total Project
6:00 AM	213	0	0	213
7:00 AM	240	11	15	266
8:00 AM	318	25	34	377
9:00 AM	430	57	78	565
10:00 AM	488	96	131	715
11:00 AM	567	126	172	865
12:00 PM	655	153	211	1,019
1:00 PM	753	171	238	1,162
2:00 PM	709	160	222	1,091
3:00 PM	692	158	219	1,069
4:00 PM	667	141	195	1,003
5:00 PM	747	146	205	1,098
6:00 PM	864	165	232	1,261
7:00 PM	976	181	254	1,411
8:00 PM	982	178	251	1,411
9:00 PM	904	147	210	1,261
10:00 PM	741	105	152	998
11:00 PM	518	68	99	685
12:00 AM	388	38	56	482

B. Weekend

Time	Total Commercial Parking Demand			
	Parcel Q	Parcel W-1/W-2	Parcel L / M-2	Total Project
6:00 AM	216	0	0	216
7:00 AM	233	7	9	249
8:00 AM	345	19	26	390
9:00 AM	465	53	73	591
10:00 AM	530	79	107	716
11:00 AM	650	125	170	945
12:00 PM	773	164	225	1,162
1:00 PM	869	194	268	1,331
2:00 PM	900	202	279	1,381
3:00 PM	898	202	279	1,379
4:00 PM	859	186	257	1,302
5:00 PM	841	177	247	1,265
6:00 PM	939	191	270	1,400
7:00 PM	985	188	267	1,440
8:00 PM	1,013	185	263	1,461
9:00 PM	946	161	231	1,338
10:00 PM	878	153	220	1,251
11:00 PM	634	103	152	889
12:00 AM	497	68	102	667

and addressed the individual peak parking demand for each parcel for both the weekday and the weekend. The analysis therefore allows for shared parking within a parcel,but not for shared parking between parcels. The results are summarized in Table 8.4.

The results for Parcels Q and L/M-2 are identical to the Project with County Office Building Option discussed earlier in Section 7.3.2. The differences for Parcel W are discussed below.

Parcel W-1/W-2

The proposed on-site parking supply for Parcel W-1/W-2 is 204 spaces. As shown in Table 8.4, this total supply will accommodate Project needs at all times during the weekday and the weekend. It will meet the commercial parking demand with a 33 space surplus during the weekday daytime, a 23 space surplus during the weekday evening, a 2 space surplus during the weekend daytime, and a 13 space surplus during the weekend evening, as shown in Table 8-4.

Overall Project

Combining the parking characteristics of all development parcels, the peak commercial parking demand for the total project, as shown in Table 8-4, is estimated at 1,162 spaces on a weekday daytime. The peak parking need is estimated at 1,417 spaces on a weekday evening, 1,381 spaces on a weekend daytime, and 1,474 spaces on a weekend evening.

The proposed parking supply will be sufficient to accommodate the projected parking demand for development on Parcels W-1/W-2 and L/M-2 at all times. While the proposed parking supply for Parcel Q will be sufficient to accommodate projected demand during the weekday daytime, it will not be sufficient during weekday evenings and at weekends when it will be between 145 spaces and 258 spaces short. The small parking supply surpluses on Parcels W-1/W-2 and L/M-2 will not be sufficient to accommodate the Parcel Q shortfalls.

Conclusions on Parking Demand and Supply

The overall parking supply will come very close to meeting the estimated peak parking demands of the Project. The Parcel Q parking garage will accommodate the peak daytime parking demands, but will be short by 145 to 258 spaces on weekday evenings and at weekends.

The Parcel W-1/W-2 garage will provide adequate parking to meet retail commercial demands at all times, with small surpluses of between 2 and 33 spaces at different times.

Table 8-4 Comparison of Peak Parking Demands and Proposed Parking Supply
Project with Additional Residential Development Option

4/24/2006

Period	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Demand	Supply	Difference	Demand	Supply	Difference	Demand	Supply	Difference	Demand	Supply	Difference
Weekday - Day	753	755	2	171	204	33	238	290	52	1,162	1,249	87
- Eve	982	755	-227	181	204	23	254	290	36	1,417	1,249	-168
Weekend - Day	900	755	-145	202	204	2	279	290	11	1,381	1,249	-132
- Eve	1,013	755	-258	191	204	13	270	290	20	1,474	1,249	-225

The Parcel L/M-2 garage will provide adequate parking for the retail commercial parking demands at all times, with small surpluses of 11 to 52 spaces at different times.

The weekday evening and weekend deficits in commercial parking on Parcel Q can not be accommodated on other Project parcels. However, they could be easily accommodated by the considerable surplus parking capacity that exists at evenings and weekends in many of the parking garages on Bunker Hill – particularly the office building garages within a few blocks of the Proposed Project. Use of this publicly available parking would be an effective use of existing resources and avoid providing an over-supply of parking in the area.

Based on the above analysis, it is concluded there would be no significant off-street parking supply impacts due to the Project with Additional Residential Development Option.

8.4 Changes to Existing Parking Supply in the Area of the Project

The changes to the existing parking supply in the area of the Project would be no different with this Project Option than with the Project with County Office Building Option (see Section 7.4).

The conclusion of that analysis therefore also apply to this Project Option, which are:

- There would be no significant impacts from the removal of off-street parking spaces on the Project development parcels.
- There would be no significant impacts from the very minor changes in the off-street parking supply in the Civic Mall/Park area.
- There would be no significant impacts from the potential removal of any on-street parking spaces adjacent to the Project development parcels.

9. Project Mitigation – Project with County Office Building Option

This Chapter of the report explores and identifies mitigation strategies to reduce significant traffic and parking impacts identified in the earlier impact analyses for the Project with County Office Building Option, and describes a proposed transportation mitigation program. These mitigations were developed in conjunction with, and approved by, LADOT.

9.1 Traffic Impact Mitigations – County Office Building Option

The analysis in Chapter 5 (see Table 5-1 and Figure 5-1) identified significant impacts at seven intersections in the A.M. peak hour, and at seventeen intersections in the P.M. peak hour. Of the seven significant impacts in the A.M. peak hour, three would be at intersections that would continue to operate at LOS D or better (an acceptable level of service), while four would be at intersections that would operate at LOS E. Of the seventeen significant impacts in the P.M. peak hour, ten would be at intersections that would continue to operate at LOS D or better, four would be at intersections that would operate at LOS E, and three would be at intersections that would operate at LOS F.

Background

The Project is located in the downtown Los Angeles area, where the street system is essentially fully built out, and is already often striped for the maximum capacity and operational effectiveness within the available right-of-way. In most cases, street widenings are not feasible, because sufficient right-of-way is not available or because right-of-way acquisition is not possible, or because it is not practical or desirable to reduce sidewalk widths due to high pedestrian flows on downtown sidewalks and the City's goals of a walkable downtown.

In addition, for downtown to function effectively from an access and circulation standpoint it is critical for the transportation system to achieve a balance in serving vehicular traffic, transit, and pedestrians. Roadway widenings – while benefiting traffic – often have adverse impacts on pedestrians and may have adverse impacts on bus transit service. So even where potentially feasible roadway mitigations might be identified – they may not be the best solution in the overall context of multi-modal transportation and circulation.

Also, the Project has by definition many features that reduce the level of vehicular trips that could be generated and placed on the Downtown roadway system and surrounding freeways.

The fact that it is a mixed use Project has three principal advantages. Firstly, the very large residential component reduces the number of overall trips, because residential uses generate far less trips than commercial uses. Secondly, both the mix of uses within the Project, and its location in downtown adjacent to or near to a high number of diverse uses, will lead to a high level of interaction between these uses and trips that will walk or use transit and therefore not make a car trip. Thirdly, its location near significant levels of transit will lead to significant levels of transit usage. So the Project make-up itself will reduce the level of trip making from the Project.

The Project will also add substantially to the pedestrian amenities on Bunker Hill. It will in effect fill an existing "hole" in pedestrian connections on Bunker Hill. Today's parking lots will be replaced with development that provides key mid-block pedestrian connections through this key area of Bunker Hill, overcoming some of the grade difficulties currently faced by pedestrians in the area, and facilitating access to the Metro Red Line Station at Hill Street and First Street. These Project features will encourage both walking and use of transit not just for Project users but for all residents, employees and visitors of Bunker Hill and the Civic Center areas.

Mitigation Strategy

In the context of this background, the overall mitigation strategy for the Project comprises the following elements:

- Focus first on the potential for traffic operational measures to improve the efficiency of existing roadway system.
- Maintain a good balance between vehicular and pedestrian circulation, emphasizing adequate sidewalk widths and pedestrian connections, safety and walkability.
- Encourage transit use and walking.
- Encourage trip reduction measures for appropriate land uses (e.g. office building).
- Focus investigation of specific roadway improvements, and implementation where feasible and practical and where they do not conflict with the above strategies, on those impacted intersections with the worst level of service (LOS F or LOS E).

Operational Improvements

Downtown traffic signals were long ago fitted with the Automated Traffic Surveillance and Control System (ATSAC) signal control system, which is a system that coordinates the timing of traffic signals over an area to increase their efficiency.

The second generation enhancement to the ATSAC system is ATCS (Adaptive Traffic Control System) further improves the efficiency of the ATSAC system by providing the ability to dynamically adjust signal timing to accommodate current traffic conditions as detected by sensors in the street, thereby enhancing the capacity of the intersections in the system. ATCS adds more vehicle detectors at intersections and more sophisticated traffic control software, as well as additional Closed Circuit Television Cameras (CCTV) to allow the verification of traffic conditions and incidents.

While ATCS has been added to traffic signals south of 8th Street in the downtown, it has not yet been added to the streets north of 8th Street. It is therefore proposed that the Project implement ATCS at a number of intersections in the northern part of downtown north of 8th Street.

An analysis of all intersections with significant traffic impacts showed that implementation of ATCS would mitigate significant traffic impacts at six intersections in the A.M. peak hour and at three intersections in the P.M. peak hour, as follows:

A.M. Peak Hour

- Hope St / Temple St. / US-101 Ramps
- Hope Street / 1st Street
- Grand Avenue / 1st Street
- Hill Street / Temple Street
- Hill Street / 3rd Street
- Broadway / Temple Street

P.M. Peak Hour

- Figueroa Street / 3rd Street
- Grand Avenue / Upper 2nd Street
- Broadway / Temple Street

The implementation of ATCS would also partially mitigate traffic impacts at the other intersection locations with significant impacts, but would not eliminate them. Significant impacts would remain at one location in the A.M. peak hour, and at 13 locations in the P.M. peak hour.

Implementation of ATCS would also include as an integral component, as appropriate, LADOT's Transit Priority System (TPS). TPS was developed as an enhancement to the City's ATSAC system to provide traffic signal priority to buses operating in heavily used transit corridors. It also includes control of dynamic passenger information signs at selected bus shelters along Metro Rapid bus routes to provide waiting passengers with estimated arrival times of the next bus. It has been successfully deployed in recent years along two major Los Angeles transit corridors.

In order to be effective, ATCS cannot be applied just to individual intersections, but has to be applied to a number of traffic signals over a geographic area or subset of the signal system. LADOT has determined that implementation of the ATCS mitigation improvement in the area surrounding the Project would comprise: upgrades to Model 2070 traffic signal controllers at 37 intersections; installation of 31 ATSAC/ATCS system vehicle detectors at 6 intersections; and installation of CCTV cameras - to provide video information to the ATSAC Center - at four locations.

Vehicle Trip Reduction Programs

Another approach to mitigation would be to reduce the number of vehicle trips generated by the Project, by encouraging greater use of the transit system and rideshare alternatives by Project users. The traffic impact analysis already assumed certain levels of transit use – but one mitigation strategy would be to further increase the use of transit. Such measures are most effective for office buildings – where transit is often an attractive alternative to drive-alone commuters and high day-long parking charges. However they are less effective for retail and restaurant trips – where many car trips already have multiple occupants and parking convenience is often more important to visitors than parking cost, and where vehicular trip restraint policies may impact the competitiveness and economic viability of the land uses. For these reasons vehicle trip reduction programs are rarely applied to commercial land uses other than office uses. Similarly, vehicle trip reduction programs cannot be realistically applied to residential uses.

Vehicle trip reduction and transportation demand management (TDM) programs would thus realistically focus on the County Office Building in the Project. The effect of a trip reduction program for the office building that might increase the transit/rideshare mode split from 40% to 50% was evaluated. Such a TDM program could for example, include the provision of an on-site transportation coordinator, provision of information on transit and logistical support for formation of carpools an vanpools, priority locations for carpool and vanpool parking, and other incentives to use transit and rideshare. The County would be responsible for funding and implementing such a program.

Analysis showed that this level of increased transit/rideshare use would eliminate one significant traffic impact (in conjunction with the implementation of ATCS discussed earlier) as follows:

P.M. Peak Hour

- Hill Street and 1st Street

While the reduction in vehicle trips would partially mitigate impacts at other locations it would not reduce them to a level of insignificance.

Specific Intersection Improvements

The feasibility of specific intersection improvements was investigated for the remaining intersection locations where the Project would cause significant traffic impacts, particularly where the resultant level of service would be LOS E or LOS F. This evaluation, which was conducted in conjunction with LADOT staff, looked at the feasibility of re-striping traffic lanes and/or adding traffic lanes to modify intersection lane configurations, roadway widenings, and potential changes to signal timing and phasing. No feasible mitigation improvements were identified as a result of this evaluation. In conjunction with LADOT it was determined that roadway widenings were not feasible (due to lack of available right-of-way because of existing buildings or lack of control over adjacent right-of-way); lane re-stripings were not feasible as they would result in inadequate lane widths; and signal timing/phasing changes were not feasible as they would worsen rather than improve intersection operations or potentially cause other problems and/or impacts elsewhere.

Other Proposed Measures

Other proposed measures that could reduce vehicle trips by facilitating and encouraging walking and the use of transit, and thereby partially mitigate the remaining significant traffic impacts, include the following:

- Providing enhanced walking connections along the Project street frontages to transit service (to bus stops and to the Red Line station portals at 1st Street and Hill Street, and at Hill Street mid-block between 1st Street and Temple Street). This could include the provision of pedestrian amenities along Project street frontages to facilitate walking in the Project area, including landscaped sidewalks, wider crosswalks where feasible at key intersections, improved lighting for pedestrian safety at nighttime, and pedestrian wayfinding signage.

- Provision of enhanced bus stops on Project street frontages, including bus shelters with passenger amenities such as benches, shaded areas, and transit information, that could be integrated into the overall urban design/landscaping of the Project.

- Provision of transit information kiosks at various strategic locations on the Project site.

- Participation by the Project in a Share-Car program, for example, Flexcar. Share-Car organizations make cars available to registered members to use only when they need to. By providing shared cars to multiple users it is an effective way of reducing overall car ownership. It is anticipated that up to three on-street parking spaces could be provided at key locations adjacent to the Project frontage for up to three Share-Cars. The Share-Cars could be available to both Project and non-Project users as long as they were members of the Share-Car program. The Project would support a Share-Car organization's application to the City, and would promote the Share-Car concept and encourage its usage with Project residents and tenants.

- Provision of vehicular directional signage on surface streets approaching and within the Project area to direct vehicles to specific destinations and parking locations, as appropriate, and thereby minimizing vehicles circulating in the Project area.

The appropriate implementation of a mix of these measures would be coordinated and reviewed with the Los Angeles Department of Transportation and developed as feasible.

These measures would certainly be beneficial to traffic flow, transit service, pedestrian circulation, and overall mobility in the area. While they might potentially mitigate significant impacts at at least three locations in the P.M. peak hour (at Hope Street / Temple Street / US-101 Ramps, at Grand Avenue / Temple Street, and at Olive Street / 5th Street, because the increases in v/c ratios at these locations are close to the threshold of significance), it is difficult to confirm such mitigation quantitatively. For the purposes of providing a conservative analysis it is assumed that while beneficial, and partially mitigating certain significant impacts, they may not reduce remaining impacts to a less than significant level.

Remaining Significant and Unavoidable Traffic Impacts - Project with County Office Building Option

The combination of implementing an ATCS program and an office trip reduction program would mitigate a total of 6 significant impacts in the A.M. peak hour and 4 significant impacts in the P.M. peak hour to a less than significant level. These mitigation measures would reduce the magnitude of the remaining significant impacts, but not to a level of insignificance.

There would still be one significant unavoidable impact in the A.M. peak hour and 13 significant unavoidable impacts in the P.M. peak hour, at the following locations (with the resultant level of serviced shown in parentheses), and as shown in Table 9-1:

A.M. Peak Hour

- Broadway / 1st Street (LOS D)

P.M. Peak Hour

- Olive Street / 1st Street (LOS C)
- Olive Street / 4th Street (LOS C)
- Hope Street / 1st Street (LOS D)
- Hope Street / GTK Way / 2nd Place (LOS D)
- Grand Avenue / Temple Street (LOS D)
- Grand Avenue / 1st Street (LOS D)
- Olive Street / 5th Street (LOS D)
- Hill Street / 2nd Street (LOS D)
- Hill Street / 4th Street (LOS D)
- Hope Street / Temple St. (US-101 Ramps) (LOS E)
- Broadway / 1st Street (LOS E)
- Grand Avenue / US-101 / I-110 Ramps (LOS F)
- Hill Street / 3rd Street (LOS F)

As can be seen from the above list however, all of these intersections would continue to operate at LOS D or better, except for two which would operate at LOS E in the P.M. peak hour (Hope Street / Temple St. / US-101 Ramps, and Broadway / 1st Street), and two which would operate at LOS F in the P.M. peak hour (Grand Avenue / US-101 / I-110 Ramps, and Hill Street / 3rd Street).

9.2 CMP and Freeway Impact Mitigations – Project with County Office Building Option

The analysis of CMP and freeway impacts in Chapter 6 concluded there would be two significant traffic impacts on the freeway system for this Project Option. The Project would cause an incremental increase of in the D/C ratio of 0.021 at the US-101 Hollywood Freeway between Grand Avenue and Hill Street, and an incremental increase of in the D/C

Table 9-1 Intersection Level Of Service - Future With Project Conditions - Project with County Office Building Option With Mitigation

A. A.M Peak Hour

		Future Without Project Condtions		Future With Project Conditions				Future With Project with Mitigation Conditions				
		V/C	LOS	V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact	Mitigates Impact
1	Figueroa St. / 3rd St.	0.827	D	0.837	D	0.010	No	0.814	D	-0.013	No	
2	Figueroa St. / 5th St.	0.487	A	0.492	A	0.005	No	0.479	A	-0.008	No	
3	Figueroa St. / 6th St.	0.626	B	0.632	B	0.006	No	0.614	B	-0.012	No	
4	I-110 Off Ramp / Temple St.	0.398	A	0.400	A	0.002	No	0.389	A	-0.009	No	
5	Hope St. / Temple St. / US-101 Ramps	0.902	E	0.921	E	0.019	Yes	0.895	D	-0.007	No	Full
6	Hope St. / 1st St.	0.925	E	0.935	E	0.010	Yes	0.910	E	-0.015	No	Full
7	Hope St. / GTK Way / 2nd Place	0.420	A	0.452	A	0.032	No	0.440	A	0.020	No	
8	Flower St. / 3rd St.	0.671	B	0.678	B	0.007	No	0.660	B	-0.011	No	
9	Flower St. / 5th St.	0.439	A	0.448	A	0.009	No	0.435	A	-0.004	No	
10	Flower St. / 6th St.	0.528	A	0.540	A	0.012	No	0.525	A	-0.003	No	
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.693	B	0.724	C	0.031	No	0.703	C	0.010	No	
12	Grand Ave. / Temple St.	0.930	E	0.929	E	-0.001	No	0.903	E	-0.027	No	
13	Grand Ave. / 1st St.	0.791	C	0.818	D	0.027	Yes	0.795	C	0.004	No	Full
14	Grand Ave. / Upper 2nd St.	0.537	A	0.670	B	0.133	No	0.651	B	0.114	No	
15	Grand Ave. / 5th St.	0.487	A	0.502	A	0.015	No	0.489	A	0.002	No	
16	Olive St. / 1st St.	0.531	A	0.609	B	0.078	No	0.590	A	0.059	No	
17	Olive St. / 2nd St.	0.283	A	0.359	A	0.076	No	0.351	A	0.068	No	
18	Olive St. / 4th St.	0.437	A	0.548	A	0.111	No	0.523	A	0.086	No	
19	Olive St. / 5th St.	0.623	B	0.654	B	0.031	No	0.636	B	0.013	No	
20	Olive St. / 6th St.	0.402	A	0.424	A	0.022	No	0.410	A	0.008	No	
21	Hill St. / Temple St.	0.762	C	0.815	D	0.053	Yes	0.792	C	0.030	No	Full
22	Hill St. / 1st St.	0.744	C	0.766	C	0.022	No	0.743	C	-0.001	No	
23	Hill St. / 2nd St.	0.765	C	0.793	C	0.028	No	0.770	C	0.005	No	
24	Hill St. / 3rd St.	0.968	E	0.996	E	0.028	Yes	0.966	E	-0.002	No	Full
25	Hill St. / 4th St.	0.518	A	0.542	A	0.024	No	0.526	A	0.008	No	
26	Hill St. / 6th St.	0.457	A	0.466	A	0.009	No	0.453	A	-0.004	No	
27	Broadway / Temple St.	0.858	D	0.895	D	0.037	Yes	0.866	D	0.008	No	Full
28	Broadway / 1st St.	0.824	D	0.915	E	0.091	Yes	0.880	D	0.056	Yes	Partial
29	Broadway / 2nd St.	0.613	B	0.616	B	0.003	No	0.597	A	-0.016	No	
30	Broadway / 4th St.	0.474	A	0.489	A	0.015	No	0.476	A	0.002	No	
31	Spring St. / 1st St.	0.592	A	0.609	B	0.017	No	0.592	A	0.000	No	
32	Spring St. / 2nd St.	0.609	B	0.612	B	0.003	No	0.596	A	-0.013	No	

Table 9-1 Intersection Level Of Service - Future With Project Conditions - Project with County Office Building Option With Mitigation 5/1/2006

B. P.M Peak Hour

		Future Without Project Condtions		Future With Project Conditions				Future With Project with Mitigation Conditions				
		V/C	LOS	V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact	Mitigates Impact
1	Figueroa St. / 3rd St.	0.965	E	0.985	E	0.020	Yes	0.957	E	-0.008	No	Full
2	Figueroa St. / 5th St.	0.781	C	0.795	C	0.014	No	0.772	C	-0.009	No	
3	Figueroa St. / 6th St.	0.650	B	0.658	B	0.008	No	0.640	B	-0.010	No	
4	I-110 Off Ramp / Temple St.	0.409	A	0.413	A	0.004	No	0.402	A	-0.007	No	
5	Hope St. / Temple St. / US-101 Ramps	0.971	E	1.015	F	0.044	Yes	0.985	E	0.014	Yes	Partial
6	Hope St. / 1st St.	0.733	C	0.830	D	0.097	Yes	0.806	D	0.073	Yes	Partial
7	Hope St. / GTK Way / 2nd Place	0.776	C	0.845	D	0.069	Yes	0.822	D	0.046	Yes	Partial
8	Flower St. / 3rd St.	0.546	A	0.569	A	0.023	No	0.552	A	0.006	No	
9	Flower St. / 5th St.	0.517	A	0.535	A	0.018	No	0.519	A	0.002	No	
10	Flower St. / 6th St.	0.498	A	0.515	A	0.017	No	0.500	A	0.002	No	
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.994	E	1.100	F	0.106	Yes	1.064	F	0.070	Yes	Partial
12	Grand Ave. / Temple St.	0.844	D	0.896	D	0.052	Yes	0.868	D	0.024	Yes	Partial
13	Grand Ave. / 1st St.	0.850	D	0.918	E	0.068	Yes	0.889	D	0.039	Yes	Partial
14	Grand Ave. / Upper 2nd St.	0.504	A	0.708	C	0.204	Yes	0.689	B	0.185	No	Full
15	Grand Ave. / 5th St.	0.565	A	0.597	A	0.032	No	0.580	A	0.015	No	
16	Olive St. / 1st St.	0.627	B	0.801	D	0.174	Yes	0.770	C	0.143	Yes	Partial
17	Olive St. / 2nd St.	0.406	A	0.583	A	0.177	No	0.567	A	0.161	No	
18	Olive St. / 4th St.	0.653	B	0.740	C	0.087	Yes	0.719	C	0.066	Yes	Partial
19	Olive St. / 5th St.	0.812	D	0.858	D	0.046	Yes	0.833	D	0.021	Yes	Partial
20	Olive St. / 6th St.	0.486	A	0.513	A	0.027	No	0.499	A	0.013	No	
21	Hill St. / Temple St.	0.933	E	0.941	E	0.008	No	0.915	E	-0.018	No	
22	Hill St. / 1st St.	0.911	E	0.947	E	0.036	Yes	0.920	E	0.009	No	Full
23	Hill St. / 2nd St.	0.679	B	0.845	D	0.166	Yes	0.813	D	0.134	Yes	Partial
24	Hill St. / 3rd St.	1.018	F	1.103	F	0.085	Yes	1.064	F	0.046	Yes	Partial
25	Hill St. / 4th St.	0.760	C	0.851	D	0.091	Yes	0.819	D	0.059	Yes	Partial
26	Hill St. / 6th St.	0.586	A	0.609	B	0.023	No	0.591	A	0.005	No	
27	Broadway / Temple St.	0.834	D	0.866	D	0.032	Yes	0.842	D	0.008	No	Full
28	Broadway / 1st St.	0.841	D	0.939	E	0.098	Yes	0.908	E	0.067	Yes	Partial
29	Broadway / 2nd St.	0.748	C	0.768	C	0.020	No	0.746	C	-0.002	No	
30	Broadway / 4th St.	0.646	B	0.678	B	0.032	No	0.657	B	0.011	No	
31	Spring St. / 1st St.	0.582	A	0.622	B	0.040	No	0.603	B	0.021	No	
32	Spring St. / 2nd St.	0.509	A	0.517	A	0.008	No	0.503	A	-0.006	No	

ratio of 0.020 at the US-101 Hollywood Freeway north of Vignes Street, both in the P.M. peak hour. Both would be at or very slightly above the threshold of significance, The latter location is a CMP location.

The effect of the mitigation measure proposed in the preceding section to implement a trip reduction program for the County Office Building on these two freeway impacts was analyzed. The results are shown in Table 9-2. That measure would reduce the impact on the US-101 Hollywood Freeway north of Vignes Street to less than a significant impact, thereby eliminating the impact at the CMP location.

The impact at the other location - the US-101 Hollywood Freeway between Grand Avenue and Hill Street – would be reduced by this measure but not quite to a level of insignificance. The increase in D/C ratio would be exactly at the 0.02 threshold, as shown in Table 9-2.

There is no feasible mitigation measure for this impact. The increase in D/C ratio barely meets the threshold of significance. It is therefore not practical to consider large scale measures such as freeway widenings as they would not be proportional to the level of impact. At this location, the US-101 Freeway passes through a "cut" in downtown with major retaining walls and numerous bridge overcrossings. Any freeway widening is therefore a large infrastructure improvement that could only be undertaken as a major regional transportation improvement. There are currently no such improvement plans for this section of freeway. The Proposed Project already proposes a trip reduction program for the office building component. It also proposes a series of other measures (see Section 9.1) to further increase transit ridership and pedestrian trips – and it is possible that such measures could reduce this impact to a level of insignificance. The analysis however takes the conservative stance that this impact may remain significant and unavoidable for this Project Option.

There would thus remain one significant but unavoidable impact on the freeway system in the P.M. peak hour.

9.3 Parking Impact Mitigations – Project with County Office Building Option

Residential Parking Impacts

The analysis of residential parking needs concluded that the proposed residential parking supply for the Project would be sufficient. The Project is located in a downtown location, with high levels of transit service, and with many destinations within easy walking

Table 9-2 Freeway Impact Analysis - PM Peak Hour - Project with County Office Building Option - With Mitigation

4/23/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2005)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
1	I-10 at Budlong Ave. [1]	Yes	EB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	100	20,668	12,500	1.653	F(3)	0.008	No
			WB	18,620	12,500	1.490	F(3)	20,568	12,500	1.645	F(3)	110	20,678	12,500	1.654	F(3)	0.009	No
2	I - 10 East of Los Angeles Street [2]	No	EB	9,020	8,000	1.128	F(0)	9,964	8,000	1.245	F(0)	0	9,964	8,000	1.245	F(0)	0.000	No
			WB	7,080	8,000	0.885	D	7,821	8,000	0.978	E	0	7,821	8,000	0.978	E	0.000	No
3	I - 10 at East Los Angeles City Limit [1]	Yes	EB	12,365	12,000	1.030	F(0)	13,659	12,000	1.138	F(0)	47	13,706	12,000	1.142	F(0)	0.004	No
			WB	9,055	12,000	0.755	C	10,002	12,000	0.834	D	37	10,039	12,000	0.837	D	0.003	No
4	US - 101 south of Santa Monica Blvd. [1]	Yes	NB	11,100	8,000	1.388	F(2)	12,261	8,000	1.533	F(3)	103	12,364	8,000	1.546	F(3)	0.013	No
			SB	10,280	8,000	1.285	F(1)	11,356	8,000	1.419	F(2)	85	11,441	8,000	1.430	F(2)	0.011	No
5	US - 101 from Alvarado St. to Gendale Blvd. [2]	No	NB	7,623	8,000	0.953	E	8,421	8,000	1.053	F(0)	89	8,510	8,000	1.064	F(0)	0.011	No
			SB	8,104	8,000	1.013	F(0)	8,952	8,000	1.119	F(0)	90	9,042	8,000	1.130	F(0)	0.011	No
6	US - 101 Grand Ave. to Hill St. [2]	No	NB	5,951	8,000	0.744	C	6,574	8,000	0.822	D	83	6,657	8,000	0.832	D	0.010	No
			SB	7,830	8,000	0.979	E	8,649	8,000	1.081	F(0)	160	8,809	8,000	1.101	F(0)	0.020	Yes
7	US - 101 north of Vignes St. [1]	Yes	NB	6,693	10,000	0.669	C	7,393	10,000	0.739	C	116	7,509	10,000	0.751	C	0.012	No
			SB	11,099	8,000	1.387	F(2)	12,260	8,000	1.533	F(3)	146	12,406	8,000	1.551	F(3)	0.018	No
8	SR - 110 from Solano to Hill St. / Stadium Way [2]	No	NB	5,213	6,000	0.869	D	5,758	6,000	0.960	E	100	5,858	6,000	0.976	E	0.017	No
			SB	6,231	6,000	1.039	F(0)	6,883	6,000	1.147	F(0)	88	6,971	6,000	1.162	F(0)	0.015	No
9	SR - 110 at Alpine St. [1]	Yes	NB	9,026	6,000	1.504	F(3)	9,970	6,000	1.662	F(3)	75	10,045	6,000	1.674	F(3)	0.013	No
			SB	8,407	6,000	1.401	F(2)	9,287	6,000	1.548	F(3)	66	9,353	6,000	1.559	F(3)	0.011	No
10	SR - 110 south of US - 101 [1]	Yes	NB	12,007	8,000	1.501	F(3)	13,263	8,000	1.658	F(3)	31	13,294	8,000	1.662	F(3)	0.004	No
			SB	11,131	8,000	1.391	F(2)	12,296	8,000	1.537	F(3)	37	12,333	8,000	1.542	F(3)	0.005	No
11	SR - 110 from Olympic Blvd. to Pico Blvd. [2]	No	NB	7,722	8,000	0.965	E	8,530	8,000	1.066	F(0)	130	8,660	8,000	1.082	F(0)	0.016	No
			SB	9,231	8,000	1.154	F(0)	10,197	8,000	1.275	F(1)	145	10,342	8,000	1.293	F(1)	0.018	No

Table 9-2 Freeway Impact Analysis - PM Peak Hour - Project with County Office Building Option - With Mitigation

4/23/2006

No.	Freeway Segments	CMP Location	DIR	Existing (2005)				Cumulative (2015) Base				Cumulative + Project (2015)						
				Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Project Trips	Demand	Capacity	D/C	LOS	Change in D/C	Significant Impact
12	SR - 110 at Slauson Ave. ¹	Yes	NB	8,550	8,000	1.069	F(0)	9,445	8,000	1.181	F(0)	100	9,545	8,000	1.193	F(0)	0.013	No
			SB	12,155	8,000	1.519	F(3)	13,427	8,000	1.678	F(3)	113	13,540	8,000	1.692	F(3)	0.014	No
13	SR - 60 at Indiana Street ¹	Yes	EB	15,425	12,000	1.285	F(1)	17,039	12,000	1.420	F(2)	47	17,086	12,000	1.424	F(2)	0.004	No
			WB	6,445	12,000	0.537	B	7,119	12,000	0.593	C	37	7,156	12,000	0.596	C	0.003	No
14	I - 5 north of Stadium Way ¹	Yes	NB	12,855	10,000	1.286	F(1)	14,200	10,000	1.420	F(2)	50	14,250	10,000	1.425	F(2)	0.005	No
			SB	10,560	10,000	1.056	F(0)	11,665	10,000	1.166	F(0)	44	11,709	10,000	1.171	F(0)	0.004	No

Notes:

1. Existing demand (factored from 2003 to 2005 conditions) and capacity obtained from LACMTA "2004 Congestion Management Program for Los Angeles County".
2. Existing demand (factored from 2004 to 2005 conditions) from Caltrans " 2004 California State Highway Traffic Volumes". Existing capacity calculated using 2000 vehicles per lane.

distance. The Project would provide more residential parking spaces than required by the Municipal Code. The Project would also participate in the Share-Car Program (see description in Section 9.1).

The Project would provide less residential parking spaces than required by the Deputy Advisory Agency policy. However, that policy is not considered to be appropriate to downtown projects – for the reasons articulated in Chapter 7. The discussion in Chapter 7 also identified that there is ample evidence from market conditions that more parking would not be needed, and that in fact more parking would be inconsistent with current policies for downtown and with Project objectives.

The Project Applicant will seek an exception to the Deputy Advisory Agency Policy. With the exception there would be no significant impact. The reasons for seeking the deviation from the DAA parking policy are provided above. The request for such approval should be acted upon within months of the Certification of the EIR by the lead agency. If approved, there would be no significant impact for this issue. However, using a worse case perspective for purposes of this report, a significant and unavoidable impact is assumed for this matter.

Commercial Parking Impacts

The Parking Analysis in Chapter 7 identified there would be sufficient parking provided to meet both City requirements and parking demands for the Project with County Office Building Option, with the exception that the Parcel Q parking garage will be short by 145 to 258 spaces on weekday evenings and at weekends. The analysis also identified that this could be accommodated in currently available surplus public parking at other garages on Bunker Hill on the evenings and weekends, so there would be no significant impacts. No mitigation measures are therefore necessary.

9.4 Construction Impact Mitigations - County Office Building Option

Construction impacts were discussed in Section 5.5. In order to mitigate the potential temporary and short-term impacts of construction truck traffic for certain periods of time, the temporary diversion of trips to/from the County Mall garage, and the temporary and short-term traffic impacts of any necessary lane and/or sidewalk closures during the construction period, the Project should, prior to construction, develop a Construction Traffic Control/Management Plan or Plans to be approved by LADOT, to minimize the effects of construction on vehicular and pedestrian circulation and assist in the orderly flow of vehicular and pedestrian circulation in the area of the Project.

The Plan should include Project scheduling, the location and timing of any temporary lane closures, traffic detours, haul routes, temporary roadway striping and signage for traffic flow as necessary, as well the identification and signage of alternative pedestrian routes in the immediate vicinity of the Project if necessary.

The Plan should also provide for the coordination of construction areas, and for safe pedestrian movement throughout the Project Area such that adequate and safe pedestrian movement access is maintained to adjacent uses including the Walt Disney Concert Hall, the Music Center, the County Court House, and the Metro Red Line station portals (on Parcel W-2 and on the Court of Flags in the County Mall).

Also, prior to construction, the County of Los Angeles Chief Administrative Officer should insure that all County properties on Grand Avenue, including the Hall of Administration, County Courthouse, the Walt Disney Concert Hall, and the Music Center, will distribute information to employees and visitors on construction schedules and alternate travel routes, as appropriate, in conjunction with the LADOT approved Construction Traffic Control/Management Plan(s).

While this Construction Traffic Control/Management Plan would reduce the level of impacts, it may not reduce them to a less than significant level, so it is concluded that these construction impacts while temporary may remain significant and unavoidable.

9.5 Civic Park Mitigations

Civic Park impacts were discussed in Section 5.4, and it was found that for many of the activities there would be no significant impacts, with the following exceptions.

Weekly, Periodic and Seasonal Events

The analysis in Section 5.4 concluded that while the medium and large sized events may worsen traffic conditions in the PM peak hour, the number of such events would be infrequent and would not occur on a regular basis. Yet, although such a traffic impact would be temporary in nature, that impact may, on occasion, be significant in its magnitude.

However, given the temporary and irregular nature of the impact, there are no feasible mitigation measures, so this would remain a significant and unavoidable impact.

Annual Events, Festivals and Holiday Events

The analysis in Section 5.4 concluded that such events could potentially have temporary and short-term (one-time) traffic impacts.

It is expected that very large events such as festivals and holiday events would be handled in the same way as similar events (such as sports team celebrations, holiday festivals, etc.) are currently handled by the City – that is, on a case-by-case basis with specific event planning coordination with City Departments.

These would typically be addressed, at the discretion of the Los Angeles Department of Transportation (LADOT) or other appropriate agencies, by the preparation of special traffic management and controls plans on a temporary basis, as are currently prepared for special events as deemed necessary by LADOT. Such plans would reduce and minimize traffic impacts. Given the traffic management controls in such plans, the temporary and infrequent nature of such events, and the general acceptance of the public of some level of traffic congestion and vehicle delays in arriving at and departing these successful special events, there generally should be no significant traffic impacts.

Yet, on occasion, the size of the event and other factors may cause this traffic impact to be significant. However, given, among other things, the temporary nature of the impact, there are no feasible mitigation measures other than the traffic control plans described above, so there may remain occasional significant and unavoidable impacts.

9.6 Phasing of Mitigations – Project with County Office Building Option

The Project will likely be built in three phases, by block/major parcel.

However, in order to be effective, the ATCS signal system improvements will need to be implemented as a system at one time. This means that the system should be installed prior to the occupancy of Phase I of the Project, although the system will provide mitigation for all three phases of the Project.

The trip reduction program mitigation measure is specifically targeted to the office building so it would be implemented with the development of Parcel W-1/W-2.

The other measures, such as enhanced pedestrian facilities and connections, enhanced transit amenities, all along Project frontages, directional signage, and participation in the Share-Car Program, as described in Section 9.1, should all be implemented as appropriate for each block/parcel of the Project as it is developed.

10. Project Mitigation – Project with Additional Residential Development Option

This Chapter of the report explores and identifies mitigation strategies to reduce significant traffic and parking impacts identified in the earlier impact analyses for the Project with Additional Residential Development Option, and describes a proposed transportation mitigation program. These mitigations were developed in conjunction with, and approved by, LADOT.

10.1 Traffic Impact Mitigations – Project with Additional Residential Development Option

The analysis in Chapter 6 (see Table 6-1 and Figure 6-1) identified significant impacts at six intersections in the A.M. peak hour, and at seventeen intersections in the P.M. peak hour. Of the seven significant impacts in the A.M. peak hour, three would be at intersections that would continue to operate at LOS D or better (an acceptable level of service), while three would be at intersections that would operate at LOS E. Of the seventeen significant impacts in the P.M. peak hour, eleven would be at intersections that would continue to operate at LOS D or better, four would be at intersections that would operate at LOS E, and two would be at intersections that would operate at LOS F.

The mitigation analysis considered the same background issues and mitigation strategies for this Project Option as described in Section 9.1 of this report for the Project with County Office Building Option. The results are described below.

Operational Improvements

An analysis of all intersections with significant traffic impacts showed that implementation of ATCS (Adaptive Traffic Control System) would mitigate significant traffic impacts at all six intersections impacted in the A.M. peak hour and at ten intersections in the P.M. peak hour, as follows:

A.M. Peak Hour

- Hope St / Temple St. / US-101 Ramps
- Hope Street / 1st Street

- Grand Avenue / 1st Street
- Hill Street / Temple Street
- Hill Street / 3rd Street
- Broadway / 1st Street

P.M. Peak Hour

- Figueroa Street / 3rd Street
- Hope St / Temple St. / US-101 Ramps
- Grand Avenue / Temple Street
- Grand Avenue / 1st Street
- Grand Avenue / Upper 2nd Street
- Olive Street / 5th Street
- Hill Street / 1st Street
- Hill Street / 3rd Street
- Hill Street / 4th Street
- Broadway / Temple Street

The implementation of ATCS would also partially mitigate traffic impacts at the other intersection locations with significant impacts, but would not eliminate them. No significant impacts would remain in the A.M. peak hour, and seven significant impacts would remain in the P.M. peak hour.

Implementation of ATCS could also include, as an integral component as appropriate, LADOT's Transit Priority System (TPS), as described in Section 9.1. In order to be effective, ATCS cannot be applied just to individual intersections, but has to be applied to a number of traffic signals over a geographic area or subset of the signal system. LADOT has determined that implementation of the ATCS mitigation improvement in the area surrounding the Project would comprise: upgrades to the existing Model 2070 traffic signal controllers at 37 intersections; installation of 31 ATSAC/ATCS system vehicle detectors at 6 intersections; and installation of CCTV cameras - to provide video information to the ATSAC Center - at four locations.

Vehicle Trip Reduction Programs

Section 9.1 identified that vehicle trip reduction programs are most effective for office buildings – where transit is often an attractive alternative to drive-alone commuters and high day-long parking charges. However they are less effective for retail and restaurant trips – where many car trips already have multiple occupants and parking convenience is often more important to visitors than parking cost, and where vehicular trip restraint policies may impact the competitiveness and economic viability of the land uses. For these reasons vehicle trip reduction programs are rarely applied to commercial land uses other than office uses. Similarly, vehicle trip reduction programs cannot be realistically applied to residential uses. A vehicle trip reduction program was then identified for the County Office Building as a partial mitigation measure.

As the office building is not a part of the Project with Additional Residential Development Option, and as trip reduction programs are not considered effective for the remaining uses, no trip reduction program is proposed for the Project with Additional Residential Development Option.

Specific Intersection Improvements

Similarly to the discussion in Section 9.1, the feasibility of specific intersection improvements was investigated for the remaining intersection locations where the Project with Additional Residential Development Option would cause significant traffic impacts, particularly where the resultant level of service would be LOS E or LOS F. This evaluation, which was conducted in conjunction with LADOT staff, looked at the feasibility of re-striping traffic lanes and/or adding traffic lanes to modify intersection lane configurations, roadway widenings, and potential changes to signal timing and phasing. No feasible mitigation improvements were identified as a result of this evaluation. In conjunction with LADOT it was determined that roadway widenings were not feasible (due to lack of available right-of-way because of existing buildings or lack of control over adjacent right-of-way); lane re-stripings were not feasible as they would result in inadequate lane widths; and signal timing/phasing changes were not feasible as they would worsen rather than improve intersection operations or potentially cause other problems and/or impacts elsewhere.

Other Proposed Measures

Other proposed measures that could reduce vehicle trips by facilitating and encouraging walking and the use of transit, and thereby partially mitigate significant traffic impacts, include the following:

- Providing enhanced walking connections along the Project street frontages to transit service (to bus stops and to the Red Line station portals at 1st Street and Hill Street, and at Hill Street mid-block between 1st Street and Temple Street). This could include the provision of pedestrian amenities along Project street frontages to facilitate walking in the Project area, including landscaped sidewalks, wider crosswalks where feasible at key intersections, improved lighting for pedestrian safety at nighttime, and pedestrian wayfinding signage.

- Provision of enhanced bus stops on Project street frontages, including bus shelters with passenger amenities such as benches, shaded areas, and transit information, that could be integrated into the overall urban design/landscaping of the Project.

- Provision of transit information kiosks at various strategic locations on the Project site.

- Participation by the Project in the Share-Car program, for example, Flexcar. Share-Car organizations make cars available to registered members to use only when they need to. By providing shared cars to multiple users it is an effective way of reducing overall car ownership. It is anticipated that up to three on-street parking spaces could be provided at key locations adjacent to the Project frontage for up to three Share-Cars. The Share-Cars could be available to both Project and non-Project users as long as they were members of the Share-Car program. The Project would support a Share-Car organization's application to the City, and would promote the Share-Car concept and encourage its usage with Project residents and tenants.

- Provision of vehicular directional signage on surface streets approaching and within the Project area to direct vehicles to specific destinations and parking locations, as appropriate, and thereby minimizing vehicles circulating in the Project area.

The appropriate implementation of a mix of these measures would be coordinated and reviewed with the Los Angeles Department of Transportation and developed as feasible.

These measures would certainly be beneficial to traffic flow, transit service, pedestrian circulation, and overall mobility in the area. While they might potentially mitigate significant impacts at at least three locations in the P.M. peak hour (at Hope Street / Temple Street / US-101 Ramps, at Grand Avenue / Temple Street, and at Olive Street / 5th Street, because the increases in v/c ratios at these locations are close to the threshold of significance), it is difficult to confirm such mitigation quantitatively. For the purposes of providing a conservative analysis it is assumed that while beneficial, and partially mitigating certain significant impacts, they may not reduce remaining impacts to a less than significant level.

Remaining Significant and Unavoidable Traffic Impacts - Project with Additional Residential Development Option

The implementing of an ATCS program would mitigate all 6 significant impacts in the A.M. peak hour and 10 of 17 significant impacts in the P.M. peak hour to a less than significant level. The mitigation measure would reduce the magnitude of the remaining significant impacts, but would not to the level of insignificance.

There would still be 7 significant unavoidable impacts in the P.M. peak hour, at the following locations (with the resultant level of service shown in parentheses), and as shown in Table 10-1:

P.M. Peak Hour

▪ Olive Street / 1st Street	(LOS C)
▪ Olive Street / 4th Street	(LOS C)
▪ Hill Street / 2nd Street	(LOS C)
▪ Hope Street / 1st Street	(LOS D)
▪ Hope Street / GTK Way / 2nd Place	(LOS D)
▪ Broadway / 1st Street	(LOS D)
▪ Grand Avenue / US-101 / I-110 Ramps	(LOS F)

As can be seen from the above list however, all of these intersections would continue to operate at LOS D or better, except for one which would operate at LOS F in the P.M. peak hour (Grand Avenue / US-101 / I-110 Ramps).

10.2 CMP and Freeway Impact Mitigations - Project with Additional Residential Development Option

This Project Option would not cause any significant CMP of other freeway impacts, so no mitigation measures would be necessary.

10.3 Parking Impact Mitigations - Project with Additional Residential Development Option

The conclusions of the parking impacts and mitigation needs for this Project Option are the same as described in Section 9.3 for the Project with County Office Building Option.

10.4 Construction Impact Mitigations - Project with Additional Residential Development Option

The construction impact mitigations for this Project Option are the same as described in Section 9.4 for the Project with County Office Building Option.

Table 10-1 Intersection Level Of Service - Future With Project Conditions - Project with Additional Residential Development Option With Mitigation

5/1/2006

A. A.M Peak Hour

		Future Without Project Condtions		Future With Project Conditions				Future With Project with Mitigation Conditions				
		V/C	LOS	V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact	Mitigates Impact
1	Figueroa St. / 3rd St.	0.827	D	0.838	D	0.011	No	0.815	D	-0.012	No	
2	Figueroa St. / 5th St.	0.487	A	0.493	A	0.006	No	0.479	A	-0.008	No	
3	Figueroa St. / 6th St.	0.626	B	0.629	B	0.003	No	0.612	B	-0.014	No	
4	I-110 Off Ramp / Temple St.	0.398	A	0.400	A	0.002	No	0.389	A	-0.009	No	
5	Hope St. / Temple St. / US-101 Ramps	0.902	E	0.921	E	0.019	Yes	0.896	D	-0.006	No	Full
6	Hope St. / 1st St.	0.925	E	0.935	E	0.010	Yes	0.910	E	-0.015	No	Full
7	Hope St. / GTK Way / 2nd Place	0.420	A	0.452	A	0.032	No	0.440	A	0.020	No	
8	Flower St. / 3rd St.	0.671	B	0.678	B	0.007	No	0.660	B	-0.011	No	
9	Flower St. / 5th St.	0.439	A	0.449	A	0.010	No	0.437	A	-0.002	No	
10	Flower St. / 6th St.	0.528	A	0.535	A	0.007	No	0.520	A	-0.008	No	
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.693	B	0.722	C	0.029	No	0.702	C	0.009	No	
12	Grand Ave. / Temple St.	0.930	E	0.925	E	-0.005	No	0.899	D	-0.031	No	
13	Grand Ave. / 1st St.	0.791	C	0.817	D	0.026	Yes	0.795	C	0.004	No	Full
14	Grand Ave. / Upper 2nd St.	0.537	A	0.680	B	0.143	No	0.662	B	0.125	No	
15	Grand Ave. / 5th St.	0.487	A	0.503	A	0.016	No	0.490	A	0.003	No	
16	Olive St. / 1st St.	0.531	A	0.600	A	0.069	No	0.583	A	0.052	No	
17	Olive St. / 2nd St.	0.283	A	0.386	A	0.103	No	0.376	A	0.093	No	
18	Olive St. / 4th St.	0.437	A	0.491	A	0.054	No	0.478	A	0.041	No	
19	Olive St. / 5th St.	0.623	B	0.661	B	0.038	No	0.643	B	0.020	No	
20	Olive St. / 6th St.	0.402	A	0.412	A	0.010	No	0.400	A	-0.002	No	
21	Hill St. / Temple St.	0.762	C	0.811	D	0.049	Yes	0.788	C	0.026	No	Full
22	Hill St. / 1st St.	0.744	C	0.760	C	0.016	No	0.740	C	-0.004	No	
23	Hill St. / 2nd St.	0.765	C	0.792	C	0.027	No	0.770	C	0.005	No	
24	Hill St. / 3rd St.	0.968	E	0.986	E	0.018	Yes	0.959	E	-0.009	No	Full
25	Hill St. / 4th St.	0.518	A	0.543	A	0.025	No	0.528	A	0.010	No	
26	Hill St. / 6th St.	0.457	A	0.467	A	0.010	No	0.454	A	-0.003	No	
27	Broadway / Temple St.	0.858	D	0.867	D	0.009	No	0.843	D	-0.015	No	
28	Broadway / 1st St.	0.824	D	0.863	D	0.039	Yes	0.839	D	0.015	No	Full
29	Broadway / 2nd St.	0.613	B	0.617	B	0.004	No	0.600	A	-0.013	No	
30	Broadway / 4th St.	0.474	A	0.490	A	0.016	No	0.477	A	0.003	No	
31	Spring St. / 1st St.	0.592	A	0.610	B	0.018	No	0.593	A	0.001	No	
32	Spring St. / 2nd St.	0.609	B	0.612	B	0.003	No	0.596	A	-0.013	No	

Table 10-1 Intersection Level Of Service - Future With Project Conditions - Project with Additional Residential Development Option With Mitigation

5/1/2006

B. P.M Peak Hour

		Future Without Project Condtions		Future With Project Conditions				Future With Project with Mitigation Conditions				
		V/C	LOS	V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact	Mitigates Impact
1	Figueroa St. / 3rd St.	0.965	E	0.980	E	0.015	Yes	0.954	E	-0.011	No	Full
2	Figueroa St. / 5th St.	0.781	C	0.790	C	0.009	No	0.769	C	-0.012	No	
3	Figueroa St. / 6th St.	0.650	B	0.658	B	0.008	No	0.640	B	-0.010	No	
4	I-110 Off Ramp / Temple St.	0.409	A	0.412	A	0.003	No	0.401	A	-0.008	No	
5	Hope St. / Temple St. / US-101 Ramps	0.971	E	0.999	E	0.028	Yes	0.972	E	0.001	No	Full
6	Hope St. / 1st St.	0.733	C	0.832	D	0.099	Yes	0.809	D	0.076	Yes	Partial
7	Hope St. / GTK Way / 2nd Place	0.776	C	0.845	D	0.069	Yes	0.821	D	0.045	Yes	Partial
8	Flower St. / 3rd St.	0.546	A	0.564	A	0.018	No	0.548	A	0.002	No	
9	Flower St. / 5th St.	0.517	A	0.529	A	0.012	No	0.514	A	-0.003	No	
10	Flower St. / 6th St.	0.498	A	0.513	A	0.015	No	0.499	A	0.001	No	
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.994	E	1.068	F	0.074	Yes	1.039	F	0.045	Yes	Partial
12	Grand Ave. / Temple St.	0.844	D	0.877	D	0.033	Yes	0.853	D	0.009	No	Full
13	Grand Ave. / 1st St.	0.850	D	0.890	D	0.040	Yes	0.866	D	0.016	No	Full
14	Grand Ave. / Upper 2nd St.	0.504	A	0.714	C	0.210	Yes	0.695	B	0.191	No	Full
15	Grand Ave. / 5th St.	0.565	A	0.588	A	0.023	No	0.572	A	0.007	No	
16	Olive St. / 1st St.	0.627	B	0.753	C	0.126	Yes	0.733	C	0.106	Yes	Partial
17	Olive St. / 2nd St.	0.406	A	0.599	A	0.193	No	0.582	A	0.176	No	
18	Olive St. / 4th St.	0.653	B	0.743	C	0.090	Yes	0.723	C	0.070	Yes	Partial
19	Olive St. / 5th St.	0.812	D	0.851	D	0.039	Yes	0.828	D	0.016	No	Full
20	Olive St. / 6th St.	0.486	A	0.513	A	0.027	No	0.499	A	0.013	No	
21	Hill St. / Temple St.	0.933	E	0.938	E	0.005	No	0.913	E	-0.020	No	
22	Hill St. / 1st St.	0.911	E	0.941	E	0.030	Yes	0.915	E	0.004	No	Full
23	Hill St. / 2nd St.	0.679	B	0.803	D	0.124	Yes	0.781	C	0.102	Yes	Partial
24	Hill St. / 3rd St.	1.018	F	1.050	F	0.032	Yes	1.021	F	0.003	No	Full
25	Hill St. / 4th St.	0.760	C	0.802	D	0.042	Yes	0.781	C	0.021	No	Full
26	Hill St. / 6th St.	0.586	A	0.603	B	0.017	No	0.587	A	0.001	No	
27	Broadway / Temple St.	0.834	D	0.866	D	0.032	Yes	0.843	D	0.009	No	Full
28	Broadway / 1st St.	0.841	D	0.918	E	0.077	Yes	0.893	D	0.052	Yes	Partial
29	Broadway / 2nd St.	0.748	C	0.767	C	0.019	No	0.746	C	-0.002	No	
30	Broadway / 4th St.	0.646	B	0.667	B	0.021	No	0.648	B	0.002	No	
31	Spring St. / 1st St.	0.582	A	0.611	B	0.029	No	0.595	A	0.013	No	
32	Spring St. / 2nd St.	0.509	A	0.518	A	0.009	No	0.504	A	-0.005	No	

10.5 Civic Park Mitigations – Project with Additional Residential Development Option

The Civic Park mitigations for this Project Option are the same as described in Section 9.5 for the Project with County Office Building Option.

10.6 Phasing of Mitigations – Project with Additional Residential Development Option

The Project will likely be built in three phases, by block/major parcel.

However, in order to be effective, the ATCS signal system improvements will need to be implemented as a system at one time. This means that the system should be installed prior to the occupancy of Phase I of the Project, although the system will provide mitigation for all three phases of the Project.

The other measures, such as enhanced pedestrian facilities and connections, enhanced transit amenities, along Project frontages, directional signage, and participation in the Share-Car Program, as described in Section 9.1, should be all be implemented as appropriate for each block/parcel of the Project as it is developed.

11. Project Alternatives

This Chapter addresses five alternatives to the Proposed Project, to evaluate the potential of the alternatives to avoid or reduce the significant adverse impacts of the Proposed Project. The mix and quantities of land uses for the five alternatives are summarized in Table 11-1. In this evaluation, the key characteristics for each Project Alternative are summarized in comparison to both the Project with County Office Building Option and the Project with Additional Residential Development Option. A discussion then compares the key characteristics of the Project Alternative to the Project with County Office Building Option – which is the Project Option with the greatest impacts.

11.1 Alternative 1: No Project "A"

The No Project "A" Alternative assumes that the Project would not be developed and that the existing land uses within the Project Site would remain unchanged. The streetscape improvements on Grand Avenue would not occur and the improvement and expansion of the existing Civic Mall would not occur. Parcels Q, W-1/W-2, L and M-2 would remain as parking facilities. This alternative would produce no change to the existing physical condition and use of the site.

There would be no increase in trips generated from the site, and so traffic conditions would remain exactly as they exist today. There would be no change in parking conditions which would remain exactly as they are today.

11.2 Alternative 2: No Project "B"

The No Project "B" Alternative assumes that the Project site would be developed according to the existing zoning and Community Plan designations, including previous development approvals under an existing 1991 Owner Participation Agreement (OPA) for Parcels K, Q, and W-2.

Under this Alternative, the development program would comprise 843 residential units, 64,641 square feet of retail use, and 1,565,792 square feet of office uses. The office uses would be private office buildings in this alternative. The Grand Avenue Streetscape Conceptual Plan would be implemented only in front of Parcel Q, and the Civic Park Conceptual Plan would not be implemented.

Table 11-1 COMPARISON OF ALTERNATIVES

	The Grand Avenue Project		Alternatives				
Project Characteristics	Proposed Project	Additional Residential Option	1. No Project "A"	2. No Project "B"	3. Reduced Project	4. Alternative Design	5. Alternative Land Use
Residential Units	2,060 units	2, 660 units	0	843	1,545 units	2,060 units	3,372 units
Affordable Units	412 units	532 units	0	169	309 units	412 units	674 units
Residential Floor Area	2,155,000 sq. ft	2,740,600 sq. ft	0	822,768	1,616,250 sq. ft.	2,155,000 sq. ft	3,565,000 sq. ft.
Retail Floor Area	449,000 sq. ft.	449,000 sq. ft.	0	64,641	336,750 sq. ft.	449,000 sq. ft.	35,000 sq. ft.
Hotel Rooms	275 rooms	275 rooms	0	0	206 hotel rooms	275 rooms	0
Hotel Floor Area	315,000 sq. ft.	315,000 sq. ft.	0	0	236,250 sq. ft.	315,000 sq. ft.	0
Office Floor Area	681,000 sq. ft.	0	0	1,565,792	510,750 sq. ft.	681,000 sq. ft.	0
Total Commercial	1,445,000 sq. ft.	764,000 sq. ft.	0	1,630,433	1,083,750 sq. ft.	1,445,000 sq. ft.	35,000 sq. ft.
Total Floor Area	3,600,000 sq. ft.	3,504,600 sq. ft.	0	2,453,201	2,700,000 sq. ft.	3,600,000 sq. ft.	3,600,000
Residential/Office High-Rise Stories	20 – 40 stories	20 – 40 stories	0	20 – 40 stories	15 – 30 stories	20 – 40 stories (Residential towers in L/M-2 would be reversed)	20 – 40 stories
Hotel High-Rise Stories	40 – 50 stories	40 – 50 stories	0	0	30 – 38 stories	40 – 50 stories	0
Civic Mall Renovation and Expansion							
Area Description/Funding	16 acres Conceptual Plan/Project generated funding of $50 million	16 acres Conceptual Plan/Project generated funding of $50 million	0 acres No renovation or expansion	0 acres No renovation or expansion	Up to 16 acres Improvements would range from renovation of existing Civic Mall to lesser level of improvements across all or a portion of the 16-acre site/Project generated funding of $x million (to be defined by Martha)	16 acres Conceptual Plan with retention of contributing features/Project generated funding of $50 million	16 acres Conceptual Plan/Project generated funding of $50 million
Grand Avenue Streetscape	Conceptual Plan would be implemented.	Conceptual Plan would be implemented.	Conceptual Plan would not be implemented.	Conceptual Plan would be implemented only in front of Parcel Q.	Scope of improvements reduced commensurate with available funding.	Conceptual Plan would be implemented.	Conceptual Plan would be implemented.

Source: PCR Services Corporation

Table 11-2 summarizes the key characteristics of this Alternative, including project characteristics, trip generation, parking requirements, and peak parking demands, and compares them to both Project options.

Trip Generation and Traffic/CMP Impacts

As shown in Table 11-2, this Alternative would generate fewer total trips in both the A.M. (about 15% less) and P.M. peak hours (about 35% less) than the Proposed Project, although the inbound direction A.M. peak hour trip totals and the outbound P.M. peak hour trip totals would be similar to the Project. (The reduction in trips would occur mostly for the outbound A.M. peak hour and the inbound P.M. hour). Table 11-3 shows trip generation by parcel and by land uses (with detailed trip generation calculations shown in Appendix C).

This Alternative would therefore probably generate fewer significant traffic impacts in both peak hours, but because the number of trips in the peak directions would be very similar to the Project, the reduction in the number of impacts could be relatively small.

It is likely that this Alternative would not create CMP and freeway impacts, because the number of P.M. peak hour trips would be less than the Project, and the Project's CMP/freeway impacts discussed in Chapter 5 were only marginally above the threshold of significance. As determined for the Project, this Alternative would not cause any CMP transit impacts.

There would be no potential temporary traffic impacts from the Civic Park as the Conceptual Plan would not be implemented.

Construction impacts for this Alternative could be similar to the Project, because all four parcels would be developed, although the Civic Park Conceptual Plan would not be implemented. Potentially significant impacts could be expected - as discussed for the Project.

Parking Impacts

As shown in Table 11-2, the amount of parking required for this Alternative would be less than for the Project in total (about 25% less for Los Angeles Municipal Code (LAMC) requirements). Parking requirements would however be much lower for the residential uses (about 60% less), but higher for the commercial uses (by about 27%). This Alternative would seek a variance/deviation from the Deputy Advisory Agency Policy for condominium parking supply, as described for the Proposed Project in Chapter 7. Table 11-4 shows parking requirements and comparisons in more detail, with supporting calculations included in Appendix C.

Table 11-2 Alternative 2: No Project "B" Comparison with the Proposed Project

Component	Proposed Project with County Office Building Option	Proposed Project with Additional Residential Option	Alternative 2 No Project "B"
Project Characteristics			
Residential Units	2,060	2,660	843
Hotel Rooms	275	275	0
Retail Floor Area	449,000 sq. ft.	449,000 sq.ft.	64,641 sq.ft.
Office Floor Area	681,000 sq.ft	0	1,565,792 sq.ft.
Total Commercial	1,445,000 sq.ft	764,000 sq.ft.	1,630,433 sq.ft.
Trip Generation			
AM Peak Hour			
In	919	359	992
Out	632	660	334
Total	1,551	1,019	1,326
PM Peak Hour			
In	1,120	1,121	460
Out	1,344	882	1,123
Total	2,464	2,003	1,583
Parking Requirements			
Deputy Advisory Agency (Resid) & Municipal Code (Comm)			
Residential (DAA)	4,128	5,328	1,685
Commercial (LAMC)	1,285	604	1,631
Total	5,413	5,932	3,316
LAMC			
Residential	2,092	2,699	853
Commercial	1,285	604	1,631
Total	3,377	3,303	2,484
Peak Commercial Parking Demand			
Weekday - Day	2,826	1,162	3,122
Weekday – Eve	3,081	1,417	818
Weekend - Day	3,045	1,381	653
Weekend - Eve	3,138	1,474	241

Table 11-3 Summary of Project Trip Generation

Alternative 2 - No Project "B"

5/2/2006

A. By Parcel

Project Component	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Parcel Q								
Condominiums	0	D.U	0	0	0	0	0	0
Apartments	0	D.U	0	0	0	0	0	0
Subtotal Residential			0	0	0	0	0	0
Hotel	0	Rooms	0	0	0	0	0	0
Office	1,417,755	S.F	784	107	891	161	790	951
Supermarket	20,000	S.F	9	6	15	52	50	102
Retail	21,250	S.F	13	8	21	35	38	73
Restaurant	5,000	S.F	2	1	3	14	7	21
Event Facility	0	Seats	0	0	0	0	0	0
Health Club	0	S.F	0	0	0	0	0	0
Subtotal Commercial			808	122	930	262	885	1,147
Subtotal			808	122	930	262	885	1,147
Parcel W-1 / W-2								
Condominiums	147	D.U	11	46	57	32	20	52
Apartments	37	D.U	2	5	7	5	3	8
Subtotal Residential			13	51	64	37	23	60
Office	148,037	S.F	128	18	146	23	117	140
Retail	12,445	S.F	9	6	15	24	27	51
Restaurant	0	S.F	0	0	0	0	0	0
Subtotal Commercial			137	24	161	47	144	191
Subtotal			150	75	225	84	167	251
Parcel L / M-2								
Condominiums	527	D.U	28	119	147	97	60	157
Apartments	132	D.U	6	18	24	17	11	28
Subtotal Residential			34	137	171	114	71	185
Retail	0	S.F	0	0	0	0	0	0
Restaurant	0	S.F	0	0	0	0	0	0
Subtotal Commercial			0	0	0	0	0	0
Subtotal			34	137	171	114	71	185
Total All Parcels			992	334	1,326	460	1,123	1,583

Table 11-3

Summary of Project Trip Generation
Alternative 2 - No Project "B"

5/2/2006

B. By Land Use

Land Use Type	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Condominiums	674	D.U	39	165	204	129	80	209
Apartments	169	D.U	8	23	31	22	14	36
Subtotal Residential	843	D.U	47	188	235	151	94	245
Hotel	0	Rooms	0	0	0	0	0	0
Office	1,565,792	S.F	912	125	1,037	184	907	1,091
Supermarket	20,000	S.F	9	6	15	52	50	102
Retail	33,695	S.F	22	14	36	59	65	124
Restaurant	5,000	S.F	2	1	3	14	7	21
Event Facility	0	Seats	0	0	0	0	0	0
Health Club	0	S.F	0	0	0	0	0	0
Subtotal Commercial			945	146	1,091	309	1,029	1,338
Total			992	334	1,326	460	1,123	1,583

Table 11-4 Summary of Parking Requirements
Alternative 2: No Project "B"

5/23/2006

As Per City Code Parking Requirement and CDP Advisory Agency AA-2000-1

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"
Residential	1,007	1,007	0	1,421	2,621	367	1,700	1,700	1,318	4,128	5,328	1,685
Commercial	429	429	1,468	755	74	163	101	101	0	1,285	604	1,631
Total	1,436	1,436	1,468	2,176	2,695	530	1,801	1,801	1,318	5,413	5,932	3,316

Source: Table 7-3, Table 8-2, and Table C-4 City Code Parking Requirement and CDP Advisory Agency AA-2000-1, Appendix C.

As Per City Code Parking Requirement

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"
Residential	513	513	0	719	1,326	186	860	860	667	2,092	2,699	853
Commercial	429	429	1,468	755	74	163	101	101	0	1,285	604	1,631
Total	942	942	1,468	1,474	1,400	349	961	961	667	3,377	3,303	2,484

Source: Table 7-3, Table 8-2, and Table C-5 City Code Parking Requirement, Appendix C.

Table 11-5 Comparison of Peak Commercial Parking Demands
Alternative 2: No Project "B"

5/1/2006

Period	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"	Project Office Option	Project Residential Option	Alt.2 No Project "B"
Weekday - Day	753	753	2,813	1,835	171	309	238	238	0	2,826	1,162	3,122
- Eve	982	982	730	1,845	181	88	254	254	0	3,081	1,417	818
Weekend - Day	900	900	574	1,866	202	79	279	279	0	3,045	1,381	653
- Eve	1,013	1,013	208	1,855	191	33	270	270	0	3,138	1,474	241

Peak parking demands are summarized in Table 11-5, along with comparisons to the Project. Peak parking demand for this Alternative would be slightly higher than for the Project in the weekday daytime (by about 10%), but much lower at other times (this is because the parking demand for the private office building in this Alternative would be significantly reduced during off-peak times and could be shared, whereas the parking for the County Office Building in the Project could not be shared and would be 24-hour dedicated parking).

However, approximately 3,015 spaces of the peak weekday daytime demand of 3,122 spaces would be for the private office buildings. If only the code required parking were provided on-site for the office uses (1,565 spaces), then up to about 1,450 spaces would need to be provided in off-site locations. This could cause a significant parking impact for this Alternative.

Changes to the existing parking supply in the area would be similar to the Project as all four parcels would be developed, although there would be no changes to the parking supply in the Civic Mall as the Conceptual Plan would not be implemented. As previously identified in Chapter 7 for the Project, there would be no significant impacts from changes to the existing parking supply with this Alternative.

11.3 Alternative 3: Reduced Project

The Reduced Project Alternative represents a 25% reduction in proposed development on parcels Q, W-1/W-2 and L/M-2 compared to the Proposed Project. The mix of office, commercial and residential uses would remain the same as under the Proposed Project, but the floor area associated with each use would be reduced by 25%.

The scope of the Grand Avenue Streetscape Conceptual Plan would be reduced commensurate with available funding. Implementation of the Civic Park Conceptual Plan would range from renovation of the existing Civic Mall to a lesser level of improvements across all or a portion of the 16-acre site.

Table 11-6 summarizes the key characteristics of this Alternative, including project characteristics, trip generation, parking requirements, and peak parking demands, and compares them to both Project options.

Trip Generation and Traffic/CMP Impacts

All trip totals would be reduced proportionally under this Alternative. As shown in Table 11-6, this Alternative would generate 25% fewer total trips in both the A.M. and P.M. peak hours than the Proposed Project. Table 11-7 shows trip generation by parcel and by land uses (with detailed trip generation calculations shown in Appendix C).

This Alternative would therefore probably generate fewer significant traffic impacts than the Project in both peak hours.

It is likely that this Alternative would not create CMP and freeway impacts, because the number of P.M. peak hour trips would be less than the Project, and the Project's CMP/freeway impacts discussed in Chapter 5 were only marginally above the threshold of significance. As determined for the Project, this Alternative would not cause any CMP transit impacts.

As discussed for the Project, there could be potential temporary traffic impacts from the Civic Park – although they could be smaller impacts because the Conceptual Plan would be implemented to a lesser degree.

Construction impacts for this Alternative could be similar to the Project, because all four parcels would still be developed. Potentially significant impacts could be expected - as discussed for the Project.

Parking Impacts

As shown in Table 11-6, the amount of parking required for this Alternative would be 25% less than for the Project in total and by type of use. This Alternative would seek a variance/deviation from the Deputy Advisory Agency Policy for condominium parking supply, as described for the Project in Chapter 7. Table 11-8 shows parking requirements and comparisons in more detail, with supporting calculations included in Appendix C.

Peak parking demands are summarized in Table 11-9. Peak parking demand for this Alternative would be 25% less for all key time periods. As for the Project, there would be no significant off-street parking impacts due to this Alternative.

Changes to the existing parking supply in the area would be similar to the Project as all four parcels would be developed, and the Civic Mall Conceptual Plan would be implemented. As previously identified in Chapter 7 for the Project, there would be no significant impacts from changes to the existing parking supply with this Alternative.

11.4 Alternative 4: Alternative Design

The Alternative Design Alternative would reverse the location of the two proposed residential towers for Parcel L/M-2. All other aspects of the development program would remain the same so the mix and quantities of land uses on the development parcels would be the same as for the Proposed Project.

Table 11-6 Alternative 3: Reduced Project Comparison with the Proposed Project

Component	Proposed Project with County Office Building Option	Proposed Project with Additional Residential Option	Alternative 3 Reduced Project
Project Characteristics			
Residential Units	2,060	2,660	1,545
Hotel Rooms	275	275	206
Retail Floor Area	449,000 sq. ft.	449,000 sq.ft.	336,750 sq.ft.
Office Floor Area	681,000 sq.ft	0	510,750 sq.ft.
Total Commercial	1,445,000 sq.ft	764,000 sq.ft.	1,083,750 sq.ft.
Trip Generation			
AM Peak Hour			
In	919	359	694
Out	632	660	487
Total	1,551	1,019	1,181
PM Peak Hour			
In	1,120	1,121	875
Out	1,344	882	1,049
Total	2,464	2,003	1,924
Parking Requirements			
Deputy Advisory Agency (Resid) & Municipal Code (Comm)			
Residential (DAA)	4,128	5,328	3,092
Commercial (LAMC)	1,285	604	968
Total	5,413	5,932	4,060
LAMC			
Residential	2,092	2,699	1,565
Commercial	1,285	604	968
Total	3,377	3,303	2,533
Peak Commercial Parking Demand			
Weekday - Day	2,826	1,162	2,120
Weekday – Eve	3,081	1,417	2,310
Weekend - Day	3,045	1,381	2,284
Weekend - Eve	3,138	1,474	2,353

Table 11-7 Summary of Project Trip Generation
Alternative 3 - Reduced Project

4/26/2006

A. **By Parcel**

Project Component	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Parcel Q								
Condominiums	300	D.U	17	71	88	55	34	89
Apartments	75	D.U	3	10	13	9	6	15
Subtotal Residential			20	81	101	64	40	104
Hotel	206	Rooms	41	27	68	44	39	83
Office	0	S.F	0	0	0	0	0	0
Supermarket	39,750	S.F	33	21	54	98	94	192
Retail	73,313	S.F	35	22	57	106	114	220
Restaurant	31,500	S.F	6	6	12	74	37	111
Event Facility	188	Seats	0	0	0	8	3	11
Health Club	37,500	S.F	7	9	16	27	25	52
Subtotal Commercial			81	58	139	313	273	586
Subtotal			142	166	308	421	352	773
Parcel W-1 / W-2								
Condominiums	426	D.U	22	94	116	75	46	121
Apartments	107	D.U	5	13	18	13	9	22
Subtotal Residential			27	107	134	88	55	143
Office	510,750	S.F	441	55	496	69	394	463
Retail	40,800	S.F	21	13	34	61	67	128
Restaurant	7,500	S.F	2	1	3	17	9	26
Subtotal Commercial			464	69	533	147	470	617
Subtotal			491	176	667	235	525	760
Parcel L / M-2								
Condominiums	510	D.U	25	109	134	89	54	143
Apartments	127	D.U	5	16	21	16	10	26
Subtotal Residential			30	125	155	105	64	169
Retail	54,825	S.F	29	18	47	87	95	182
Restaurant	11,250	S.F	2	2	4	27	13	40
Subtotal Commercial			31	20	51	114	108	222
Subtotal			61	145	206	219	172	391
Total All Parcels			694	487	1,181	875	1,049	1,924

Table 11-7 Summary of Project Trip Generation
Alternative 3 - Reduced Project

4/26/2006

B. By Land Use

Land Use Type	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Condominiums	1,236	D.U	64	274	338	219	134	353
Apartments	309	D.U	13	39	52	38	25	63
Subtotal Residential	1,545	D.U	77	313	390	257	159	416
Hotel	206	Rooms	41	27	68	44	39	83
Office	510,750	S.F	441	55	496	69	394	463
Supermarket	39,750	S.F	33	21	54	98	94	192
Retail	168,938	S.F	85	53	138	254	276	530
Restaurant	50,250	S.F	10	9	19	118	59	177
Event Facility	188	Seats	0	0	0	8	3	11
Health Club	37,500	S.F	7	9	16	27	25	52
Subtotal Commercial			576	147	723	574	851	1,425
Total			694	487	1,181	875	1,049	1,924

Table 11-8 Summary of Parking Requirements
Alternative 3: Reduced Project

5/23/2006

As Per City Code Parking Requirement and CDP Advisory Agency AA-2000-1

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project
Residential	1,007	1,007	750	1,421	2,621	1,067	1,700	1,700	1,275	4,128	5,328	3,092
Commercial	429	429	326	755	74	567	101	101	75	1,285	604	968
Total	1,436	1,436	1,076	2,176	2,695	1,634	1,801	1,801	1,350	5,413	5,932	4,060

Source: Table 7-3, Table 8-2, and Table C-9 City Code Parking Requirement and CDP Advisory Agency AA-2000-1, Appendix C.

As Per City Code Parking Requirement

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project
Residential	513	513	380	719	1,326	540	860	860	645	2,092	2,699	1,565
Commercial	429	429	326	755	74	567	101	101	75	1,285	604	968
Total	942	942	706	1,474	1,400	1,107	961	961	720	3,377	3,303	2,533

Source: Table 7-3, Table 8-2, and Table C-10 City Code Parking Requirement, Appendix C.

Table 11-9 Comparison of Peak Commercial Parking Demands
Alternative 3: Reduced Project

5/1/2006

A. Total Project

Period	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project	Project Office Option	Project Residential Option	Alt.3 Reduced Project
Weekday - Day	753	753	565	1,835	171	1,376	238	238	179	2,826	1,162	2,120
- Eve	982	982	736	1,845	181	1,383	254	254	191	3,081	1,417	2,310
Weekend - Day	900	900	675	1,866	202	1,400	279	279	209	3,045	1,381	2,284
- Eve	1,013	1,013	760	1,855	191	1,391	270	270	202	3,138	1,474	2,353

B. Parcel W-1/W-2 Office Parking Only

Period	Parcel W-1/W-2		
	Project Office Option	Project Residential Option	Alt.3 Reduced Project
Weekday - Day	1,664	0	1,248
- Eve	1,664	0	1,248
Weekend - Day	1,664	0	1,248
- Eve	1,664	0	1,248

C. Parcel W-1/W-2 Commercial Parking Only

Period	Parcel W-1/W-2		
	Project Office Option	Project Residential Option	Alt.3 Reduced Project
Weekday - Day	171	171	128
- Eve	181	181	135
Weekend - Day	202	202	152
- Eve	191	191	143

The scope of the Grand Avenue Streetscape Conceptual Plan would be the same as for the Proposed Project. This alternative would modify the Civic Park Conceptual Plan such that the character-defining features of the existing Civic Mall would be addressed in a manner that would preclude a significant impact to this historic resource.

There would therefore be no difference from the Project for this Alternative in terms of trip generation, traffic patterns, or parking requirements. All traffic and parking impacts for this Alternative would be exactly the same as described for the Project.

11.5 Alternative 5: Alternative Land Use

The Alternative Land Use Alternative would comprise residential uses and a small amount of local-serving retail uses on the development parcels. There would be a total of 3,372 residential units of which 674 units would be affordable, and a total of 35,000 square feet of retail uses.

The scope of both the Grand Avenue Streetscape Conceptual Plan and the Civic Park Conceptual Plan would be the same as for the Proposed Project.

Table 11-10 summarizes the key characteristics of this Alternative, including project characteristics, trip generation, parking requirements, and peak parking demands, and compares them to both Project options.

Trip Generation and Traffic/CMP Impacts

As shown in Table 11-10, this Alternative would generate significantly fewer trips than the Project – about 45% fewer trips in the A.M. peak hour and about 55% fewer trips in the P.M. peak hour than the Proposed Project. Table 11-11 shows trip generation by parcel and by land uses (with detailed trip generation calculations shown in Appendix C).

This Alternative would therefore probably generate fewer significant traffic impacts than the Project in both peak hours, particularly in the P.M peak hour.

It is likely that this Alternative would not create CMP and freeway impacts, because the number of P.M. peak hour trips would be significantly less than the Project, and the Project's CMP/freeway impacts discussed in Chapter 5 were only marginally above the threshold of significance. As determined for the Project, this Alternative would not cause any CMP transit impacts.

As discussed for the Project, there could be potential temporary traffic impacts from the Civic Park – to the same degree as described in Chapter 5 for the Project – because the Conceptual Plan would be implemented to the same degree.

Construction impacts for this Alternative could be similar to the Project, because all four parcels would still be developed. Potentially significant impacts could be expected - as discussed for the Project.

Parking Impacts

As shown in Table 11-10, the amount of parking required (LAMC) for this Alternative would be about 2 to 3% higher in total than for the Project. This Alternative would seek a variance/deviation from the Deputy Advisory Agency Policy for condominium parking supply, as described for the Project in Chapter 7. Table 11-12 shows parking requirements and comparisons in more detail, with supporting calculations included in Appendix C. This alternative would require substantially more residential parking than for the Project, but virtually no commercial parking.

Peak parking demands are summarized in Table 11-13. Peak commercial parking demands would be virtually negligible for this Alternative. As for the Project, there would be no significant off-street parking impacts due to this Alternative.

Changes to the existing parking supply in the area would be similar to the Project as all four parcels would be developed, and the Civic Mall Conceptual Plan would be implemented. As previously identified in Chapter 7 for the Project, there would be no significant impacts from changes to the existing parking supply with this Alternative.

Table 11-10 Alternative 5: Alternative Land Use Comparison with the Proposed Project

Component	Proposed Project with County Office Building Option	Proposed Project with Additional Residential Option	Alternative 3 Reduced Project
Project Characteristics			
Residential Units	2,060	2,660	3,372
Hotel Rooms	275	275	674
Retail Floor Area	449,000 sq. ft.	449,000 sq.ft.	35,000 sq.ft.
Office Floor Area	681,000 sq.ft	0	0 sq.ft.
Total Commercial	1,445,000 sq.ft	764,000 sq.ft.	35,000 sq.ft.
Trip Generation			
AM Peak Hour			
In	919	359	180
Out	632	660	669
Total	1,551	1,019	849
PM Peak Hour			
In	1,120	1,121	646
Out	1,344	882	425
Total	2,464	2,003	1,071
Parking Requirements			
Deputy Advisory Agency (Resid) & Municipal Code (Comm)			
Residential (DAA)	4,128	5,328	6,745
Commercial (LAMC)	1,285	604	36
Total	5,413	5,932	6,781
LAMC			
Residential	2,092	2,699	3,413
Commercial	1,285	604	36
Total	3,377	3,303	3,449
Peak Commercial Parking Demand			
Weekday - Day	2,826	1,162	77
Weekday – Eve	3,081	1,417	78
Weekend - Day	3,045	1,381	91
Weekend - Eve	3,138	1,474	80

Table 11-11 Summary of Project Trip Generation
Alternative 5 - Alternative Land Use

5/2/2006

A. By Parcel

Project Component	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Parcel Q								
Condominiums	731	D.U	37	157	194	132	81	213
Apartments	183	D.U	8	25	33	23	15	38
Subtotal Residential			45	182	227	155	96	251
Hotel	0	Rooms	0	0	0	0	0	0
Office	0	S.F	0	0	0	0	0	0
Supermarket	15,000	S.F	6	3	9	41	40	81
Retail	14,025	S.F	10	6	16	27	29	56
Restaurant	3,500	S.F	1	1	2	10	5	15
Event Facility	0	Seats	0	0	0	0	0	0
Health Club	0	S.F	0	0	0	0	0	0
Subtotal Commercial			17	10	27	78	74	152
Subtotal			62	192	254	233	170	403
Parcel W-1 / W-2								
Condominiums	1,201	D.U	58	246	304	212	130	342
Apartments	300	D.U	13	41	54	38	25	63
Subtotal Residential			71	287	358	250	155	405
Office	0	S.F	0	0	0	0	0	0
Retail	0	S.F	0	0	0	0	0	0
Restaurant	0	S.F	0	0	0	0	0	0
Subtotal Commercial			0	0	0	0	0	0
Subtotal			71	287	358	250	155	405
Parcel L / M-2								
Condominiums	766	D.U	39	164	203	138	84	222
Apartments	191	D.U	8	26	34	25	16	41
Subtotal Residential			47	190	237	163	100	263
Retail	0	S.F	0	0	0	0	0	0
Restaurant	0	S.F	0	0	0	0	0	0
Subtotal Commercial			0	0	0	0	0	0
Subtotal			47	190	237	163	100	263
Total All Parcels			180	669	849	646	425	1,071

Table 11-11

Summary of Project Trip Generation
Alternative 5 - Alternative Land Use

5/2/2006

B. By Land Use

Land Use Type	Quantity	Units	A.M Peak Hour			P.M Peak Hour		
			In	Out	Total	In	Out	Total
Condominiums	2,698	D.U	134	567	701	482	295	777
Apartments	674	D.U	29	92	121	86	56	142
Subtotal Residential	3,372	D.U	163	659	822	568	351	919
Hotel	0	Rooms	0	0	0	0	0	0
Office	0	S.F	0	0	0	0	0	0
Supermarket	15,000	S.F	6	3	9	41	40	81
Retail	14,025	S.F	10	6	16	27	29	56
Restaurant	3,500	S.F	1	1	2	10	5	15
Event Facility	0	Seats	0	0	0	0	0	0
Health Club	0	S.F	0	0	0	0	0	0
Subtotal Commercial			17	10	27	78	74	152
Total			180	669	849	646	425	1,071

Table 11-12 Summary of Parking Requirements
Alternative 5: Alternative Land Use

As Per City Code Parking Requirement and CDP Advisory Agency AA-2000-1

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use
Residential	1,007	1,007	1,828	1,421	2,621	3,002	1,700	1,700	1,915	4,128	5,328	6,745
Commercial	429	429	36	755	74	0	101	101	0	1,285	604	36
Total	1,436	1,436	1,864	2,176	2,695	3,002	1,801	1,801	1,915	5,413	5,932	6,781

Source: Table 7-3, Table 8-2, and Table C-14 City Code Parking Requirement and CDP Advisory Agency AA-2000-1, Appendix C.

As Per City Code Parking Requirement

Land Use	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use
Residential	513	513	925	719	1,326	1,519	860	860	969	2,092	2,699	3,413
Commercial	429	429	36	755	74	0	101	101	0	1,285	604	36
Total	942	942	961	1,474	1,400	1,519	961	961	969	3,377	3,303	3,449

Source: Table 7-3, Table 8-2, and Table C-15 City Code Parking Requirement, Appendix C.

Table 11-13 Comparison of Peak Commercial Parking Demands
Alternative 5: Alternative Land Use

5/1/2006

Period	Parcel Q			Parcel W-1/W-2			Parcel L / M-2			Total		
	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use	Project Office Option	Project Residential Option	Alt.5 Alternative Land Use
Weekday - Day	753	753	77	1,835	171	0	238	238	0	2,826	1,162	77
- Eve	982	982	78	1,845	181	0	254	254	0	3,081	1,417	78
Weekend - Day	900	900	91	1,866	202	0	279	279	0	3,045	1,381	91
- Eve	1,013	1,013	80	1,855	191	0	270	270	0	3,138	1,474	80

12. Persons and Organizations Contacted, References, and Report Preparers

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12.3 Report Preparers

The Mobility Group

The Mobility Group is a transportation consulting firm that provides a range of services in transportation planning and engineering, traffic and circulation, parking, transit and transportation management. The firm has been involved in the development of transportation strategies, plans and studies for a wide range of land development projects, including major mixed-use projects; preparation of numerous Circulation/Mobility Elements for General Plans; and transportation, traffic and parking plans for Specific Plans, Downtown Plans and transit-oriented developments. The firm has considerable experience in Downtown Los Angeles, having prepared transportation plans and traffic and parking studies for the Los Angeles Sports and Entertainment District (LASED), the Grand Avenue Pedestrian Improvements Project, and many recent residential/mixed use developments in the Downtown, Central City West, and South Park areas, including the Elleven, Luma and Evo Projects, residential projects in the LASED, the 9th & Figueroa Project, and the 8th & Grand Project.

FPL & Associates

FPL & Associates is a transportation and civil engineering firm, providing services in transportation engineering and operations, and civil design for public and private infrastructure projects and improvements. In addition to having conducted many traffic circulation and operations studies for private developments, they have also prepared many designs for roadway improvements, signal improvements, and on-site and off-site infrastructure improvements. They have considerable experience in Downtown Los Angeles, having been on the design team for the Grand Avenue Pedestrian Improvements Project and Re-Alignment, and are currently preparing design plans for all off-site transportation improvements for the Los Angels Sports and Entertainment District, as well as participating in the development of traffic management plans around STAPLES Center and the Los Angeles Sports and Entertainment District.

Michael Bates

Mr. Bates, with The Mobility Group, has over 30 years experience as a transportation consultant, with 23 of those years in the Los Angeles area. He has worked on many large scale mixed-use development projects in Southern California, including the development of transportation, traffic, and parking strategies and plans and study reports. He has experience in numerous major downtowns including Los Angeles, San Francisco and San Diego –where he prepared the San Diego Downtown Transportation Plan. In Downtown Los Angeles, over the last twenty years his experience includes the Central City West

Specific Plan and EIR, the Alameda District Plan and EIR, the Downtown Los Angeles Strategic Plan, the LACMTA and MWD Headquarters Office Buildings and Gateway Plaza at Union Station, the STAPLES Center EIR, the Los Angeles Entertainment District Specific Plan and EIR, and the Grand Avenue Pedestrian Improvements Project EIR. During the last three years, he has prepared traffic, circulation and parking studies for more than twelve major high-rise residential projects in the Downtown Area totaling over 4,000 residential units. Mr. Bates has an M.S. in Transportation Planning and Traffic Engineering, University of Birmingham, England, 1974, and a B.A. in Urban Planning, University of Reading, England, 1973.

Fong-Ping Lee

Mr. Lee, P.E., T.E., with FPL Associates, has over twenty five years experience in transportation planning and traffic and civil engineering, mostly in Southern California. His experience includes traffic operations and engineering analyses, traffic studies, traffic signal design and roadway design and signing/striping, for major transportation infrastructure projects and for improvements for land development projects. In the Downtown Los Angeles area, he has recently worked on the roadway design for the Grand Avenue Pedestrian Improvement Project; on traffic circulation and roadway improvements at Union Station; and on traffic studies and roadway improvements for the Los Angeles Sports and Entertainment District, the 9th and Figueroa Residential Mixed Use Project, and the First Street Bridge Widening Project. Mr. Lee has a Ph.D. in Transportation Engineering, University of Texas at Austin, 1983, an M.S. in Transportation Planning, National Taiwan University, 1976, and a B.S. in Civil Engineering, National Taiwan University, 1974.

Ali Mustafa

Mr. Mustafa, with The Mobility Group, has seven years experience in the preparation of technical analyses and reports for traffic, circulation, and parking studies for land development projects, for Downtown Specific Plans, and for General Plan Circulation Elements. Recently he has worked on over ten major residential/mixed use projects in Downtown Los Angeles including the South Park and Central City West areas, and on parking management and traffic management plans for the Los Angeles Sports and Entertainment District. Mr. Mustafa has an M.S. in Transportation Engineering, Illinois Institute of Technology, 2002, an M.Tech. in Transportation Engineering, Regional Engineering College, A.P. India, and a B.E. in Civil Engineering, Osmania University, A.P. India, 1998.

Alex Zupanski

Mr. Zupanski, P.E., has thirteen years experience in transportation, traffic and civil engineering, all in Southern California. This experience includes studies and designs for:

roadway improvements, signing and striping, intersection improvements, traffic signals, and traffic handling plans for construction projects. His experience in Downtown Los Angeles includes the First Street Bridge Widening Project, the Los Angeles Entertainment District, and the 9th & Figueroa Residential Mixed Use Project. He has an M.S. in Transportation Engineering, California State University Long Beach, 1997, and a B.S. in Civil Engineering, California State Polytechnic University Pomona, 1993.

Appendix A

Trip Generation Calculations

Table A-1 A.M Peak Hour Trip Generation - Project with County Office Building Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	0.36	1,2	145	5%	15%	5%		110	76%	19%	21	81%	89
	534,562	S.F													
Apartments	100	D.U	0.30	1,3	30	5%	20%	25%		17	56%	25%	4	75%	13
	98,375	S.F													
Subtotal Residential	500	D.U			175					127	73%	20%	25	80%	102
	632,937	S.F													
Hotel	275	Rooms	0.52	1,4	143	5%	10%	20%		97	68%	61%	59	39%	38
	315,000	S.F													
Office	0	S.F	0.00	1,5	0							88%		12%	
Market	53,000	S.F	3.89	1,6	206	15%	10%	5%	40%	88	43%	61%	54	39%	34
Retail	97,750	S.F	1.58	1,7	154	15%	20%	5%	30%	67	43%	61%	41	39%	26
Restaurant	42,000	S.F	0.81	1,8,9	34	15%	30%	5%	10%	16	47%	52%	8	48%	8
Event Facility	250	Seats	0.00	1,10	0	5%	5%	5%	10%	0			0		0
	24,000	S.F													
Health Club	50,000	S.F	1.21	1,11	61	20%	35%	5%	20%	21	34%	42%	9	58%	12
Subtotal Commercial	266,750	S.F			455					192	42%	58%	112	42%	80
Total Parcel Q	1,214,687	S.F			773					416	54%	47%	196	53%	220
Parcel W-1 / W-2															
Condominiums	568	D.U	0.34	1,2	193	5%	15%	5%		147	76%	19%	28	81%	119
	553,005	S.F													
Apartments	142	D.U	0.30	1,3	43	5%	20%	25%		24	56%	25%	6	75%	18
	139,728	S.F													
Subtotal Residential	710	D.U			236					171	73%	20%	34	80%	137
	692,733	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	681,000	S.F	1.69	1,5	1,153	0%	5%	40%	0%	657	57%	89%	585	11%	72
Retail	54,400	S.F	2.00	1,7	109	15%	20%	5%	40%	40	37%	61%	25	39%	15
Restaurant	10,000	S.F	0.81	1,8,9	8	15%	30%	5%	10%	4	49%	52%	2	48%	2
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	745,400	S.F			1,270					701	55%	87%	612	13%	89
Total Parcel W-1 / W-2	1,438,133	S.F			1,506					872	58%	74%	646	26%	226

Table A-1 A.M Peak Hour Trip Generation - Project with County Office Building Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680	D.U	0.33	1,2	226	5%	15%	5%		172	76%	19%	33	81%	139
	662,050	S.F													
Apartments	170	D.U	0.30	1,3	51	5%	20%	25%		29	56%	25%	7	75%	22
	167,280	S.F													
Subtotal Residential	850	D.U			277					201	73%	20%	40	80%	161
	829,330	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		88%	0	12%	0
Retail	73,100	S.F	1.77	1,7	130	15%	20%	5%	30%	56	43%	61%	34	39%	22
Restaurant	15,000	S.F	0.81	1,8,9	12	15%	30%	5%	10%	6	47%	52%	3	48%	3
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	88,100	S.F			142					62	44%	60%	37	40%	25
Total Parcel L / M-2	917,430	S.F			419					263	63%	29%	77	71%	186
Total All Parcels	3,570,250	S.F			2,698					1,551	57%	59%	919	41%	632

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.29(X)+28.26) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation (LN(T) = 1.24*LN(X) - 2.00) for Hotel was used.
5. ITE 715 trip generation equation (T = 1.66*(X) + 22.94) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (LN(T) = 1.70*LN(X) - 1.42) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.60*LN(X) + 2.29) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution for the AM peak hour is not available. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sit Down Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.

Table A-2 P.M Peak Hour Trip Generation - Project with County Office Building Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	0.38	1,2	151	5%	15%	5%		115	76%	62%	71	38%	44
	534,562	S.F													
Apartments	100	D.U	0.35	1,3	35	5%	20%	25%		20	56%	61%	12	39%	8
	98,375	S.F													
Subtotal Residential	500	D.U			186					135	72%	62%	83	39%	52
	632,937	S.F													
Hotel	275	Rooms	0.59	1,4	162	5%	10%	20%		110	68%	53%	58	47%	52
	315,000	S.F													
Office	0	S.F	0.00	1,5	0							17%		83%	
Market	53,000	S.F	10.66	1,6	565	15%	10%	5%	40%	241	43%	51%	123	49%	118
Retail	97,750	S.F	6.31	1,7	617	15%	20%	5%	30%	267	43%	48%	128	52%	139
Restaurant	42,000	S.F	7.49	1,8	315	15%	30%	5%	10%	148	47%	67%	99	33%	49
Event Facility	250	Seats	0.07	1,9	18	5%	5%	5%	10%	14	77%	75%	11	25%	3
	24,000	S.F													
Health Club	50,000	S.F	4.05	1,10	203	20%	35%	5%	20%	69	34%	51%	36	49%	33
Subtotal Commercial	266,750	S.F			1,718					739	43%	54%	397	46%	342
Total Parcel Q	1,214,687	S.F			2,066					984	48%	55%	538	45%	446
Parcel W-1 / W-2															
Condominiums	568	D.U	0.37	1,2	209	5%	15%	5%		158	76%	62%	98	38%	60
	553,005	S.F													
Apartments	142	D.U	0.35	1,3	50	5%	20%	25%		28	56%	61%	17	39%	11
	139,728	S.F													
Subtotal Residential	710	D.U			259					186	72%	62%	115	38%	71
	692,733	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	681,000	S.F	1.57	1,5	1,070	0%	5%	40%	0%	610	57%	15%	91	85%	519
Retail	54,400	S.F	7.70	1,7	419	15%	20%	5%	40%	155	37%	48%	74	52%	81
Restaurant	10,000	S.F	7.49	1,8	75	15%	30%	5%	10%	35	47%	67%	23	33%	12
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	745,400	S.F			1,564					800	51%	23%	188	76%	612
Total Parcel W-1 / W-2	1,438,133	S.F			1,823					986	54%	31%	303	69%	683

Table A-2 P.M Peak Hour Trip Generation - Project with County Office Building Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680	D.U	0.36	1,2	247	5%	15%	5%		187	76%	62%	116	38%	71
	662,050	S.F													
Apartments	170	D.U	0.35	1,3	60	5%	20%	25%		34	57%	61%	21	39%	13
	167,280	S.F													
Subtotal Residential	850	D.U			307					221	72%	62%	137	38%	84
	829,330	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		17%	0	83%	0
Retail	73,100	S.F	6.96	1,7	509	15%	20%	5%	30%	220	43%	48%	106	52%	114
Restaurant	15,000	S.F	7.49	1,8	112	15%	30%	5%	10%	53	47%	67%	36	33%	17
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	88,100	S.F			621					273	44%	52%	142	48%	131
Total Parcel L / M-2	917,430	S.F			928					494	53%	56%	279	44%	215
Total All Parcels	3,570,250	S.F			4,817					2,464	51%	45%	1,120	55%	1,344

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.34(X)+15.47) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip rate for Hotel was used.
5. ITE 715 trip generation equation (T=1.52(X)+ 34.88) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (Ln(T) = 0.79*LN(X) + 3.20) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.66*LN(X) + 3.40) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. ITE 444 trip rate for Movie Theater with Matinee was used.
10. ITE 492 trip rate for Health / Fitness Club was used.

Table A-3 Daily Trip Generation - Project with County Office Building Option

4/24/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	4.33	1,2	1,732	5%	15%	5%		1,316	76%	50%	658	50%	658
	534,562	S.F													
Apartments	100	D.U	4.20	1,3	420	5%	20%	25%		236	56%	50%	118	50%	118
	98,375	S.F													
Subtotal Residential	500	D.U			2,152					1,552	72%	50%	776	50%	776
	632,937	S.F													
Hotel	275	Rooms	7.59	1,4	2,088	5%	10%	20%		1,420	68%	50%	710	50%	710
	315,000	S.F													
Office	0	S.F	0.00	1,5	0							50%		50%	
Market	53,000	S.F	93.21	1,6	4,940	15%	10%	5%	40%	2,112	43%	50%	1,056	50%	1,056
Retail	97,750	S.F	68.45	1,7	6,691	15%	20%	5%	30%	2,892	43%	50%	1,446	50%	1,446
Restaurant	42,000	S.F	89.95	1,8	3,778	15%	30%	5%	10%	1,777	47%	50%	889	50%	889
Event Facility	250	Seats	1.76	1,9	440	5%	5%	5%	10%	339	77%	50%	169	50%	169
	24,000	S.F													
Health Club	50,000	S.F	32.93	1,10	1,647	20%	35%	5%	20%	563	34%	50%	282	50%	282
Subtotal Commercial	266,750	S.F			17,496					7,683	44%	50%	3,841	50%	3,842
Total Parcel Q	1,214,687	S.F			21,736					10,655	49%	50%	5,327	50%	5,328
Parcel W-1 / W-2															
Condominiums	568	D.U	4.16	1,2	2,365	5%	15%	5%		1,797	76%	50%	898	50%	899
	553,005	S.F													
Apartments	142	D.U	4.20	1,3	596	5%	20%	25%		335	56%	50%	168	50%	167
	139,728	S.F													
Subtotal Residential	710	D.U			2,961					2,132	72%	50%	1,066	50%	1,066
	692,733	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	681,000	S.F	5.53	1,5	3,767	0%	5%	40%	0%	2,148	57%	50%	1,074	50%	1,074
Retail	54,400	S.F	84.04	1,7	4,572	15%	20%	5%	40%	1,694	37%	50%	847	50%	847
Restaurant	10,000	S.F	89.95	1,8	900	15%	30%	5%	10%	423	47%	50%	211	50%	212
Event Facility	0	Seats	1.76	1,9	0					0		50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	745,400	S.F			9,239					4,265	46%	50%	2,132	50%	2,133
Total Parcel W-1 / W-2	1,438,133	S.F			12,200					6,397	52%	50%	3,198	50%	3,199

Table A-3 Daily Trip Generation - Project with County Office Building Option

4/24/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680	D.U	4.10	1,2	2,787	5%	15%	5%		2,118	76%	50%	1,059	50%	1,059
	662,050	S.F													
Apartments	170	D.U	4.20	1,3	714	5%	20%	25%		402	56%	50%	201	50%	201
	167,280	S.F													
Subtotal Residential	850	D.U			3,501					2,520	72%	50%	1,260	50%	1,260
	829,330	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		50%	0	50%	0
Retail	73,100	S.F	75.78	1,7	5,540	15%	20%	5%	30%	2,395	43%	50%	1,197	50%	1,198
Restaurant	15,000	S.F	89.95	1,8	1,349	15%	30%	5%	10%	634	47%	50%	317	50%	317
Event Facility	0	Seats	1.76	1,9	0					0			0		0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	88,100	S.F			6,889					3,029	44%	50%	1,514	50%	1,515
Total Parcel L / M-2	917,430	S.F			10,390					5,549	53%	50%	2,774	50%	2,775
Total All Parcels	3,570,250	S.F			44,326					22,601	51%	50%	11,299	50%	11,302

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 daily trip generation equation (T= 3.77(X)+223.66) for High-Rise Condominium / Townhouse was used.
3. ITE 222 daily trip rate for High-Rise Apartments was used.
4. ITE 310 daily trip generation equation (T = 8.95*(X) - 373.16) for Hotel was used.
5. ITE 715 trip generation equation (LN(T) = 0.60*LN(X) + 4.32) for Single Tenant Office Building was used.
6. ITE 850 daily trip generation equation (T = 66.95*(X) +1391.56) for Supermarket was used.
7. ITE 820 daily trip generation equation (LN(T) = 0.65*LN(X) + 5.83) for Shopping Center was used.
8. ITE 931 daily trip rate for Quality Restaurant was used.
9. ITE 444 daily trip rate for Movie Theater with Matinee is not available. Daily trip rate was estimated based on the ratio of ITE 443 weekday p.m peak hour of adjacent traffic to ITE 444 weekday p.m peak hour of adjacent traffic.
10. ITE 492 daily trip rate for Health / Fitness Club was used.

Table A-4 A.M Peak Hour Trip Generation - Project with Additional Residential Development Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	0.36	1,2	145	5%	15%	5%		110	76%	19%	21	81%	89
	534,562	S.F													
Apartments	100	D.U	0.30	1,3	30	5%	20%	25%		17	56%	25%	4	75%	13
	98,375	S.F													
Subtotal Residential	500	D.U			175					127	73%	20%	25	80%	102
	632,937	S.F													
Hotel	275	Rooms	0.52	1,4	143	5%	10%	20%		97	68%	61%	59	39%	38
	315,000	S.F													
Office	0	S.F	0.00	1,5	0							88%		12%	
Market	53,000	S.F	3.89	1,6	206	15%	10%	5%	40%	88	43%	61%	54	39%	34
Retail	97,750	S.F	1.58	1,7	154	15%	20%	5%	30%	67	43%	61%	41	39%	26
Restaurant	42,000	S.F	0.81	1,8,9	34	15%	30%	5%	10%	16	47%	52%	8	48%	8
Event Facility	250	Seats	0.00	1,10	0	5%	5%	5%	10%	0			0		0
	24,000	S.F													
Health Club	50,000	S.F	1.21	1,11	61	20%	35%	5%	20%	21	34%	42%	9	58%	12
Subtotal Commercial	266,750	S.F			455					192	42%	58%	112	42%	80
Total Parcel Q	1,214,687	S.F			774					416	54%	47%	196	53%	220
Parcel W-1 / W-2															
Condominiums	1,048	D.U	0.32	1,2	332	5%	15%	5%		252	76%	19%	48	81%	204
	1,053,585	S.F													
Apartments	262	D.U	0.30	1,3	79	5%	20%	25%		44	56%	25%	11	75%	33
	257,148	S.F													
Subtotal Residential	1,310	D.U			411					296	72%	20%	59	80%	237
	1,310,733	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0	0%	10%	40%	0%	0	#DIV/0!	88%	0	12%	0
Retail	54,400	S.F	2.00	1,7	109	15%	20%	5%	40%	40	37%	61%	25	39%	15
Restaurant	10,000	S.F	0.81	1,8,9	8	15%	30%	5%	10%	4	49%	52%	2	48%	2
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	64,400	S.F			117					44	38%	61%	27	38%	17
Total Parcel W-1 / W-2	1,375,133	S.F			527					340	64%	25%	86	75%	254

Table A-4 A.M Peak Hour Trip Generation - Project with Additional Residential Development Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680 662,050	D.U S.F	0.33	1,2	226	5%	15%	5%		172	76%	19%	33	81%	139
Apartments	170 167,280	D.U S.F	0.30	1,3	51	5%	20%	25%		29	56%	25%	7	75%	22
Subtotal Residential	850 829,330	D.U S.F			277					201	73%	20%	40	80%	161
Hotel	0 0	Rooms S.F	0.00	1,4	0					0		61%	0	39%	0
Office	0	S.F	0.00	1,5	0					0		88%	0	12%	0
Retail	73,100	S.F	1.77	1,7	130	15%	20%	5%	30%	56	43%	61%	34	39%	22
Restaurant	15,000	S.F	0.81	1,8,9	12	15%	30%	5%	10%	6	47%	52%	3	48%	3
Event Facility	0 0	Seats S.F	0.00	1,10	0					0			0		0
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	88,100	S.F			142					62	44%	60%	37	40%	25
Total Parcel L / M-2	917,430	S.F			419					263	63%	29%	77	71%	186
Total All Parcels	3,507,250	S.F			1,720					1,019	59%	35%	359	65%	660

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.29(X)+28.26) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation (LN(T) = 1.24*LN(X) - 2.00) for Hotel was used.
5. ITE 710 trip generation equation (LN(T) = 0.80*LN(X) + 1.55) for General Office Building was used.
6. ITE 850 trip generation equation (LN(T) = 1.70*LN(X) - 1.42) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.60*LN(X) + 2.29) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution for the AM peak hour is not available. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sit Down Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.

Table A-5 P.M Peak Hour Trip Generation - Project with Additional Residential Development Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	0.38	1,2	151	5%	15%	5%		115	76%	62%	71	38%	44
	534,562	S.F													
Apartments	100	D.U	0.35	1,3	35	5%	20%	25%		20	56%	61%	12	39%	8
	98,375	S.F													
Subtotal Residential	500	D.U			186					135	72%	62%	83	39%	52
	632,937	S.F													
Hotel	275	Rooms	0.59	1,4	162	5%	10%	20%		110	68%	53%	58	47%	52
	315,000	S.F													
Office	0	S.F	0.00	1,5	0							17%		83%	
Market	53,000	S.F	10.66	1,6	565	15%	10%	5%	40%	241	43%	51%	123	49%	118
Retail	97,750	S.F	6.31	1,7	617	15%	20%	5%	30%	267	43%	48%	128	52%	139
Restaurant	42,000	S.F	7.49	1,8	315	15%	30%	5%	10%	148	47%	67%	99	33%	49
Event Facility	250	Seats	0.07	1,9	18	5%	5%	5%	10%	14	77%	75%	11	25%	3
	24,000	S.F													
Health Club	50,000	S.F	4.05	1,10	203	20%	35%	5%	20%	69	34%	51%	36	49%	33
Subtotal Commercial	266,750	S.F			1,718					739	43%	54%	397	46%	342
Total Parcel Q	1,214,687	S.F			2,067					984	48%	55%	538	45%	446
Parcel W-1 / W-2															
Condominiums	1,048	D.U	0.35	1,2	372	5%	15%	5%		283	76%	62%	175	38%	108
	1,053,585	S.F													
Apartments	262	D.U	0.35	1,3	92	5%	20%	25%		52	57%	61%	32	39%	20
	257,148	S.F													
Subtotal Residential	1,310	D.U			463					335	72%	62%	207	38%	128
	1,310,733	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0	0%	10%	40%	0%	0	#DIV/0!	17%	0	83%	0
Retail	54,400	S.F	7.70	1,7	419	15%	20%	5%	40%	155	37%	48%	74	52%	81
Restaurant	10,000	S.F	7.49	1,8	75	15%	30%	5%	10%	35	47%	67%	23	33%	12
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	64,400	S.F			494					190	39%	51%	97	49%	93
Total Parcel W-1 / W-2	1,375,133	S.F			957					525	55%	58%	304	42%	221

Table A-5 P.M Peak Hour Trip Generation - Project with Additional Residential Development Option

4/21/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680 662,050	D.U S.F	0.36	1,2	247	5%	15%	5%		187	76%	62%	116	38%	71
Apartments	170 167,280	D.U S.F	0.35	1,3	60	5%	20%	25%		34	57%	61%	21	39%	13
Subtotal Residential	850 829,330	D.U S.F			306					221	72%	62%	137	38%	84
Hotel	0 0	Rooms S.F	0.59	1,4	0					0		53%	0	47%	0
Office	0	S.F	0.00	1,5	0					0		17%	0	83%	0
Retail	73,100	S.F	6.96	1,7	509	15%	20%	5%	30%	220	43%	48%	106	52%	114
Restaurant	15,000	S.F	7.49	1,8	112	15%	30%	5%	10%	53	47%	67%	36	33%	17
Event Facility	0 0	Seats S.F	0.07	1,9	0					0		75%	0	25%	0
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	88,100	S.F			621					273	44%	52%	142	48%	131
Total Parcel L / M-2	917,430	S.F			927					494	53%	56%	279	44%	215
Total All Parcels	3,507,250	S.F			3,951					2,003	51%	56%	1,121	44%	882

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.34(X)+15.47) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip rate for Hotel was used.
5. ITE 710 trip generation equation (T=1.12(X)+78.81) for General Office Building was used.
6. ITE 850 trip generation equation (Ln(T) = 0.79*LN(X) + 3.20) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.66*LN(X) + 3.40) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. ITE 444 trip rate for Movie Theater with Matinee was used.
10. ITE 492 trip rate for Health / Fitness Club was used.

Table A-6 Daily Trip Generation - Project with Additional Residential Development Option

4/24/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	4.33	1,2	1,732	5%	15%	5%		1,316	76%	50%	658	50%	658
	534,562	S.F													
Apartments	100	D.U	4.20	1,3	420	5%	20%	25%		236	56%	50%	118	50%	118
	98,375	S.F													
Subtotal Residential	500	D.U			2,152					1,552	72%	50%	776	50%	776
	632,937	S.F													
Hotel	275	Rooms	7.59	1,4	2,088	5%	10%	20%		1,420	68%	50%	710	50%	710
	315,000	S.F													
Office	0	S.F	0.00	1,5	0							50%		50%	
Market	53,000	S.F	93.21	1,6	4,940	15%	10%	5%	40%	2,112	43%	50%	1,056	50%	1,056
Retail	97,750	S.F	68.45	1,7	6,691	15%	20%	5%	30%	2,892	43%	50%	1,446	50%	1,446
Restaurant	42,000	S.F	89.95	1,8	3,778	15%	30%	5%	10%	1,777	47%	50%	889	50%	889
Event Facility	250	Seats	1.76	1,9	440	5%	5%	5%	10%	339	77%	50%	169	50%	169
	24,000	S.F													
Health Club	50,000	S.F	32.93	1,10	1,647	20%	35%	5%	20%	563	34%	50%	282	50%	282
Subtotal Commercial	266,750	S.F			17,496					7,683	44%	50%	3,841	50%	3,842
Total Parcel Q	1,214,687	S.F			21,736					10,655	49%	50%	5,327	50%	5,328
Parcel W-1 / W-2															
Condominiums	1,048	D.U	3.98	1,2	4,175	5%	15%	5%		3,173	76%	50%	1,586	50%	1,586
	1,053,585	S.F													
Apartments	262	D.U	4.20	1,3	1,100	5%	20%	25%		619	56%	50%	310	50%	309
	257,148	S.F													
Subtotal Residential	1,310	D.U			5,275					3,792	72%	50%	1,896	50%	1,896
	1,310,733	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0	0%	5%	40%	0%	0	#DIV/0!	50%	0	50%	0
Retail	54,400	S.F	84.04	1,7	4,572	15%	20%	5%	40%	1,694	37%	50%	847	50%	847
Restaurant	10,000	S.F	89.95	1,8	900	15%	30%	5%	10%	423	47%	50%	211	50%	212
Event Facility	0	Seats	1.76	1,9	0					0		50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	64,400	S.F			5,472					2,117	39%	50%	1,058	50%	1,059
Total Parcel W-1 / W-2	1,375,133	S.F			10,747					5,909	55%	50%	2,954	50%	2,955

Table A-6 Daily Trip Generation - Project with Additional Residential Development Option

4/24/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680	D.U	4.10	1,2	2,787	5%	15%	5%		2,118	76%	50%	1,059	50%	1,059
	662,050	S.F													
Apartments	170	D.U	4.20	1,3	714	5%	20%	25%		402	56%	50%	201	50%	201
	167,280	S.F													
Subtotal Residential	850	D.U			3,501					2,520	72%	50%	1,260	50%	1,260
	829,330	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		50%	0	50%	0
Retail	73,100	S.F	75.78	1,7	5,540	15%	20%	5%	30%	2,395	43%	50%	1,197	50%	1,198
Restaurant	15,000	S.F	89.95	1,8	1,349	15%	30%	5%	10%	634	47%	50%	317	50%	317
Event Facility	0	Seats	1.76	1,9	0					0			0		0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	88,100	S.F			6,889					3,029	44%	50%	1,514	50%	1,515
Total Parcel L / M-2	917,430	S.F			10,390					5,549	53%	50%	2,774	50%	2,775
Total All Parcels	3,507,250	S.F			42,873					22,113	52%	50%	11,055	50%	11,058

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 daily trip generation equation (T= 3.77(X)+223.66) for High-Rise Condominium / Townhouse was used.
3. ITE 222 daily trip rate for High-Rise Apartments was used.
4. ITE 310 daily trip generation equation (T = 8.95*(X) - 373.16) for Hotel was used.
5. ITE 715 trip generation equation (LN(T) = 0.60*LN(X) + 4.32) for Single Tenant Office Building was used.
6. ITE 850 daily trip generation equation (T = 66.95*(X) +1391.56) for Supermarket was used.
7. ITE 820 daily trip generation equation (LN(T) = 0.65*LN(X) + 5.83) for Shopping Center was used.
8. ITE 931 daily trip rate for Quality Restaurant was used.
9. ITE 444 daily trip rate for Movie Theater with Matinee is not available. Daily trip rate was estimated based on the ratio of ITE 443 weekday p.m peak hour of adjacent traffic to ITE 444 weekday p.m peak hour of adjacent traffic.
10. ITE 492 daily trip rate for Health / Fitness Club was used.

Appendix B

Parking Demand Analysis

Project with County Office Building Option

Table B-1 City Code Parking Requirement (Commercial Uses) and CDP Advisory Agency AA-2000-1 (Residential Uses) Project With County Office Building Option

5/19/2006

Land Use	City Code Requirement / CDP Advisory Agency Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	275	Rooms	54	0	Rooms	0	0	Rooms	0	275	Rooms	54
Meeting Space	10 spaces / 1,000 s.f	2	9,000	S.F	90	0	S.F	0	0	S.F	0	9,000	S.F	90
Subtotal Hotel					144			0			0			144
Retail	1 space / 1,000 s.f	3	168,000	S.F	168	64,000	S.F	64	86,000	S.F	86	318,000	S.F	318
Restaurant	1 space / 1,000 s.f	3,7	42,000	S.F	42	10,000	S.F	10	15,000	S.F	15	67,000	S.F	67
Health Club	1 space / 1,000 s.f	3	50,000	S.F	50	0	S.F	0	0	S.F	0	50,000	S.F	50
Event Facility	1 space / 10 seats	4	250	Seats	25	0	Seats	0	0	Seats	0	250	Seats	25
Subtotal Commercial					285			74			101			460
Office	1 space / 1,000 s.f	3	0	S.F	0	681,000	S.F	681	0	S.F	0	681,000	S.F	681
Condominiums 1 - Bed	2.25 spaces / D.U	5	220	D.U	495	312	D.U	702	374	D.U	842	906	D.U	2,039
2 - Bed	2.25 spaces / D.U	5	155	D.U	349	222	D.U	500	265	D.U	596	642	D.U	1,445
3 - Bed	2.25 spaces / D.U	5	25	D.U	56	34	D.U	77	41	D.U	92	100	D.U	225
Subtotal Condominiums			400	D.U	900	568	D.U	1,279	680	D.U	1,530	1,648	D.U	3,709
Apartments 1 - Bed	1 space / D.U	6	70	D.U	70	107	D.U	107	128	D.U	128	305	D.U	305
2 - Bed	1 space / D.U	6	0	D.U	0	35	D.U	35	42	D.U	42	77	D.U	77
3 - Bed	1 space / D.U	6	30	D.U	30	0	D.U	0	0	D.U	0	30	D.U	30
Subtotal Apartments			100	D.U	100	142	D.U	142	170	D.U	170	412	D.U	412
Subtotal Residential			500	D.U	1,000	710	D.U	1,421	850	D.U	1,700	2,060	D.U	4,121
Grand Total					1,429			2,176			1,801			5,406

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. CDP Advisory Agency Policy AA - 2000 - 1
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Table B-2 City Code Parking Requirement (All Uses)
Project with County Office Building Option

5/19/2006

Land Use	City Code Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	275	Rooms	54	0	Rooms	0	0	Rooms	0	275	Rooms	54
Meeting Space	10 spaces / 1,000 s.f	2	9,000	S.F	90	0	S.F	0	0	S.F	0	9,000	S.F	90
Subtotal Hotel					144			0			0			144
Retail	1 space / 1,000 s.f	3	168,000	S.F	168	64,000	S.F	64	86,000	S.F	86	318,000	S.F	318
Restaurant	1 space / 1,000 s.f	3,7	42,000	S.F	42	10,000	S.F	10	15,000	S.F	15	67,000	S.F	67
Health Club	1 space / 1,000 s.f	3	50,000	S.F	50	0	S.F	0	0	S.F	0	50,000	S.F	50
Event Facility	1 space / 10 seats	4	250	Seats	25	0	Seats	0	0	Seats	0	250	Seats	25
Subtotal Commercial					285			74			101			460
Office	1 space / 1,000 s.f	3	0	S.F	0	681,000	S.F	681	0	S.F	0	681,000	S.F	681
Condominiums 1 - Bed	1 space / D.U	5	220	D.U	220	312	D.U	312	374	D.U	374	906	D.U	906
2 - Bed	1 space / D.U	5	155	D.U	155	222	D.U	222	265	D.U	265	642	D.U	642
3 - Bed	1.25 spaces / D.U	5	25	D.U	31	34	D.U	43	41	D.U	51	100	D.U	125
Subtotal Condominiums			400	D.U	406	568	D.U	577	680	D.U	690	1,648	D.U	1,673
Apartments 1 - Bed	1 space / D.U	6	70	D.U	70	107	D.U	107	128	D.U	128	305	D.U	305
2 - Bed	1 space / D.U	6	0	D.U	0	35	D.U	35	42	D.U	42	77	D.U	77
3 - Bed	1 space / D.U	6	30	D.U	30	0	D.U	0	0	D.U	0	30	D.U	30
Subtotal Apartments			100	D.U	100	142	D.U	142	170	D.U	170	412	D.U	412
Subtotal Residential			500	D.U	506	710	D.U	719	850	D.U	860	2,060	D.U	2,085
Grand Total					935			1,474			961			3,370

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. LAMC 12.21 A.4. (p).(1) Exception for Central City Area.
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Table B-3 Estimated Parking Demand - Parcel Q - Summary - Project with County Office Building Option

Land Use	Quantity	Units	Weekday Demand (Without Shared Parking)						Saturday Demand (Without Shared Parking)					
			Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)	Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)
Block Q														
Retail/Restaurant/Entertainment														
Local	88,000	1,000 S.F	3.80	15%	15%	5%	2.47	217	4.00	10%	5%	5%	3.20	282
Regional	80,000	1,000 S.F	3.80	15%	15%	5%	2.47	198	4.00	5%	5%	5%	3.40	272
Restaurant	42,000	1,000 S.F	15.00	15%	30%	5%	7.50	315	15.00	15%	15%	5%	9.75	410
Clubs/Bars	0	1,000 S.F	10.00		10%		9.00	0	10.00		5%		9.50	0
Subtotal	210,000						3.48	730					4.59	963
Museum Exhibit	0	1,000 S.F	3.00				3.00	0	4.00				4.00	0
Museum Theater	0	1,000 S.F												
	0	Seats	0.40				0.40	0	0.50				0.50	0
Subtotal	0							0						0
R/R/E Total	210,000							730						963
Hotel														
Rooms	275	Rooms	1.00		10%	20%	0.70	193	1.00		5%	20%	0.75	206
Meeting Space	9,000	S.F	10.00		10%	5%	8.50	77	10.00		0%	5%	9.50	86
Subtotal	315,000	1,000 S.F						269						292
Residential														
Condominiums 1-Bed	220	D.U	1.00				1.00	220	1.00				1.00	220
Condominiums 2-Bed	155	D.U	2.00				2.00	310	2.00				2.00	310
Condominiums 3-Bed+	25	D.U	3.00				3.00	75	3.00				3.00	75
Condominium - Subtotal	400						1.51	605					1.00	605
Apartments 1-Bed	70	D.U	1.00				1.00	70	1.00				1.00	70
Apartments 2-Bed	0	D.U	1.00				1.00	0	1.00				1.00	0
Apartments 3-Bed	30	D.U	1.50				1.50	45	1.50				1.50	45
Apartments - Subtotal	100	D.U					1.15	115					1.00	115
Residential Total	500 632,937	 1,000 S.F						720						720
Health Club	50,000	1,000 S.F	5.00	20%	35%	5%	2.00	100	5.00	20%	15%	5%	3.00	150
Cinemas	0	1,000 S.F												
	0	Seats	0.25	5%	10%	5%	0.20	0	0.33	5%	10%	5%	0.26	0
Event Facility	24,000	1,000 S.F												
	250	Seats	0.33	5%	5%	5%	0.28	70	0.33	5%	0%	5%	0.30	74
Total Spaces - Block Q								1,889						2,199

Summary of Land Use

Land Use	Quantity	Units
Residential	500 632,937	D.U 1,000 S.F
Commercial	599,000	1,000 S.F
Total	1,231,937	1,000 S.F

Hotel Rooms	275
Seats	250

With Shared Parking

Weekday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
720	720	720
1,169	982	918
1,889	1,702	1,638

With Shared Parking

Saturday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
720	720	720
1,479	1,013	927
2,199	1,733	1,647

Table B-4 Peak Shared Parking Demand Estimate - Parcel Q Project with County Office Building Option

The Mobility Group
04/23/06

Hours of Day	Health Club	Retail	Restaurant	Cinema	Museum Exhibit	Museum Theater/ Event Facility	Hotel		Total Spaces	Hour of Day	Peak Hour *
							Guest Room	Meeting Space			
Weekday	100%	75%	100%	100%	100%	100%	100%	100%		Weekday	
Initial Spaces:	100	415	315	0	0	70	193	77	1,169		
6:00 AM	20	0	0	0	0	0	193	0	213	6:00 AM	
7:00 AM	45	25	6	0	0	0	164	0	240	7:00 AM	
8:00 AM	83	56	16	0	0	0	125	38	318	8:00 AM	
9:00 AM	85	131	32	0	0	0	106	77	430	9:00 AM	
10:00 AM	50	212	63	0	0	0	87	77	488	10:00 AM	
11:00 AM	58	271	95	0	0	0	67	77	567	11:00 AM	
12:00 PM	61	302	158	0	0	0	58	77	655	12:00 PM	
1:00 PM	87	311	221	0	0	0	58	77	753	1:00 PM	
2:00 PM	74	302	189	0	0	0	67	77	709	2:00 PM	
3:00 PM	63	296	189	0	0	0	67	77	692	3:00 PM	
4:00 PM	76	271	158	0	0	0	87	77	667	4:00 PM	
5:00 PM	89	246	221	0	0	0	116	77	747	5:00 PM	
6:00 PM	97	255	284	0	0	18	135	77	864	6:00 PM	
7:00 PM	100	277	315	0	0	63	144	77	976	7:00 PM	
8:00 PM	76	271	315	0	0	70	173	77	982	8:00 PM	84%
9:00 PM	70	190	315	0	0	70	183	77	904	9:00 PM	
10:00 PM	57	100	284	0	0	70	193	38	741	10:00 PM	
11:00 PM	47	40	221	0	0	18	193	0	518	11:00 PM	
12:00 AM	38	0	158	0	0	0	193	0	388	12:00 AM	
Saturday	100%	75%	100%	100%	100%	100%	100%	100%		Saturday	
Initial Spaces:	150	554	410	0	0	74	206	86	1,479		
6:00 AM	30	0	0	0	0	0	186	0	216	6:00 AM	
7:00 AM	68	12	8	0	0	0	144	0	233	7:00 AM	
8:00 AM	125	42	12	0	0	0	124	43	345	8:00 AM	
9:00 AM	128	125	25	0	0	0	103	86	465	9:00 AM	
10:00 AM	143	187	33	0	0	0	83	86	530	10:00 AM	
11:00 AM	149	303	41	0	0	0	72	86	650	11:00 AM	
12:00 PM	150	353	123	0	0	0	62	86	773	12:00 PM	
1:00 PM	143	394	184	0	0	0	62	86	869	1:00 PM	
2:00 PM	143	415	184	0	0	0	72	86	900	2:00 PM	
3:00 PM	131	415	184	0	0	0	83	86	898	3:00 PM	
4:00 PM	113	374	184	0	0	0	103	86	859	4:00 PM	
5:00 PM	75	311	246	0	0	0	124	86	841	5:00 PM	
6:00 PM	53	270	369	0	0	19	144	86	939	6:00 PM	
7:00 PM	30	249	389	0	0	67	165	86	985	7:00 PM	
8:00 PM	30	228	410	0	0	74	186	86	1,013	8:00 PM	69%
9:00 PM	15	166	410	0	0	74	196	86	946	9:00 PM	
10:00 PM	8	158	389	0	0	74	206	43	878	10:00 PM	
11:00 PM	8	54	348	0	0	19	206	0	634	11:00 PM	
12:00 AM	5	0	287	0	0	0	206	0	497	12:00 AM	

Table B-5. Estimated Parking Demand - Parcel W-1/W-2 - Summary - Project with County Office Building Option

			Weekday Demand (Without Shared Parking)						Saturday Demand (Without Shared Parking)					
Land Use	Quantity	Units	Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)	Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)
Block W														
Retail/Restaurant/Entertainment														
Local	32,000	1,000 S.F	3.80	15%	15%	5%	2.47	79	4.00	10%	5%	5%	3.20	102
Regional	32,000	1,000 S.F	3.80	15%	15%	5%	2.47	79	4.00	5%	5%	5%	3.40	109
Restaurant	10,000	1,000 S.F	15.00	15%	30%	5%	7.50	75	15.00	15%	15%	5%	9.75	98
Clubs/Bars	0	1,000 S.F	10.00		10%		9.00	0	10.00		5%		9.50	0
Subtotal	74,000						3.15	233					4.17	309
Museum Exhibit	0	1,000 S.F	3.00				3.00	0	4.00				4.00	0
Museum Theater	0	1,000 S.F												
	0	Seats	0.40				0.40	0	0.50				0.50	0
Subtotal	0							0						0
R/R/E Total	74,000							233						309
Hotel														
Rooms	0	Rooms	1.00		20%	20%	0.60	0	1.00		5%	20%	0.75	0
Meeting Space	0	S.F	10.00		10%	5%	8.50	0	10.00		0%	5%	9.50	0
Subtotal	0	1,000 S.F						0						0
Residential														
Condominiums 1-Bed	312	D.U	1.00				1.00	312	1.00				1.00	312
Condominiums 2-Bed	222	D.U	2.00				2.00	444	2.00				2.00	444
Condominiums 3-Bed+	34	D.U	3.00				3.00	102	3.00				3.00	102
Condominium - Subtotal	568						1.51	858					1.00	858
Apartments Studio	0	D.U	1.00				1.00	0	1.00				1.00	0
Apartments 1-Bed	107	D.U	1.00				1.00	107	1.00				1.00	107
Apartments 2-Bed	35	D.U	1.50				1.50	53	1.50				1.50	53
Apartments - Subtotal	142	D.U					1.12	160					1.00	160
Residential Total	710							1,018						1,018
	692,733	1,000 S.F												
Office	681,000	1,000 S.F	4.10	0%	5%	35.4%	2.44	1,664	4.10	0%	5%	35%	2.44	1,664
Cinemas	0	1,000 S.F												
	0	Seats	0.25	5%	10%	5%	0.20	0	0.33	5%	10%	5%	0.26	0
Event Facility	0	1,000 S.F												
	0	Seats	0.33	5%	5%	5%	0.28	0	0.33	5%	5%	5%	0.28	0
Total Spaces - Block W								2,915						2,990

Summary of Land Use

Land Use	Quantity	Units
Residential	710 692,733	D.U 1,000 S.F
Commercial	755,000	1,000 S.F
Total	1,447,733	1,000 S.F

Hotel Rooms 0

Seats 0

With Shared Parking

Weekday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
1,018	1,018	1,018
1,897	1,845	1,845
2,915	2,862	2,862

With Shared Parking

Saturday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
1,018	1,018	1,018
1,973	1,866	1,866
2,990	2,884	2,884

Table B-6 **Peak Shared Parking Demand Estimate - Parcel W-1/W-2**
Project with County Office Building Option

The Mobility Group
04/20/06

Retail & Restaurant Parking Only - Office Parking Not Shared

Hours of Day	Office	Retail	Restaurant	Cinema	Museum Exhibit	Museum Theater/ Event Facility	Hotel		Total Spaces	Hour of Day	Peak Hour *
							Guest Room	Meeting Space			
Weekday	100%	75%	100%	100%	100%	100%	100%	100%		Weekday	
Initial Spaces:	0	158	75	0	0	0	0	0	233		
6:00 AM	0	0	0	0	0	0	0	0	0	6:00 AM	
7:00 AM	0	9	2	0	0	0	0	0	11	7:00 AM	
8:00 AM	0	21	4	0	0	0	0	0	25	8:00 AM	
9:00 AM	0	50	8	0	0	0	0	0	57	9:00 AM	
10:00 AM	0	81	15	0	0	0	0	0	96	10:00 AM	
11:00 AM	0	103	23	0	0	0	0	0	126	11:00 AM	
12:00 PM	0	115	38	0	0	0	0	0	153	12:00 PM	T
1:00 PM	0	119	53	0	0	0	0	0	171	1:00 PM	P
2:00 PM	0	115	45	0	0	0	0	0	160	2:00 PM	
3:00 PM	0	113	45	0	0	0	0	0	158	3:00 PM	
4:00 PM	0	103	38	0	0	0	0	0	141	4:00 PM	
5:00 PM	0	94	53	0	0	0	0	0	146	5:00 PM	
6:00 PM	0	97	68	0	0	0	0	0	165	6:00 PM	
7:00 PM	0	106	75	0	0	0	0	0	181	7:00 PM	
8:00 PM	0	103	75	0	0	0	0	0	178	8:00 PM	
9:00 PM	0	72	75	0	0	0	0	0	147	9:00 PM	
10:00 PM	0	38	68	0	0	0	0	0	105	10:00 PM	
11:00 PM	0	15	53	0	0	0	0	0	68	11:00 PM	
12:00 AM	0	0	38	0	0	0	0	0	38	12:00 AM	
Saturday	100%	75%	100%	100%	100%	100%	100%	100%		Saturday	
Initial Spaces:	0	211	98	0	0	0	0	0	309		
6:00 AM	0	0	0	0	0	0	0	0	0	6:00 AM	
7:00 AM	0	5	2	0	0	0	0	0	7	7:00 AM	
8:00 AM	0	16	3	0	0	0	0	0	19	8:00 AM	
9:00 AM	0	48	6	0	0	0	0	0	53	9:00 AM	
10:00 AM	0	71	8	0	0	0	0	0	79	10:00 AM	
11:00 AM	0	116	10	0	0	0	0	0	125	11:00 AM	
12:00 PM	0	135	29	0	0	0	0	0	164	12:00 PM	T
1:00 PM	0	150	44	0	0	0	0	0	194	1:00 PM	
2:00 PM	0	158	44	0	0	0	0	0	202	2:00 PM	
3:00 PM	0	158	44	0	0	0	0	0	202	3:00 PM	P
4:00 PM	0	143	44	0	0	0	0	0	186	4:00 PM	
5:00 PM	0	119	59	0	0	0	0	0	177	5:00 PM	
6:00 PM	0	103	88	0	0	0	0	0	191	6:00 PM	
7:00 PM	0	95	93	0	0	0	0	0	188	7:00 PM	
8:00 PM	0	87	98	0	0	0	0	0	185	8:00 PM	
9:00 PM	0	63	98	0	0	0	0	0	161	9:00 PM	
10:00 PM	0	60	93	0	0	0	0	0	153	10:00 PM	
11:00 PM	0	21	83	0	0	0	0	0	103	11:00 PM	
12:00 AM	0	0	68	0	0	0	0	0	68	12:00 AM	

Table B-7. Estimated Parking Demand - Parcel L/M-2 - Summary

Land Use	Quantity	Units	Weekday Demand (Without Shared Parking)						Saturday Demand (Without Shared Parking)					
			Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)	Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)
Block L/M-2														
Retail/Restaurant/Entertainment														
Local	43,000	1,000 S.F	3.80	15%	15%	5%	2.47	106	4.00	10%	5%	5%	3.20	138
Regional	43,000	1,000 S.F	3.80	15%	15%	5%	2.47	106	4.00	5%	5%	5%	3.40	146
Restaurant	15,000	1,000 S.F	15.00	15%	30%	5%	7.50	113	15.00	15%	15%	5%	9.75	146
Clubs/Bars	0	1,000 S.F	10.00		10%		9.00	0	10.00		5%		9.50	0
Subtotal	101,000						3.22	325					4.26	430
Museum Exhibit	0	1,000 S.F	3.00				3.00	0	4.00				4.00	0
Museum Theater	0	1,000 S.F												
	0	Seats	0.40				0.40	0	0.50				0.50	0
Subtotal	0							0						0
R/R/E Total	101,000							325						430
Hotel														
Rooms	0	Rooms	1.00		20%	20%	0.60	0	1.00		5%	20%	0.75	0
Meeting Space	0	S.F	10.00		10%	5%	8.50	0	10.00		0%	5%	9.50	0
Subtotal	0	1,000 S.F						0						0
Residential														
Condominiums 1-Bed	374	D.U	1.00				1.00	374	1.00				1.00	374
Condominiums 2-Bed	265	D.U	2.00				2.00	530	2.00				2.00	530
Condominiums 3-Bed+	41	D.U	3.00				3.00	123	3.00				3.00	123
Condominium - Subtotal	680						1.51	1,027					1.00	1,027
Apartments Studio	0	D.U	1.00				1.00	0	1.00				1.00	0
Apartments 1-Bed	128	D.U	1.00				1.00	128	1.00				1.00	128
Apartments 2-Bed	42	D.U	1.50				1.50	63	1.50				1.50	63
Apartments - Subtotal	170	D.U					1.12	191					1.00	191
Residential Total	850							1,218						1,218
	829,330	1,000 S.F												
Office	0	1,000 S.F	3.50	0%	10%	40%	1.75	0	0.60	0%	10%	40%	0.30	0
Cinemas	0	1,000 S.F												
	0	Seats	0.25	5%	10%	5%	0.20	0	0.33	5%	10%	5%	0.26	0
Event Facility	0	1,000 S.F												
	0	Seats	0.33	5%	5%	5%	0.28	0	0.33	5%	5%	5%	0.28	0
Total Spaces Block L/M-2								1,543						1,648

Summary Land Use

Land Use	Quantity	Units
Residential	850 829,330	D.U 1,000 S.F
Commercial	101,000	1,000 S.F
Total	930,330	1,000 S.F

Hotel Rooms 0

Seats 0

With Shared Parking

Weekday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
1,218	1,218	1,218
325	254	234
1,543	1,472	1,452

With Shared Parking

Saturday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
1,218	1,218	1,218
430	279	261
1,648	1,497	1,479

Table B-8. Peak Shared Parking Demand Estimate - Parcel L/M-2
Project with County Office Building Option

The Mobility Group
11/14/05

Hours of Day	Office	Retail	Restaurant			Event Facility	Hotel		Total Spaces	Hour of Day	Peak Hour *
							Guest Room	Meeting Space			
Weekday	100%	75%	100%	100%	100%	100%	100%	100%		Weekday	
Initial Spaces:	0	212	113	0	0	0	0	0	325		
6:00 AM	0	0	0	0	0	0	0	0	0	6:00 AM	
7:00 AM	0	13	2	0	0	0	0	0	15	7:00 AM	
8:00 AM	0	29	6	0	0	0	0	0	34	8:00 AM	
9:00 AM	0	67	11	0	0	0	0	0	78	9:00 AM	
10:00 AM	0	108	23	0	0	0	0	0	131	10:00 AM	
11:00 AM	0	139	34	0	0	0	0	0	172	11:00 AM	
12:00 PM	0	155	56	0	0	0	0	0	211	12:00 PM	T
1:00 PM	0	159	79	0	0	0	0	0	238	1:00 PM	
2:00 PM	0	155	68	0	0	0	0	0	222	2:00 PM	
3:00 PM	0	151	68	0	0	0	0	0	219	3:00 PM	
4:00 PM	0	139	56	0	0	0	0	0	195	4:00 PM	
5:00 PM	0	126	79	0	0	0	0	0	205	5:00 PM	
6:00 PM	0	131	101	0	0	0	0	0	232	6:00 PM	
7:00 PM	0	142	113	0	0	0	0	0	254	7:00 PM	P
8:00 PM	0	139	113	0	0	0	0	0	251	8:00 PM	
9:00 PM	0	97	113	0	0	0	0	0	210	9:00 PM	
10:00 PM	0	51	101	0	0	0	0	0	152	10:00 PM	
11:00 PM	0	21	79	0	0	0	0	0	99	11:00 PM	
12:00 AM	0	0	56	0	0	0	0	0	56	12:00 AM	
Saturday	100%	75%	100%	100%	100%	100%	100%	100%		Saturday	
Initial Spaces:	0	284	146	0	0	0	0	0	430		
6:00 AM	0	0	0	0	0	0	0	0	0	6:00 AM	
7:00 AM	0	6	3	0	0	0	0	0	9	7:00 AM	
8:00 AM	0	21	4	0	0	0	0	0	26	8:00 AM	
9:00 AM	0	64	9	0	0	0	0	0	73	9:00 AM	
10:00 AM	0	96	12	0	0	0	0	0	107	10:00 AM	
11:00 AM	0	155	15	0	0	0	0	0	170	11:00 AM	
12:00 PM	0	181	44	0	0	0	0	0	225	12:00 PM	
1:00 PM	0	202	66	0	0	0	0	0	268	1:00 PM	
2:00 PM	0	213	66	0	0	0	0	0	279	2:00 PM	
3:00 PM	0	213	66	0	0	0	0	0	279	3:00 PM	P
4:00 PM	0	192	66	0	0	0	0	0	257	4:00 PM	
5:00 PM	0	160	88	0	0	0	0	0	247	5:00 PM	T
6:00 PM	0	138	132	0	0	0	0	0	270	6:00 PM	
7:00 PM	0	128	139	0	0	0	0	0	267	7:00 PM	
8:00 PM	0	117	146	0	0	0	0	0	263	8:00 PM	
9:00 PM	0	85	146	0	0	0	0	0	231	9:00 PM	
10:00 PM	0	81	139	0	0	0	0	0	220	10:00 PM	
11:00 PM	0	28	124	0	0	0	0	0	152	11:00 PM	
12:00 AM	0	0	102	0	0	0	0	0	102	12:00 AM	

Project with Additional Residential Development Option

Table B-9 City Code Parking Requirement (Commercial Uses) and CDP Advisory Agency AA-2000-1 (Residential Uses) Project With Additional Residential Development Option

5/19/2006

Land Use	City Code Requirement / CDP Advisory Agency Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	275	Rooms	54	0	Rooms	0	0	Rooms	0	275	Rooms	54
Meeting Space	10 spaces / 1,000 s.f	2	9,000	S.F	90	0	S.F	0	0	S.F	0	9,000	S.F	90
Subtotal Hotel					144			0			0			144
Retail	1 space / 1,000 s.f	3	168,000	S.F	168	64,000	S.F	64	86,000	S.F	86	318,000	S.F	318
Restaurant	1 space / 1,000 s.f	3,7	42,000	S.F	42	10,000	S.F	10	15,000	S.F	15	67,000	S.F	67
Health Club	1 space / 1,000 s.f	3	50,000	S.F	50	0	S.F	0	0	S.F	0	50,000	S.F	50
Event Facility	1 space / 10 seats	4	250	Seats	25	0	Seats	0	0	Seats	0	250	Seats	25
Subtotal Commercial					285			74			101			460
Office	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Condominiums 1 - Bed	2.25 spaces / D.U	5	220	D.U	495	575	D.U	1,294	374	D.U	842	1,169	D.U	2,631
2 - Bed	2.25 spaces / D.U	5	155	D.U	349	410	D.U	923	265	D.U	596	830	D.U	1,868
3 - Bed	2.25 spaces / D.U	5	25	D.U	56	63	D.U	142	41	D.U	92	129	D.U	290
Subtotal Condominiums			400	D.U	900	1,048	D.U	2,359	680	D.U	1,530	2,128	D.U	4,789
Apartments 1 - Bed	1 space / D.U	6	70	D.U	70	197	D.U	197	128	D.U	128	395	D.U	395
2 - Bed	1 space / D.U	6	0	D.U	0	65	D.U	65	42	D.U	42	107	D.U	107
3 - Bed	1 space / D.U	6	30	D.U	30	0	D.U	0	0	D.U	0	30	D.U	30
Subtotal Apartments			100	D.U	100	262	D.U	262	170	D.U	170	532	D.U	532
Subtotal Residential			500	D.U	1,000	1,310	D.U	2,621	850	D.U	1,700	2,660	D.U	5,321
Grand Total					1,429			2,695			1,801			5,925

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. CDP Advisory Agency Policy AA - 2000 - 1
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Table B-10 **City Code Parking Requirement (All Uses)**
Project with Additional Residential Development Option

5/19/2006

Land Use	City Code Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	275	Rooms	54	0	Rooms	0	0	Rooms	0	275	Rooms	54
Meeting Space	10 spaces / 1,000 s.f	2	9,000	S.F	90	0	S.F	0	0	S.F	0	9,000	S.F	90
Subtotal Hotel					144			0			0			144
Retail	1 space / 1,000 s.f	3	168,000	S.F	168	64,000	S.F	64	86,000	S.F	86	318,000	S.F	318
Restaurant	1 space / 1,000 s.f	3,7	42,000	S.F	42	10,000	S.F	10	15,000	S.F	15	67,000	S.F	67
Health Club	1 space / 1,000 s.f	3	50,000	S.F	50	0	S.F	0	0	S.F	0	50,000	S.F	50
Event Facility	1 space / 10 seats	4	250	Seats	25	0	Seats	0	0	Seats	0	250	Seats	25
Subtotal Commercial					285			74			101			460
Office	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Condominiums 1 - Bed	1 space / D.U	5	220	D.U	220	575	D.U	575	374	D.U	374	1,169	D.U	1,169
2 - Bed	1 space / D.U	5	155	D.U	155	410	D.U	410	265	D.U	265	830	D.U	830
3 - Bed	1.25 spaces / D.U	5	25	D.U	31	63	D.U	79	41	D.U	51	129	D.U	161
Subtotal Condominiums			400	D.U	406	1,048	D.U	1,064	680	D.U	690	2,128	D.U	2,160
Apartments 1 - Bed	1 space / D.U	6	70	D.U	70	197	D.U	197	128	D.U	128	395	D.U	395
2 - Bed	1 space / D.U	6	0	D.U	0	65	D.U	65	42	D.U	42	107	D.U	107
3 - Bed	1 space / D.U	6	30	D.U	30	0	D.U	0	0	D.U	0	30	D.U	30
Subtotal Apartments			100	D.U	100	262	D.U	262	170	D.U	170	532	D.U	532
Subtotal Residential			500	D.U	506	1,310	D.U	1,326	850	D.U	860	2,660	D.U	2,692
Grand Total					935			1,400			961			3,296

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. LAMC 12.21 A.4. (p).(1) Exception for Central City Area.
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Table B-11. Estimated Parking Demand - Parcel W-1/W-2 - Summary - Project with Additional Residential Development Option

Land Use	Quantity	Units	Weekday Demand (Without Shared Parking)						Saturday Demand (Without Shared Parking)					
			Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)	Base Rate	Project Internal Reduction	Walk-In & Walk-Out	% Transit & R/S & Taxi	Net Rate	Adjusted Parking Demand (Spaces)
Block W														
Retail/Restaurant/Entertainment														
Local	32,000	1,000 S.F	3.80	15%	15%	5%	2.47	79	4.00	10%	5%	5%	3.20	102
Regional	32,000	1,000 S.F	3.80	15%	15%	5%	2.47	79	4.00	5%	5%	5%	3.40	109
Restaurant	10,000	1,000 S.F	15.00	15%	30%	5%	7.50	75	15.00	15%	15%	5%	9.75	98
Clubs/Bars	0	1,000 S.F	10.00		10%		9.00	0	10.00		5%		9.50	0
Subtotal	74,000						3.15	233					4.17	309
Museum Exhibit	0	1,000 S.F	3.00				3.00	0	4.00				4.00	0
Museum Theater	0	1,000 S.F												
	0	Seats	0.40				0.40	0	0.50				0.50	0
Subtotal	0							0						0
R/R/E Total	74,000							233						309
Hotel														
Rooms	0	Rooms	1.00		20%	20%	0.60	0	1.00		5%	20%	0.75	0
Meeting Space	0	S.F	10.00		10%	5%	8.50	0	10.00		0%	5%	9.50	0
Subtotal	0	1,000 S.F						0						0
Residential														
Condominiums 1-Bed	575	D.U	1.00				1.00	575	1.00				1.00	575
Condominiums 2-Bed	410	D.U	2.00				2.00	820	2.00				2.00	820
Condominiums 3-Bed+	63	D.U	3.00				3.00	189	3.00				3.00	189
Condominium - Subtotal	1,048						1.51	1,584					1.00	1,584
Apartments Studio	0	D.U	1.00				1.00	0	1.00				1.00	0
Apartments 1-Bed	197	D.U	1.00				1.00	197	1.00				1.00	197
Apartments 2-Bed	65	D.U	1.50				1.50	98	1.50				1.50	98
Apartments - Subtotal	262	D.U					1.12	295					1.00	295
Residential Total	1,310							1,879						1,879
	692,733	1,000 S.F												
Office	0	1,000 S.F	4.10	0%	5%	35.4%	2.44	0	4.10	0%	5%	35.4%	2.44	0
Cinemas	0	1,000 S.F												
	0	Seats	0.25	5%	10%	5%	0.20	0	0.33	5%	10%	5%	0.26	0
Event Facility	0	1,000 S.F												
	0	Seats	0.33	5%	5%	5%	0.28	0	0.33	5%	5%	5%	0.28	0
Total Spaces - Block W								2,112						2,187

Summary of Land Use

Lanc Use	Quantity	Units
Residential	1,310 692,733	D.U 1,000 S.F
Commercial	74,000	1,000 S.F
Total	766,733	1,000 S.F

Hotel Rooms	0
Seats	0

With Shared Parking

Weekday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
1,879	1,879	1,879
233	181	181
2,112	2,059	2,059

With Shared Parking

Saturday		
Adjusted Parking Demand	Shared Parking Demand	
	Peak Month	Typical Month
1,879	1,879	1,879
309	202	202
2,187	2,081	2,081

Table B-12. Peak Shared Parking Demand Estimate - Parcel W-1/W-2
Project with Additional Residential Development Option

The Mobility Group
04/24/06

Hours of Day	Office	Retail	Restaurant	Cinema	Museum Exhibit	Museum Theater/ Event Facility	Hotel		Total Spaces	Hour of Day	Peak Hour *
							Guest Room	Meeting Space			
Weekday	100%	75%	100%	100%	100%	100%	100%	100%		Weekday	
Initial Spaces:	0	158	75	0	0	0	0	0	233		
6:00 AM	0	0	0	0	0	0	0	0	0	6:00 AM	
7:00 AM	0	9	2	0	0	0	0	0	11	7:00 AM	
8:00 AM	0	21	4	0	0	0	0	0	25	8:00 AM	
9:00 AM	0	50	8	0	0	0	0	0	57	9:00 AM	
10:00 AM	0	81	15	0	0	0	0	0	96	10:00 AM	
11:00 AM	0	103	23	0	0	0	0	0	126	11:00 AM	
12:00 PM	0	115	38	0	0	0	0	0	153	12:00 PM	T
1:00 PM	0	119	53	0	0	0	0	0	171	1:00 PM	
2:00 PM	0	115	45	0	0	0	0	0	160	2:00 PM	
3:00 PM	0	113	45	0	0	0	0	0	158	3:00 PM	
4:00 PM	0	103	38	0	0	0	0	0	141	4:00 PM	
5:00 PM	0	94	53	0	0	0	0	0	146	5:00 PM	
6:00 PM	0	97	68	0	0	0	0	0	165	6:00 PM	
7:00 PM	0	106	75	0	0	0	0	0	181	7:00 PM	P
8:00 PM	0	103	75	0	0	0	0	0	178	8:00 PM	
9:00 PM	0	72	75	0	0	0	0	0	147	9:00 PM	
10:00 PM	0	38	68	0	0	0	0	0	105	10:00 PM	
11:00 PM	0	15	53	0	0	0	0	0	68	11:00 PM	
12:00 AM	0	0	38	0	0	0	0	0	38	12:00 AM	
Saturday	100%	75%	100%	100%	100%	100%	100%	100%		Saturday	
Initial Spaces:	0	211	98	0	0	0	0	0	309		
6:00 AM	0	0	0	0	0	0	0	0	0	6:00 AM	
7:00 AM	0	5	2	0	0	0	0	0	7	7:00 AM	
8:00 AM	0	16	3	0	0	0	0	0	19	8:00 AM	
9:00 AM	0	48	6	0	0	0	0	0	53	9:00 AM	
10:00 AM	0	71	8	0	0	0	0	0	79	10:00 AM	
11:00 AM	0	116	10	0	0	0	0	0	125	11:00 AM	
12:00 PM	0	135	29	0	0	0	0	0	164	12:00 PM	
1:00 PM	0	150	44	0	0	0	0	0	194	1:00 PM	
2:00 PM	0	158	44	0	0	0	0	0	202	2:00 PM	
3:00 PM	0	158	44	0	0	0	0	0	202	3:00 PM	P
4:00 PM	0	143	44	0	0	0	0	0	186	4:00 PM	
5:00 PM	0	119	59	0	0	0	0	0	177	5:00 PM	T
6:00 PM	0	103	88	0	0	0	0	0	191	6:00 PM	
7:00 PM	0	95	93	0	0	0	0	0	188	7:00 PM	
8:00 PM	0	87	98	0	0	0	0	0	185	8:00 PM	
9:00 PM	0	63	98	0	0	0	0	0	161	9:00 PM	
10:00 PM	0	60	93	0	0	0	0	0	153	10:00 PM	
11:00 PM	0	21	83	0	0	0	0	0	103	11:00 PM	
12:00 AM	0	0	68	0	0	0	0	0	68	12:00 AM	

Appendix C

Trip Generation and Parking Calculations for Alternatives Analysis

Alternative 2: No Project "B"

Table C-1 A.M Peak Hour Trip Generation - Alternative 2 - No Project "B"

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	0	D.U	0.00	1,2	0	0%	15%	5%		0	#DIV/0!	19%	0	81%	0
	0	S.F													
Apartments	0	D.U	0.30	1,3	0	0%	20%	25%		0	#DIV/0!	25%	0	75%	0
	0	S.F													
Subtotal Residential	0	D.U			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
	0	S.F													
Hotel	0	Rooms	0.00	1,4	0	5%	10%	20%		0	#DIV/0!	61%	0	39%	0
	0	S.F													
Office	1,417,755	S.F	1.10	1,5	1,565	0%	5%	40%	0%	891	57%	88%	784	12%	107
Market	20,000	S.F	1.97	1,6	39	20%	15%	0%	40%	15	39%	61%	9	39%	6
Retail	21,250	S.F	2.91	1,7	62	20%	15%	0%	50%	21	34%	61%	13	39%	8
Restaurant	5,000	S.F	0.81	1,8,9	4	20%	15%	0%	10%	3	74%	52%	2	48%	1
Event Facility	0	Seats	0.00	1,10	0	5%	5%	5%	10%	0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0	20%	35%	5%	20%	0	#DIV/0!	42%	0	58%	0
Subtotal Commercial	1,464,005	S.F			1,669					930	56%	87%	808	13%	123
Total Parcel Q	1,464,005	S.F			1,669					930	56%	87%	808	13%	122
Parcel W-1 / W-2															
Condominiums	147	D.U	0.48	1,2	71	0%	15%	5%		57	81%	19%	11	81%	46
	143,667	S.F													
Apartments	37	D.U	0.30	1,3	11	0%	20%	25%		7	60%	25%	2	75%	5
	35,917	S.F													
Subtotal Residential	184	D.U			82					64	78%	20%	13	80%	51
	179,584	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	148,037	S.F	1.73	1,5	257	0%	5%	40%	0%	146	57%	88%	128	12%	18
Retail	12,445	S.F	3.60	1,7	45	20%	15%	0%	50%	15	33%	61%	9	39%	6
Restaurant	0	S.F	0.81	1,8,9	0	30%	5%	0%	10%	0	#DIV/0!	52%	0	48%	0
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	160,482	S.F			302					161	53%	85%	137	15%	24
Total Parcel W-1 / W-2	340,066	S.F			384					225	59%	66%	150	33%	75

Table C-1 A.M Peak Hour Trip Generation - Alternative 2 - No Project "B"

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	527	D.U	0.34	1,2	182	0%	15%	5%		147	81%	19%	28	81%	119
	514,547	S.F													
Apartments	132	D.U	0.30	1,3	40	0%	20%	25%		24	60%	25%	6	75%	18
	128,637	S.F													
Subtotal Residential	659	D.U			222					171	77%	20%	34	80%	137
	643,184	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		88%	0	12%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	61%	0	39%	0
Restaurant	0	S.F	0.81	1,8,9	0	30%	5%	0%	10%	0	#DIV/0!	52%	0	48%	0
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel L / M-2	643,184	S.F			222					171	77%	20%	34	80%	137
Total All Parcels	2,447,255	S.F			2,274					1,326	58%	75%	992	25%	334

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.29(X)+28.26) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation (LN(T) = 1.24*LN(X) - 2.00) for Hotel was used.
5. ITE 710 trip generation equation (LN(T) = 0.80*LN(X) + 1.55) for General Office Building was used.
6. ITE 850 trip generation equation (LN(T) = 1.70*LN(X) - 1.42) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.60*LN(X) + 2.29) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution for the AM peak hour is not available. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sitdown Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.

Table C-2 P.M Peak Hour Trip Generation - Alternative 2 - No Project "B"

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	0	D.U	0.00	1,2	0	0%	15%	5%		0	#DIV/0!	62%	0	38%	0
	0	S.F													
Apartments	0	D.U	0.35	1,3	0	0%	20%	25%		0	#DIV/0!	61%	0	39%	0
	0	S.F													
Subtotal Residential	0	D.U			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
	0	S.F													
Hotel	0	Rooms	0.59	1,4	0	5%	10%	20%		0	#DIV/0!	53%	0	47%	0
	0	S.F													
Office	1,417,755	S.F	1.18	1,5	1,667	0%	5%	40%	0%	951	57%	17%	161	83%	790
Market	20,000	S.F	13.08	1,6	262	20%	15%	0%	40%	102	39%	51%	52	49%	50
Retail	21,250	S.F	10.60	1,7	225	20%	15%	0%	50%	73	33%	48%	35	52%	38
Restaurant	5,000	S.F	7.49	1,8	37	20%	15%	0%	10%	21	56%	67%	14	33%	7
Event Facility	0	Seats	0.07	1,9	0	5%	5%	5%	10%	0	#DIV/0!	75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0	20%	35%	5%	20%	0	#DIV/0!	51%	0	49%	0
Subtotal Commercial	1,464,005	S.F			2,191					1,147	52%	23%	262	77%	885
Total Parcel Q	1,464,005	S.F			2,191					1,147	52%	23%	262	77%	885
Parcel W-1 / W-2															
Condominiums	147	D.U	0.45	1,2	65	0%	15%	5%		52	79%	62%	32	38%	20
	143,667	S.F													
Apartments	37	D.U	0.35	1,3	13	0%	20%	25%		8	62%	61%	5	39%	3
	35,917	S.F													
Subtotal Residential	184	D.U			78					60	77%	62%	37	38%	23
	179,584	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	148,037	S.F	1.65	1,5	245	0%	5%	40%	0%	140	57%	17%	23	83%	117
Retail	12,445	S.F	12.71	1,7	158	20%	15%	0%	50%	51	33%	48%	24	52%	27
Restaurant	0	S.F	7.49	1,8	0	30%	5%	0%	10%	0	#DIV/0!	67%	0	33%	0
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	160,482	S.F			403					191	48%	25%	47	75%	144
Total Parcel W-1 / W-2	340,066	S.F			481					251	52%	33%	84	66%	167

Table C-2 P.M Peak Hour Trip Generation - Alternative 2 - No Project "B"

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	527	D.U	0.37	1,2	195	0%	15%	5%		157	81%	62%	97	38%	60
	514,547	S.F													
Apartments	132	D.U	0.35	1,3	46	0%	20%	25%		28	61%	61%	17	39%	11
	128,637	S.F													
Subtotal Residential	659	D.U			241					185	77%	62%	114	38%	71
	643,184	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		17%	0	83%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	48%	0	52%	0
Restaurant	0	S.F	7.49	1,8	0	30%	5%	0%	10%	0	#DIV/0!	67%	0	33%	0
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel L / M-2	643,184	S.F			241					185	77%	62%	114	38%	71
Total All Parcels	2,447,255	S.F			2,913					1,583	54%	29%	460	71%	1,123

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.34(X)+15.47) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip rate for Hotel was used.
5. ITE 710 trip generation equation (T=1.12(X)+78.81) for General Office Building was used.
6. ITE 850 trip generation equation (Ln(T) = 0.79*LN(X) + 3.20) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.66*LN(X) + 3.40) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. ITE 444 trip rate for Movie Theater with Matinee was used.
10. ITE 492 trip rate for Health / Fitness Club was used.

Table C-3 Daily Trip Generation - Alternative 2 - No Project "B" 5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	0	D.U	0.00	1,2	0	0%	15%	5%		0	#DIV/0!	50%	0	50%	0
	0	S.F													
Apartments	0	D.U	4.20	1,3	0	0%	20%	25%		0	#DIV/0!	50%	0	50%	0
	0	S.F													
Subtotal Residential	0	D.U			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
	0	S.F													
Hotel	0	Rooms	0.00	1,4	0	5%	10%	20%		0	#DIV/0!	50%	0	50%	0
	0	S.F													
Office	1,417,755	S.F	7.25	1,5	10,278	0%	5%	40%	0%			50%		50%	
Market	20,000	S.F	136.53	1,6	2,731	20%	15%	0%	40%	1,064	39%	50%	532	50%	532
Retail	21,250	S.F	116.78	1,7	2,482	20%	15%	0%	50%	806	33%	50%	403	50%	403
Restaurant	5,000	S.F	89.95	1,8	450	20%	15%	0%	10%	264	59%	50%	132	50%	132
Event Facility	0	Seats	1.76	1,9	0	5%	5%	5%	10%	0	#DIV/0!	50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0	20%	35%	5%	20%	0	#DIV/0!	50%	0	50%	0
Subtotal Commercial	1,464,005	S.F			15,940					2,134	13%	50%	1,067	50%	1,067
Total Parcel Q	1,464,005	S.F			15,940					2,134	13%	50%	1,067	50%	1,067
Parcel W-1 / W-2															
Condominiums	147	D.U	5.29	1,2	778	0%	15%	5%		628	81%	50%	314	50%	314
	143,667	S.F													
Apartments	37	D.U	4.20	1,3	155	0%	20%	25%		93	60%	50%	46	50%	47
	35,917	S.F													
Subtotal Residential	184	D.U			933					721	77%	50%	360	50%	361
	179,584	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	148,037	S.F	12.19	1,5	1,805	0%	5%	40%	0%	1,028	57%	50%	514	50%	514
Retail	12,445	S.F	140.83	1,7	1,753	20%	15%	0%	50%	570	33%	50%	285	50%	285
Restaurant	0	S.F	89.95	1,8	0	30%	5%	0%	10%	0	#DIV/0!	50%	0	50%	0
Event Facility	0	Seats	1.76	1,9	0					0		50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	160,482	S.F			3,557					1,598	45%	50%	799	50%	799
Total Parcel W-1 / W-2	340,066	S.F			4,490					2,319	52%	50%	1,159	50%	1,160

Table C-3 Daily Trip Generation - Alternative 2 - No Project "B"

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	527 514,547	D.U S.F	4.19	1,2	2,210	0%	15%	5%		1,784	81%	50%	892	50%	892
Apartments	132 128,637	D.U S.F	4.20	1,3	554	0%	20%	25%		332	60%	50%	166	50%	166
Subtotal Residential	659 643,184	D.U S.F			2,765					2,116	77%	50%	1,058	50%	1,058
Hotel	0 0	Rooms S.F	0.00	1,4	0					0		50%	0	50%	0
Office	0	S.F	0.00	1,5	0					0		50%	0	50%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	50%	0	50%	0
Restaurant	0	S.F	89.95	1,8	0	30%	5%	0%	10%	0	#DIV/0!	50%	0	50%	0
Event Facility	0 0	Seats S.F	1.76	1,9	0					0			0		0
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel L / M-2	643,184	S.F			2,765					2,116	77%	50%	1,058	50%	1,058
Total All Parcels	2,447,255	S.F			23,196					6,569	28%	50%	3,284	50%	3,285

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2004, except otherwise noted.
2. ITE 232 daily trip generation equation (T= 3.77(X)+223.66) for High-Rise Condominium / Townhouse was used.
3. ITE 222 daily trip rate for High-Rise Apartments was used.
4. ITE 310 daily trip generation equation (T = 8.95*(X) - 373.16) for Hotel was used.
5. ITE 710 daily trip generation equation (LN(T) = 0.77*LN(X) + 3.65) for General Office Building was used.
6. ITE 850 daily trip generation equation (T = 66.95*(X) +1391.56) for Supermarket was used.
7. ITE 820 daily trip generation equation (LN(T) = 0.65*LN(X) + 5.83) for Shopping Center was used.
8. ITE 931 daily trip rate for Quality Restaurant was used.
9. ITE 444 daily trip rate for Movie Theater with Matinee is not available. Daily trip rate was estimated based on the ratio of ITE 443 weekday p.m peak hour of adjacent traffic to ITE 444 weekday p.m peak hour of adjacent traffic.
10. ITE 492 daily trip rate for Health / Fitness Club was used.

Table C-4 **City Code Parking Requirement (Commercial Uses) and CDP Advisory Agency AA-2000-1 (Residential Uses)**
Alternative 2: No Project "B"

5/23/2006

Land Use	City Code Requirement / CDP Advisory Agency Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	0	Rooms	0	0	Rooms	0	0	Rooms	0	0	Rooms	0
Meeting Space	10 spaces / 1,000 s.f	2	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Subtotal Hotel					0			0			0			0
Retail	1 space / 1,000 s.f	3	45,000	S.F	45	14,641	S.F	15	0	S.F	0	59,641	S.F	60
Restaurant	1 space / 1,000 s.f	3	5,000	S.F	5	0	S.F	0	0	S.F	0	5,000	S.F	5
Health Club	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Event Facility	1 space / 10 seats	4	0	Seats	0	0	Seats	0	0	Seats	0	0	Seats	0
Subtotal Commercial			50,000		50	14,641		15			0	64,641		65
Office	1 space / 1,000 s.f	3	1,417,755	S.F	1,418	148,037	S.F	148	0	S.F	0	1,565,792	S.F	1,566
Condominiums 1 - Bed	2.25 spaces / D.U	5	0	D.U	0	81	D.U	182	290	D.U	653	371	D.U	835
2 - Bed	2.25 spaces / D.U	5	0	D.U	0	57	D.U	128	205	D.U	461	262	D.U	589
3 - Bed	2.25 spaces / D.U	5	0	D.U	0	9	D.U	20	32	D.U	72	41	D.U	92
Subtotal Condominiums			0	D.U	0	147	D.U	330	527	D.U	1,186	674	D.U	1,516
Apartments 1 - Bed	1 space / D.U	6	0	D.U	0	28	D.U	28	99	D.U	99	127	D.U	127
2 - Bed	1 space / D.U	6	0	D.U	0	9	D.U	9	33	D.U	33	42	D.U	42
3 - Bed	1 space / D.U	6	0	D.U	0	0	D.U	0	0	D.U	0	0	D.U	0
Subtotal Apartments			0	D.U	0	37	D.U	37	132	D.U	132	169	D.U	169
Subtotal Residential			0	D.U	0	184	D.U	367	659	D.U	1,318	843	D.U	1,685
Grand Total					1,468			530			1,318			3,316

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. CDP Advisory Agency Policy AA - 2000 - 1
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.

Table C-5 City Code Parking Requirement (All Uses)
Alternative 2: No Project "B"

5/23/2006

Land Use	City Code Requirement	Footnotes	Parcel Q			Parcel W			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	0	Rooms	0	0	Rooms	0	0	Rooms	0	0	Rooms	0
Meeting Space	10 spaces / 1,000 s.f	2	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Subtotal Hotel					0			0			0			0
Retail	1 space / 1,000 s.f	3	45,000	S.F	45	14,641	S.F	15	0	S.F	0	59,641	S.F	60
Restaurant	1 space / 1,000 s.f	3,7	5,000	S.F	5	0	S.F	0	0	S.F	0	5,000	S.F	5
Health Club	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Event Facility	1 space / 10 seats	4	0	Seats	0	0	Seats	0	0	Seats	0	0	Seats	0
Subtotal Commercial			50,000		50	14,641		15			0	64,641		65
Office	1 space / 1,000 s.f	3	1,417,755	S.F	1,418	148,037	S.F	148	0	S.F	0	1,565,792	S.F	1,566
Condominiums 1 - Bed	1 space / D.U	5	0	D.U	0	81	D.U	81	290	D.U	290	371	D.U	371
2 - Bed	1 space / D.U	5	0	D.U	0	57	D.U	57	205	D.U	205	262	D.U	262
3 - Bed	1.25 spaces / D.U	5	0	D.U	0	9	D.U	11	32	D.U	40	41	D.U	51
Subtotal Condominiums			0	D.U	0	147	D.U	149	527	D.U	535	674	D.U	684
Apartments 1 - Bed	1 space / D.U	6	0	D.U	0	28	D.U	28	99	D.U	99	127	D.U	127
2 - Bed	1 space / D.U	6	0	D.U	0	9	D.U	9	33	D.U	33	42	D.U	42
3 - Bed	1 space / D.U	6	0	D.U	0	0	D.U	0	0	D.U	0	0	D.U	0
Subtotal Apartments			0	D.U	0	37	D.U	37	132	D.U	132	169	D.U	169
Subtotal Residential			0	D.U	0	184	D.U	186	659	D.U	667	843	D.U	853
Grand Total					1,468			349			667			2,484

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. LAMC 12.21 A.4. (p).(1) Exception for Central City Area.
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Alternative 3: Reduced Project

Table C-6 A.M Peak Hour Trip Generation - Alternative 3 - Reduced Project

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	300 400,922	D.U S.F	0.39	1,2	116	5%	15%	5%		88	76%	19%	17	81%	71
Apartments	75 73,781	D.U S.F	0.30	1,3	23	5%	20%	25%		13	56%	25%	3	75%	10
Subtotal Residential	375 474,703	D.U S.F			138					101	73%	20%	20	80%	81
Hotel	206 236,250	Rooms S.F	0.49	1,4	100	5%	10%	20%		68	68%	61%	41	39%	27
Office	0	S.F	0.00	1,5	0							88%		12%	
Market	39,750	S.F	3.18	1,6	127	15%	10%	5%	40%	54	43%	61%	33	39%	21
Retail	73,313	S.F	1.77	1,7	130	15%	20%	5%	30%	57	44%	61%	35	39%	22
Restaurant	31,500	S.F	0.81	1,8,9	26	15%	30%	5%	10%	12	47%	52%	6	48%	6
Event Facility	188 18,000	Seats S.F	0.00	1,10	0	5%	5%	5%	10%	0			0		0
Health Club	37,500	S.F	1.21	1,11	45	20%	35%	5%	20%	16	34%	42%	7	58%	9
Subtotal Commercial	200,063	S.F			328					139	42%	58%	81	42%	58
Total Parcel Q	911,016	S.F			566					308	54%	46%	142	54%	166
Parcel W-1 / W-2															
Condominiums	426 414,754	D.U S.F	0.36	1,2	152	5%	15%	5%		116	76%	19%	22	81%	94
Apartments	107 104,796	D.U S.F	0.30	1,3	32	5%	20%	25%		18	56%	25%	5	75%	13
Subtotal Residential	533 519,550	D.U S.F			184					134	73%	20%	27	80%	107
Hotel	0 0	Rooms S.F	0.00	1,4	0					0		61%	0	39%	0
Office	510,750	S.F	1.70	1,5	871	0%	5%	40%	0%	496	57%	89%	441	11%	55
Retail	40,800	S.F	2.24	1,7	91	15%	20%	5%	40%	34	37%	61%	21	39%	13
Restaurant	7,500	S.F	0.81	1,8,9	6	15%	30%	5%	10%	3	49%	52%	2	48%	1
Event Facility	0 0	Seats S.F	0.00	1,10	0					0			0		0
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	559,050	S.F			968					533	55%	87%	464	13%	69
Total Parcel W-1 / W-2	1,078,600	S.F			1,152					667	58%	74%	491	26%	176

Table C-6

A.M Peak Hour Trip Generation - Alternative 3 - Reduced Project

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	510	D.U	0.35	1,2	177	5%	15%	5%		134	76%	19%	25	81%	109
	496,538	S.F													
Apartments	127	D.U	0.30	1,3	38	5%	20%	25%		21	56%	25%	5	75%	16
	125,460	S.F													
Subtotal Residential	637	D.U			215					155	72%	19%	30	81%	125
	621,998	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		88%	0	12%	0
Retail	54,825	S.F	1.99	1,7	109	15%	20%	5%	30%	47	43%	61%	29	39%	18
Restaurant	11,250	S.F	0.81	1,8,9	9	15%	30%	5%	10%	4	47%	52%	2	48%	2
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	66,075	S.F			118					51	44%	60%	31	40%	20
Total Parcel L / M-2	688,073	S.F			333					206	62%	30%	61	70%	145
Total All Parcels	2,677,689	S.F			2,051					1,181	58%	59%	694	41%	487

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.29(X)+28.26) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation (LN(T) = 1.24*LN(X) - 2.00) for Hotel was used.
5. ITE 715 trip generation equation (T = 1.66*(X) + 22.94) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (LN(T) = 1.70*LN(X) - 1.42) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.60*LN(X) + 2.29) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution for the AM peak hour is not available. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sitdown Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.

Table C-7 P.M Peak Hour Trip Generation - Alternative 3 - Reduced Project

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	300	D.U	0.39	1,2	117	5%	15%	5%		89	76%	62%	55	38%	34
	400,922	S.F													
Apartments	75	D.U	0.35	1,3	26	5%	20%	25%		15	56%	61%	9	39%	6
	73,781	S.F													
Subtotal Residential	375	D.U			143					104	73%	62%	64	38%	40
	474,703	S.F													
Hotel	206	Rooms	0.59	1,4	122	5%	10%	20%		83	68%	53%	44	47%	39
	236,250	S.F													
Office	0	S.F	0.00	1,5	0							17%		83%	
Market	39,750	S.F	11.32	1,6	450	15%	10%	5%	40%	192	43%	51%	98	49%	94
Retail	73,313	S.F	6.96	1,7	510	15%	20%	5%	30%	220	43%	48%	106	52%	114
Restaurant	31,500	S.F	7.49	1,8	236	15%	30%	5%	10%	111	47%	67%	74	33%	37
Event Facility	188	Seats	0.07	1,9	14	5%	5%	5%	10%	11	77%	75%	8	25%	3
	18,000	S.F													
Health Club	37,500	S.F	4.05	1,10	152	20%	35%	5%	20%	52	34%	51%	27	49%	25
Subtotal Commercial	200,063	S.F			1,362					586	43%	53%	313	47%	273
Total Parcel Q	911,016	S.F			1,626					773	48%	54%	421	46%	352
Parcel W-1 / W-2															
Condominiums	426	D.U	0.38	1,2	160	5%	15%	5%		121	75%	62%	75	38%	46
	414,754	S.F													
Apartments	107	D.U	0.35	1,3	37	5%	20%	25%		22	59%	61%	13	39%	9
	104,796	S.F													
Subtotal Residential	533	D.U			197					143	73%	62%	88	38%	55
	519,550	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	510,750	S.F	1.59	1,5	811	0%	5%	40%	0%	463	57%	15%	69	85%	394
Retail	40,800	S.F	8.49	1,7	346	15%	20%	5%	40%	128	37%	48%	61	52%	67
Restaurant	7,500	S.F	7.49	1,8	56	15%	30%	5%	10%	26	46%	67%	17	33%	9
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	559,050	S.F			1,213					617	51%	24%	147	76%	470
Total Parcel W-1 / W-2	1,078,600	S.F			1,410					760	54%	31%	235	69%	525

Table C-7 P.M Peak Hour Trip Generation - Alternative 3 - Reduced Project

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	510	D.U	0.37	1,2	189	5%	15%	5%		143	76%	62%	89	38%	54
	496,538	S.F													
Apartments	127	D.U	0.35	1,3	44	5%	20%	25%		26	58%	61%	16	39%	10
	125,460	S.F													
Subtotal Residential	637	D.U			233					169	73%	62%	105	38%	64
	621,998	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		17%	0	83%	0
Retail	54,825	S.F	7.68	1,7	421	15%	20%	5%	30%	182	43%	48%	87	52%	95
Restaurant	11,250	S.F	7.49	1,8	84	15%	30%	5%	10%	40	47%	67%	27	33%	13
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	66,075	S.F			505					222	44%	52%	114	49%	108
Total Parcel L / M-2	688,073	S.F			738					391	53%	56%	219	44%	172
Total All Parcels	2,677,689	S.F			3,774					1,924	51%	45%	875	55%	1,049

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation ($T=0.34(X)+15.47$) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip rate for Hotel was used.
5. ITE 710 trip generation equation ($T=1.52(X)+ 34.88$) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation ($Ln(T) = 0.79*LN(X) + 3.20$) for Supermarket was used.
7. ITE 820 trip generation equation ($LN(T) = 0.66*LN(X) + 3.40$) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. ITE 444 trip rate for Movie Theater with Matinee was used.
10. ITE 492 trip rate for Health / Fitness Club was used.

Table C-8 Daily Trip Generation - Alternative 3 - Reduced Project

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	300	D.U	4.52	1,2	1,355	5%	15%	5%		1,030	76%	50%	515	50%	515
	400,922	S.F													
Apartments	75	D.U	4.20	1,3	315	5%	20%	25%		177	56%	50%	89	50%	88
	73,781	S.F													
Subtotal Residential	375	D.U			1,670					1,207	72%	50%	603	50%	603
	474,703	S.F													
Hotel	206	Rooms	7.14	1,4	1,471	5%	10%	20%		1,000	68%	50%	500	50%	500
	236,250	S.F													
Office	0	S.F	0.00	1,5	0							50%		50%	
Market	39,750	S.F	101.96	1,6	4,053	15%	10%	5%	40%	1,733	43%	50%	867	50%	866
Retail	73,313	S.F	75.70	1,7	5,550	15%	20%	5%	30%	2,400	43%	50%	1,200	50%	1,200
Restaurant	31,500	S.F	89.95	1,8	2,833	15%	30%	5%	10%	1,333	47%	50%	666	50%	667
Event Facility	188	Seats	1.76	1,9	331	5%	5%	5%	10%	255	77%	50%	127	50%	128
	18,000	S.F													
Health Club	37,500	S.F	32.93	1,10	1,235	20%	35%	5%	20%	422	34%	50%	211	50%	211
Subtotal Commercial	200,063	S.F			14,002					6,143	44%	50%	3,071	50%	3,072
Total Parcel Q	911,016	S.F			17,143					8,350	49%	50%	4,174	50%	4,175
Parcel W-1 / W-2															
Condominiums	426	D.U	4.30	1,2	1,830	5%	15%	5%		1,391	76%	50%	695	50%	695
	414,754	S.F													
Apartments	107	D.U	4.20	1,3	449	5%	20%	25%		253	56%	50%	127	50%	126
	104,796	S.F													
Subtotal Residential	533	D.U			2,279					1,644	72%	50%	822	50%	822
	519,550	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	510,750	S.F	6.21	1,5	3,170	0%	5%	40%	0%	1,807	57%	50%	903	50%	904
Retail	40,800	S.F	92.94	1,7	3,792	15%	20%	5%	40%	1,404	37%	50%	702	50%	702
Restaurant	7,500	S.F	89.95	1,8	675	15%	30%	5%	10%	318	47%	50%	159	50%	159
Event Facility	0	Seats	1.76	1,9	0					0		50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	559,050	S.F			7,637					3,529	46%	50%	1,764	50%	1,765
Total Parcel W-1 / W-2	1,078,600	S.F			9,916					5,173	52%	50%	2,586	50%	2,587

Table C-8 Daily Trip Generation - Alternative 3 - Reduced Project

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums .	510	D.U	4.21	1,2	2,146	5%	15%	5%		1,632	76%	50%	816	50%	816
	496,538	S.F													
Apartments	127	D.U	4.20	1,3	533	5%	20%	25%		300	56%	50%	150	50%	150
	125,460	S.F													
Subtotal Residential	637	D.U			2,679					1,932	72%	50%	966	50%	966
	621,998	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		50%	0	50%	0
Retail	54,825	S.F	83.81	1,7	4,595	15%	20%	5%	30%	1,986	43%	50%	993	50%	993
Restaurant	11,250	S.F	89.95	1,8	1,012	15%	30%	5%	10%	476	47%	50%	238	50%	238
Event Facility	0	Seats	1.76	1,9	0					0			0		0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	66,075	S.F			5,607					2,462	44%	50%	1,231	50%	1,231
Total Parcel L / M-2	688,073	S.F			8,286					4,394	53%	50%	2,197	50%	2,196
Total All Parcels	2,677,689	S.F			35,345					17,917	51%	50%	8,958	50%	8,958

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 daily trip generation equation ($T= 3.77(X)+223.66$) for High-Rise Condominium / Townhouse was used.
3. ITE 222 daily trip rate for High-Rise Apartments was used.
4. ITE 310 daily trip generation equation ($T = 8.95*(X) - 373.16$) for Hotel was used.
5. ITE 715 trip generation equation ($LN(T) = 0.60*LN(X) + 4.32$) for Single Tenant Office Building was used.
6. ITE 850 daily trip generation equation ($T = 66.95*(X) +1391.56$) for Supermarket was used.
7. ITE 820 daily trip generation equation ($LN(T) = 0.65*LN(X) + 5.83$) for Shopping Center was used.
8. ITE 931 daily trip rate for Quality Restaurant was used.
9. ITE 444 daily trip rate for Movie Theater with Matinee is not available. Daily trip rate was estimated based on the ratio of ITE 443 weekday p.m peak hour of adjacent traffic to ITE 444 weekday p.m peak hour of adjacent traffic.
10. ITE 492 daily trip rate for Health / Fitness Club was used.

Table C-9 City Code Parking Requirement (Commercial Uses) and CDP Advisory Agency AA-2000-1 (Residential Uses)
Alternative 3: Reduced Project

5/23/2006

Land Use	City Code Requirement / CDP Advisory Agency Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	206	Rooms	43	0	Rooms	0	0	Rooms	0	206	Rooms	43
Meeting Space	10 spaces / 1,000 s.f	2	6,750	S.F	68	0	S.F	0	0	S.F	0	6,750	S.F	68
Subtotal Hotel					111			0			0			111
Retail	1 space / 1,000 s.f	3	126,000	S.F	126	48,000	S.F	48	64,500	S.F	64	238,500	S.F	238
Restaurant	1 space / 1,000 s.f	3	31,500	S.F	32	7,500	S.F	8	11,250	S.F	11	50,250	S.F	51
Health Club	1 space / 1,000 s.f	3	37,500	S.F	38	0	S.F	0	0	S.F	0	37,500	S.F	38
Event Facility	1 space / 10 seats	4	188	Seats	19	0	Seats	0	0	Seats	0	188	Seats	19
Subtotal Commercial			195,188		215	55,500		56	75,750		75	326,438		346
Office	1 space / 1,000 s.f	3	0	S.F	0	510,750	S.F	511	0	S.F	0	510,750	S.F	511
Condominiums 1 - Bed	2.25 spaces / D.U	5	165	D.U	371	234	D.U	527	280	D.U	630	679	D.U	1,528
2 - Bed	2.25 spaces / D.U	5	116	D.U	261	166	D.U	374	199	D.U	448	481	D.U	1,083
3 - Bed	2.25 spaces / D.U	5	19	D.U	43	26	D.U	59	31	D.U	70	76	D.U	172
Subtotal Condominiums			300	D.U	675	426	D.U	960	510	D.U	1,148	1,236	D.U	2,783
Apartments 1 - Bed	1 space / D.U	6	53	D.U	53	80	D.U	80	96	D.U	96	229	D.U	229
2 - Bed	1 space / D.U	6	0	D.U	0	27	D.U	27	31	D.U	31	58	D.U	58
3 - Bed	1 space / D.U	6	22	D.U	22	0	D.U	0	0	D.U	0	22	D.U	22
Subtotal Apartments			75	D.U	75	107	D.U	107	127	D.U	127	309	D.U	309
Subtotal Residential			375	D.U	750	533	D.U	1,067	637	D.U	1,275	1,545	D.U	3,092
Grand Total					1,076			1,634			1,350			4,060

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. CDP Advisory Agency Policy AA - 2000 - 1
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.

Table C-10 City Code Parking Requirement (All Uses)
Alternative 3: Reduced Project

5/23/2006

Land Use	City Code Requirement	Footnotes	Parcel Q			Parcel W			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	206	Rooms	43	0	Rooms	0	0	Rooms	0	206	Rooms	43
Meeting Space	10 spaces / 1,000 s.f	2	6,750	S.F	68	0	S.F	0	0	S.F	0	6,750	S.F	68
Subtotal Hotel					111			0			0			111
Retail	1 space / 1,000 s.f	3	126,000	S.F	126	48,000	S.F	48	64,500	S.F	64	238,500	S.F	238
Restaurant	1 space / 1,000 s.f	3,7	31,500	S.F	32	7,500	S.F	8	11,250	S.F	11	50,250	S.F	51
Health Club	1 space / 1,000 s.f	3	37,500	S.F	38	0	S.F	0	0	S.F	0	37,500	S.F	38
Event Facility	1 space / 10 seats	4	188	Seats	19	0	Seats	0	0	Seats	0	188	Seats	19
Subtotal Commercial			195,188		215	55,500		56			75	326,438		346
Office	1 space / 1,000 s.f	3	0	S.F	0	510,750	S.F	511	0	S.F	0	510,750	S.F	511
Condominiums 1 - Bed	1 space / D.U	5	165	D.U	165	234	D.U	234	280	D.U	280	679	D.U	679
2 - Bed	1 space / D.U	5	116	D.U	116	166	D.U	166	199	D.U	199	481	D.U	481
3 - Bed	1.25 spaces / D.U	5	19	D.U	24	26	D.U	33	31	D.U	39	76	D.U	96
Subtotal Condominiums			300	D.U	305	426	D.U	433	510	D.U	518	1,236	D.U	1,256
Apartments 1 - Bed	1 space / D.U	6	53	D.U	53	80	D.U	80	96	D.U	96	229	D.U	229
2 - Bed	1 space / D.U	6	0	D.U	0	27	D.U	27	31	D.U	31	58	D.U	58
3 - Bed	1 space / D.U	6	22	D.U	22	0	D.U	0	0	D.U	0	22	D.U	22
Subtotal Apartments			75	D.U	75	107	D.U	107	127	D.U	127	309	D.U	309
Subtotal Residential			375	D.U	380	533	D.U	540	637	D.U	645	1,545	D.U	1,565
Grand Total					706			1,107			720			2,533

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. LAMC 12.21 A.4. (p).(1) Exception for Central City Area.
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Alternative 5: Alternative Land Use

Table C-11 A.M Peak Hour Trip Generation - Alternative 5 - Alternative Land Use

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	731	D.U	0.33	1,2	241	0%	15%	5%		194	81%	19%	37	81%	157
	868,462	S.F													
Apartments	183	D.U	0.30	1,3	55	0%	20%	25%		33	60%	25%	8	75%	25
	181,850	S.F													
Subtotal Residential	914	D.U			296					227	77%	20%	45	80%	182
	1,050,312	S.F													
Hotel	0	Rooms	0.00	1,4	0	5%	10%	20%		0	#DIV/0!	61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0							88%		12%	
Market	15,000	S.F	1.61	1,6	24	20%	15%	0%	40%	9	39%	61%	6	39%	3
Retail	14,025	S.F	3.43	1,7	48	20%	15%	0%	50%	16	33%	61%	10	39%	6
Restaurant	3,500	S.F	0.81	1,8,9	3	20%	15%	0%	10%	2	71%	52%	1	48%	1
Event Facility	0	Seats	0.00	1,10	0	5%	5%	5%	10%	0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0	20%	35%	5%	20%	0	#DIV/0!	42%	0	58%	0
Subtotal Commercial	32,525	S.F			75					27	36%	63%	17	38%	10
Total Parcel Q	1,082,837	S.F			371					254	68%	24%	62	76%	192
Parcel W-1 / W-2															
Condominiums	1,201	D.U	0.31	1,2	377	0%	15%	5%		304	81%	19%	58	81%	246
	1,230,871	S.F													
Apartments	300	D.U	0.30	1,3	90	0%	20%	25%		54	60%	25%	13	75%	41
	299,523	S.F													
Subtotal Residential	1,501	D.U			467					358	77%	20%	71	80%	287
	1,530,394	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0	0%	5%	40%	0%	0	#DIV/0!	89%	0	11%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	61%	0	39%	0
Restaurant	0	S.F	0.81	1,8,9	0	30%	5%	0%	10%	0	#DIV/0!	52%	0	48%	0
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel W-1 / W-2	1,530,394	S.F			467					358	77%	20%	71	80%	287

Table C-11 A.M Peak Hour Trip Generation - Alternative 5 - Alternative Land Use

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	766	D.U	0.33	1,2	251	0%	15%	5%		203	81%	19%	39	81%	164
	795,284	S.F													
Apartments	191	D.U	0.30	1,3	57	0%	20%	25%		34	60%	25%	8	75%	26
	189,010	S.F													
Subtotal Residential	957	D.U			308					237	77%	20%	47	80%	190
	984,294	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		88%	0	12%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	61%	0	39%	0
Restaurant	0	S.F	0.81	1,8,9	0	30%	5%	0%	10%	0	#DIV/0!	52%	0	48%	0
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel L / M-2	984,294	S.F			308					237	77%	20%	47	80%	190
Total All Parcels	3,597,525	S.F			1,146					849	74%	21%	180	79%	669

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.29(X)+28.26) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation (LN(T) = 1.24*LN(X) - 2.00) for Hotel was used.
5. ITE 715 trip generation equation (T = 1.66*(X) + 22.94) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (LN(T) = 1.70*LN(X) - 1.42) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.60*LN(X) + 2.29) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution for the AM peak hour is not available. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sitdown Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.

Table C-12 P.M Peak Hour Trip Generation - Alternative 5 - Alternative Land Use

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	731	D.U	0.36	1,2	264	0%	15%	5%		213	81%	62%	132	38%	81
	868,462	S.F													
Apartments	183	D.U	0.35	1,3	64	0%	20%	25%		38	60%	61%	23	39%	15
	181,850	S.F													
Subtotal Residential	914	D.U			328					251	77%	62%	155	38%	96
	1,050,312	S.F													
Hotel	0	Rooms	0.59	1,4	0	5%	10%	20%		0	#DIV/0!	53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0							17%		83%	
Market	15,000	S.F	13.89	1,6	208	20%	15%	0%	40%	81	39%	51%	41	49%	40
Retail	14,025	S.F	12.21	1,7	171	20%	15%	0%	50%	56	33%	48%	27	52%	29
Restaurant	3,500	S.F	7.49	1,8	27	20%	15%	0%	10%	15	56%	67%	10	33%	5
Event Facility	0	Seats	0.07	1,9	0	5%	5%	5%	10%	0	#DIV/0!	75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0	20%	35%	5%	20%	0	#DIV/0!	51%	0	49%	0
Subtotal Commercial	32,525	S.F			407					152	37%	51%	78	49%	74
Total Parcel Q	1,082,837	S.F			736					403	55%	58%	233	42%	170
Parcel W-1 / W-2															
Condominiums	1,201	D.U	0.35	1,2	424	0%	15%	5%		342	81%	62%	212	38%	130
	1,230,871	S.F													
Apartments	300	D.U	0.35	1,3	105	0%	20%	25%		63	60%	61%	38	39%	25
	299,523	S.F													
Subtotal Residential	1,501	D.U			529					405	77%	62%	250	38%	155
	1,530,394	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0	0%	5%	40%	0%	0	#DIV/0!	15%	0	85%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	48%	0	52%	0
Restaurant	0	S.F	7.49	1,8	0	30%	5%	0%	10%	0	#DIV/0!	67%	0	33%	0
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel W-1 / W-2	1,530,394	S.F			529					405	77%	62%	250	38%	155

Table C-12

P.M Peak Hour Trip Generation - Alternative 5 - Alternative Land Use

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	766	D.U	0.36	1,2	276	0%	15%	5%		222	80%	62%	138	38%	84
	795,284	S.F													
Apartments	191	D.U	0.35	1,3	67	0%	20%	25%		41	61%	61%	25	39%	16
	189,010	S.F													
Subtotal Residential	957	D.U			343					263	77%	62%	163	38%	100
	984,294	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		17%	0	83%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	48%	0	52%	0
Restaurant	0	S.F	7.49	1,8	0	30%	5%	0%	10%	0	#DIV/0!	67%	0	33%	0
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel L / M-2	984,294	S.F			343					263	77%	62%	163	38%	100
Total All Parcels	3,597,525	S.F			1,608					1,071	67%	60%	646	40%	425

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 trip generation equation (T=0.34(X)+15.47) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip rate for Hotel was used.
5. ITE 710 trip generation equation (T=1.52(X)+ 34.88) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (Ln(T) = 0.79*LN(X) + 3.20) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.66*LN(X) + 3.40) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. ITE 444 trip rate for Movie Theater with Matinee was used.
10. ITE 492 trip rate for Health / Fitness Club was used.

Table C-13 Daily Trip Generation - Alternative 5 - Alternative Land Use

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	731	D.U	4.08	1,2	2,980	0%	15%	5%		2,406	81%	50%	1,203	50%	1,203
	868,462	S.F													
Apartments	183	D.U	4.20	1,3	769	0%	20%	25%		462	60%	50%	231	50%	231
	181,850	S.F													
Subtotal Residential	914	D.U			3,748					2,868	77%	50%	1,434	50%	1,434
	1,050,312	S.F													
Hotel	0	Rooms	0.00	1,4	0	5%	10%	20%		0	#DIV/0!	50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0							50%		50%	
Market	15,000	S.F	159.72	1,6	2,396	20%	15%	0%	40%	934	39%	50%	467	50%	467
Retail	14,025	S.F	135.06	1,7	1,894	20%	15%	0%	50%	616	33%	50%	308	50%	308
Restaurant	3,500	S.F	89.95	1,8	315	20%	15%	0%	10%	184	58%	50%	92	50%	92
Event Facility	0	Seats	1.76	1,9	0	5%	5%	5%	10%	0	#DIV/0!	50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0	20%	35%	5%	20%	0	#DIV/0!	50%	0	50%	0
Subtotal Commercial	32,525	S.F			4,605					1,733	38%	50%	867	50%	866
Total Parcel Q	1,082,837	S.F			8,353					4,601	55%	50%	2,301	50%	2,300
Parcel W-1 / W-2															
Condominiums	1,201	D.U	3.96	1,2	4,751	0%	15%	5%		3,836	81%	50%	1,918	50%	1,918
	1,230,871	S.F													
Apartments	300	D.U	4.20	1,3	1,260	0%	20%	25%		756	60%	50%	378	50%	378
	299,523	S.F													
Subtotal Residential	1,501	D.U			6,011					4,592	76%	50%	2,296	50%	2,296
	1,530,394	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0	0%	5%	40%	0%	0	#DIV/0!	50%	0	50%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	50%	0	50%	0
Restaurant	0	S.F	89.95	1,8	0	30%	5%	0%	10%	0	#DIV/0!	50%	0	50%	0
Event Facility	0	Seats	1.76	1,9	0					0		50%	0	50%	0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel W-1 / W-2	1,530,394	S.F			6,011					4,592	76%	50%	2,296	50%	2,296

Table C-13 Daily Trip Generation - Alternative 5 - Alternative Land Use

5/2/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	766	D.U	4.06	1,2	3,111	0%	15%	5%		2,512	81%	50%	1,256	50%	1,256
	795,284	S.F													
Apartments	191	D.U	4.20	1,3	802	0%	20%	25%		482	60%	50%	241	50%	241
	189,010	S.F													
Subtotal Residential	957	D.U			3,914					2,994	77%	50%	1,497	50%	1,497
	984,294	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		50%	0	50%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		50%	0	50%	0
Retail	0	S.F	#DIV/0!	1,7	0	30%	5%	0%	50%	0	#DIV/0!	50%	0	50%	0
Restaurant	0	S.F	89.95	1,8	0	30%	5%	0%	10%	0	#DIV/0!	50%	0	50%	0
Event Facility	0	Seats	1.76	1,9	0					0			0		0
	0	S.F													
Health Club	0	S.F	32.93	1,10	0					0		50%	0	50%	0
Subtotal Commercial	0	S.F			0					0	#DIV/0!	#DIV/0!	0	#DIV/0!	0
Total Parcel L / M-2	984,294	S.F			3,914					2,994	77%	50%	1,497	50%	1,497
Total All Parcels	3,597,525	S.F			18,278					12,187	67%	50%	6,094	50%	6,093

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2003, except otherwise noted.
2. ITE 232 daily trip generation equation (T= 3.77(X)+223.66) for High-Rise Condominium / Townhouse was used.
3. ITE 222 daily trip rate for High-Rise Apartments was used.
4. ITE 310 daily trip generation equation (T = 8.95*(X) - 373.16) for Hotel was used.
5. ITE 715 trip generation equation (LN(T) = 0.60*LN(X) + 4.32) for Single Tenant Office Building was used.
6. ITE 850 daily trip generation equation (T = 66.95*(X) +1391.56) for Supermarket was used.
7. ITE 820 daily trip generation equation (LN(T) = 0.65*LN(X) + 5.83) for Shopping Center was used.
8. ITE 931 daily trip rate for Quality Restaurant was used.
9. ITE 444 daily trip rate for Movie Theater with Matinee is not available. Daily trip rate was estimated based on the ratio of ITE 443 weekday p.m peak hour of adjacent traffic to ITE 444 weekday p.m peak hour of adjacent traffic.
10. ITE 492 daily trip rate for Health / Fitness Club was used.

Table C-14 City Code Parking Requirement (Commercial Uses) and CDP Advisory Agency AA-2000-1 (Residential Uses)
Alternative 5: Alternative Land Use

5/23/2006

Land Use	City Code Requirement / CDP Advisory Agency Requirement	Footnotes	Parcel Q			Parcel W-1/W-2			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	0	Rooms	0	0	Rooms	0	0	Rooms	0	0	Rooms	0
Meeting Space	10 spaces / 1,000 s.f	2	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Subtotal Hotel					0			0			0			0
Retail	1 space / 1,000 s.f	3	31,500	S.F	32	0	S.F	0	0	S.F	0	31,500	S.F	32
Restaurant	1 space / 1,000 s.f	3	3,500	S.F	4	0	S.F	0	0	S.F	0	3,500	S.F	4
Health Club	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Event Facility	1 space / 10 seats	4	0	Seats	0	0	Seats	0	0	Seats	0	0	Seats	0
Subtotal Commercial			35,000		36	0		0	0		0	35,000		36
Office	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Condominiums 1 - Bed	2.25 spaces / D.U	5	402	D.U	905	661	D.U	1,487	421	D.U	947	1,484	D.U	3,339
2 - Bed	2.25 spaces / D.U	5	285	D.U	641	468	D.U	1,053	299	D.U	673	1,052	D.U	2,367
3 - Bed	2.25 spaces / D.U	5	44	D.U	99	72	D.U	162	46	D.U	104	162	D.U	365
Subtotal Condominiums			731	D.U	1,645	1,201	D.U	2,702	766	D.U	1,724	2,698	D.U	6,071
Apartments 1 - Bed	1 space / D.U	6	130	D.U	130	225	D.U	225	143	D.U	143	498	D.U	498
2 - Bed	1 space / D.U	6	0	D.U	0	75	D.U	75	48	D.U	48	123	D.U	123
3 - Bed	1 space / D.U	6	53	D.U	53	0	D.U	0	0	D.U	0	53	D.U	53
Subtotal Apartments			183	D.U	183	300	D.U	300	191	D.U	191	674	D.U	674
Subtotal Residential			914	D.U	1,828	1,501	D.U	3,002	957	D.U	1,915	3,372	D.U	6,745
Grand Total					1,864			3,002			1,915			6,781

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. CDP Advisory Agency Policy AA - 2000 - 1
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.

Table C-15 City Code Parking Requirement (All Uses)
Alternative 5: Alternative Land Use

5/23/2006

Land Use	City Code Requirement	Footnotes	Parcel Q			Parcel W			Parcel L/M-2			Total Project		
			Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required	Quantity	Units	Spaces Required
Hotel - Rooms	See Note 1	1	0	Rooms	0	0	Rooms	0	0	Rooms	0	0	Rooms	0
Meeting Space	10 spaces / 1,000 s.f	2	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Subtotal Hotel					0			0			0			0
Retail	1 space / 1,000 s.f	3	31,500	S.F	32	0	S.F	0	0	S.F	0	31,500	S.F	32
Restaurant	1 space / 1,000 s.f	3,7	3,500	S.F	4	0	S.F	0	0	S.F	0	3,500	S.F	4
Health Club	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Event Facility	1 space / 10 seats	4	0	Seats	0	0	Seats	0	0	Seats	0	0	Seats	0
Subtotal Commercial			35,000		36	0		0			0	35,000		36
Office	1 space / 1,000 s.f	3	0	S.F	0	0	S.F	0	0	S.F	0	0	S.F	0
Condominiums 1 - Bed	1 space / D.U	5	402	D.U	402	661	D.U	661	421	D.U	421	1,484	D.U	1,484
2 - Bed	1 space / D.U	5	285	D.U	285	468	D.U	468	299	D.U	299	1,052	D.U	1,052
3 - Bed	1.25 spaces / D.U	5	44	D.U	55	72	D.U	90	46	D.U	58	162	D.U	203
Subtotal Condominiums			731	D.U	742	1,201	D.U	1,219	766	D.U	778	2,698	D.U	2,739
Apartments 1 - Bed	1 space / D.U	6	130	D.U	130	225	D.U	225	143	D.U	143	498	D.U	498
2 - Bed	1 space / D.U	6	0	D.U	0	75	D.U	75	48	D.U	48	123	D.U	123
3 - Bed	1 space / D.U	6	53	D.U	53	0	D.U	0	0	D.U	0	53	D.U	53
Subtotal Apartments			183	D.U	183	300	D.U	300	191	D.U	191	674	D.U	674
Subtotal Residential			914	D.U	925	1,501	D.U	1,519	957	D.U	969	3,372	D.U	3,413
Grand Total					961			1,519			969			3,449

Footnotes:

1. One space for each two individual guest room for first 20 rooms + one additional parking space for each four guest rooms in excess of 20 but not exceeding 40 + one additional parking space for each six guest rooms in excess of 40. (LAMC 12.21 A.4.(p).(2) Exception for Central City Area).
2. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
3. LAMC 12.21 A.4.(i).(3) Exception - Downtown Business District.
4. LAMC 12.21 A.4.(i).(1) Exception - Downtown Business District.
5. LAMC 12.21 A.4. (p).(1) Exception for Central City Area.
6. LAMC 12.22 A.25. (d).(2) Affordable Housing Production Incentives.
7. Includes 10,000 sq. ft. restaurant space in Civic Park.

Appendix D

LADOT Traffic Study Methodology Memorandum of Understanding

SCOPING FOR TRAFFIC STUDY

This Memorandum of Understanding (MOU) acknowledges Los Angeles Department of Transportation (LADOT) requirements of traffic impact analysis for the following project:

Project Name: Grand Avenue Implementation Plan
Project Address: Parcels Q, W-1/W-2, L/M-2 on Bunker Hill near Grand Avenue & Second Street
Project Description: Mixed use residential and commercial project. See Attachment A

Geographic Distribution: N 20 % S 30 % E 20 % W 30 %
See Attachment B for details.

Trip Generation Rate(s): ITE 7th Edition / Other See Attachment C

	Land Use		Land Use		Land Use	
	in	out	in	out	in	out
AM Trips						
PM Trips						

Project Buildout Year: Approx. 2015 Ambient or CMP Growth Rate: 1.0 % Per Yr.
Related Projects: (To be researched by the consultant and approved by LADOT) See Attachment D

Study Intersections

(Subject to revision after CMP requirement, related projects, trip generation and distribution are determined)

1. See Attachment E for List
2.
3.
4.
5.
6.
7.
8.
9.
10.

Trip Credits: (Exact amount of credit subject to approval by LADOT)

		yes	no
Transportation Demand Management (TDM)		☐	☒
Existing Active Land Use	None - Parking	☐	☒
Previous Land Use	None – Parking	☐	☒
Internal Trip	See Attachment C	☒	☐
Pass-By Trip	See Attachment C	☒	☐

This analysis must follow latest LADOT Traffic Study guidelines.

	Consultant	Developer
Name	The Mobility Group	The Related Companies L.P.
Address	18301 Von Karman, Suite 580 Irvine, CA 92612	60 Columbus Circle, 19th Floor New York, NY 10023
Phone No.	(949) 474 1591 949-474-1599	805-750-0744
Approved By:	04-18-06	4/25/06
	Consultant's Representative Date	LADOT Representative Date

Attachment A

Project Description

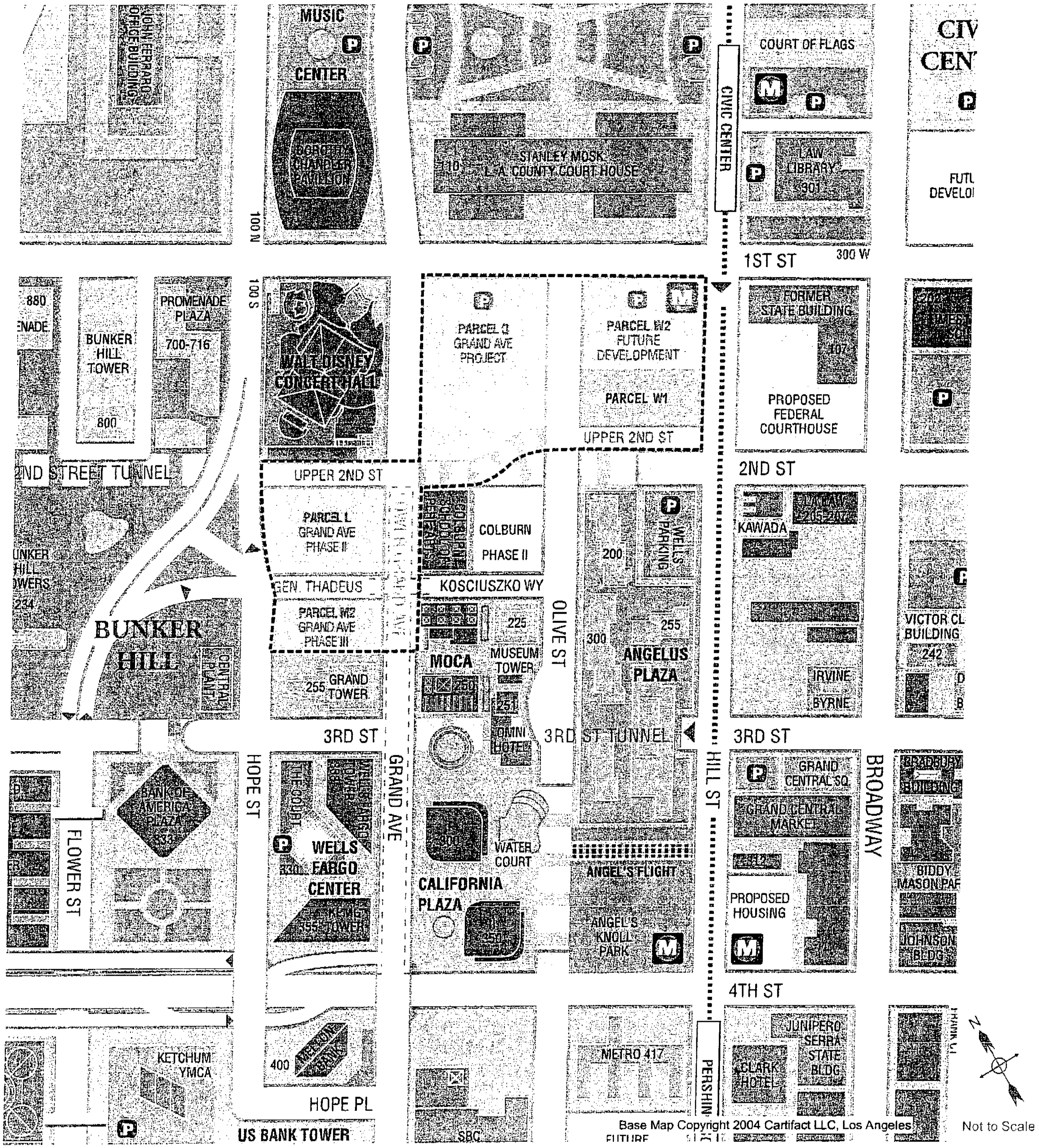
Grand Avenue Implementation Plan
Project Description
(as of 04-10-06)

The proposed Project location is shown in Figure 1. The proposed Project access points are illustrated in Figure 2.

The proposed Project Description is summarized below by approximate land use type and quantity.

Category	Element	DU's/Rooms/ Seats	Square Feet
Residential	Condominiums	1,648	1,834,617
	Apartments	412	405,383
	Sub-total	2,060	2,240,000
Hotel	Rooms	275	215,000
	Meeting Space		15,000
	Sub-Total		230,000
Commercial	Market		53,000
	Retail		265,000
	Restaurant		57,000
	Event	250	24,000
	Health Club		50,000
	Sub-total		449,000
Office			681,000
Commercial/Office	Sub-total		1,130,000
TOTAL ALL USES			3,600,000

Source: The Related Companies: Doug Gardner April 10, 2006.



Base Map Copyright 2004 Cartifact LLC, Los Angeles

Not to Scale

Legend

┆ Project Site

3/28/05

Figure 1
Project Location

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

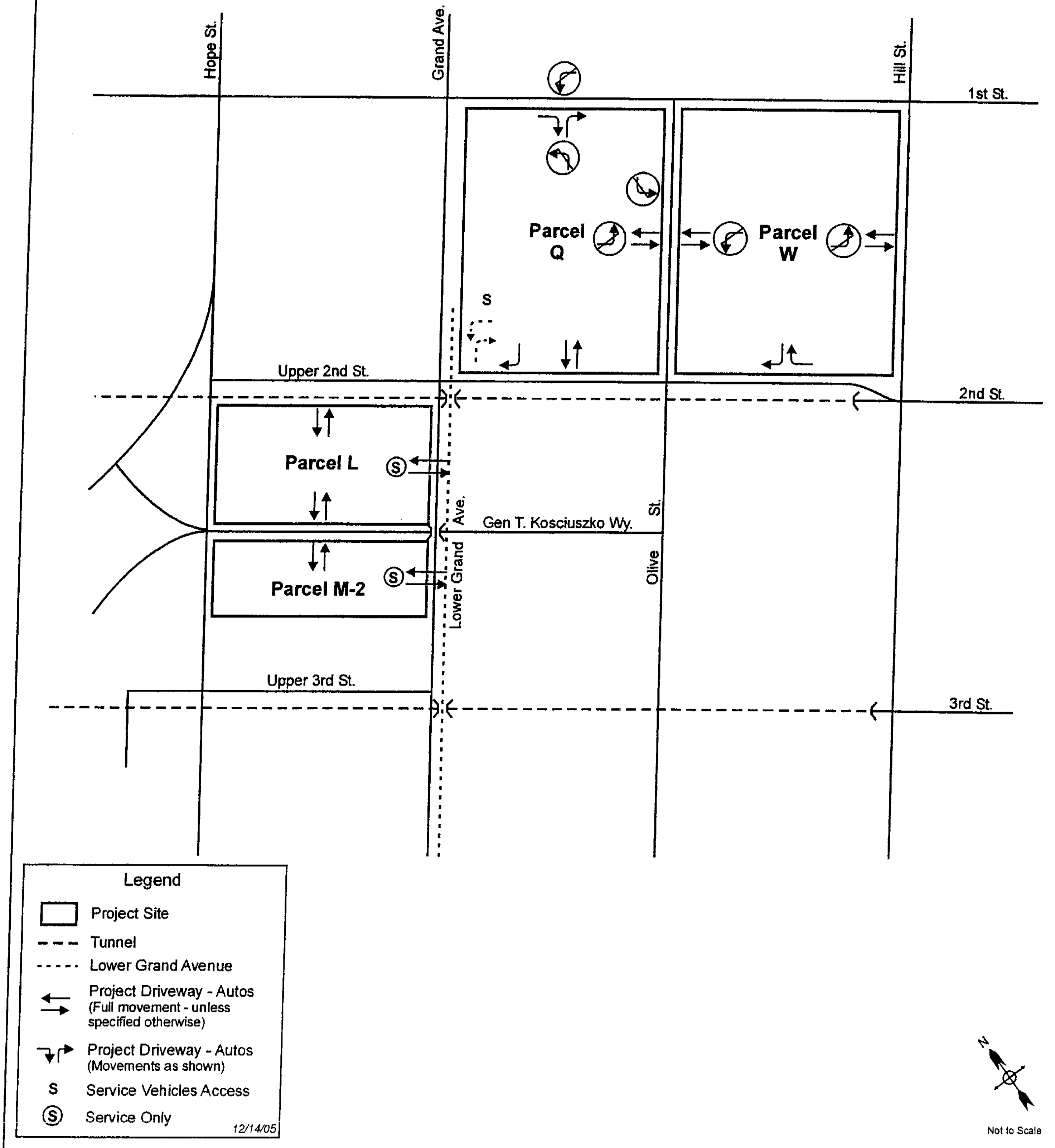


Figure 2
Project Site and Proposed Access Locations

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

Attachment B

Trip Distribution

Grand Avenue Implementation Plan - Trip Distribution Details

Based on consideration of regional trip distribution patterns (e.g. LACMTA CMP), the freeway and street network serving the area of the Proposed Project, the land use types proposed for the Project, and the location of sub-regional employment and population centers, the following overall and detailed trip distribution assumptions were developed for Project trips.

Overall Distribution

North	20%
East	20%
South	30%
West	30%

Overall Freeway/Surface Street Split

Freeway	50%
Surface Street	50%

Allocation of Trips to Individual Freeways and Streets

The allocation of Project trips to specific freeways and surface streets is shown in Figure 3a (for inbound) and in Figure 3b (for outbound) attached. In addition to the sources identified above, these allocations were also made on the basis of which streets best serve the proposed Project. Note that allocation to specific streets may differ for different parcels based on driveway locations and the relationship to the directionality of the street system.

The percentage distribution of freeway trips to freeway ramps is shown in Figures 3c and 3d for Parcel Q, in Figures 3e and 3f for Parcel W, and in Figures 3g and 3h for Parcel L/M-2.

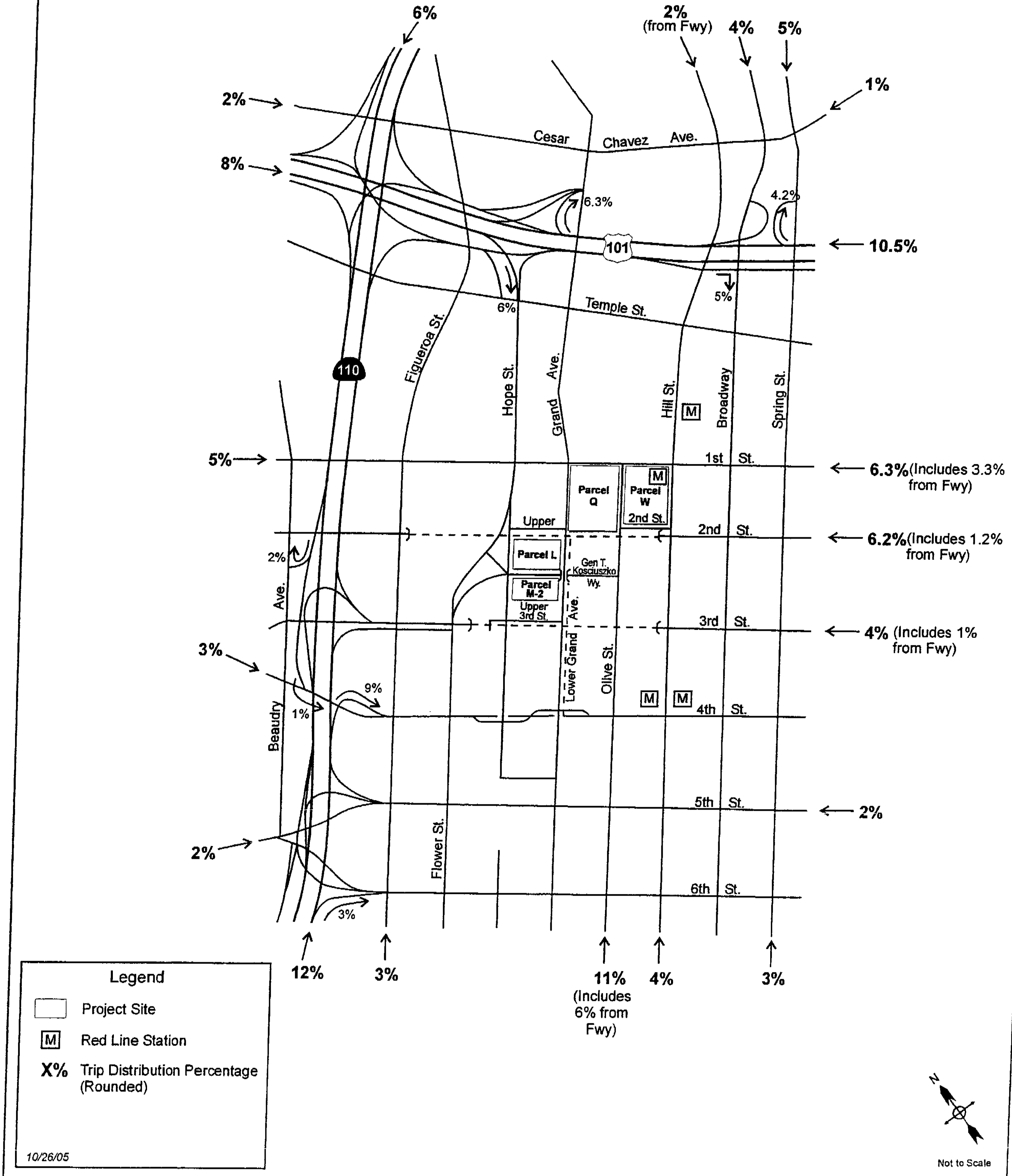


Figure 3a
Project Trip Distribution - Inbound

Grand Avenue Project

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Transportation Strategies & Solutions

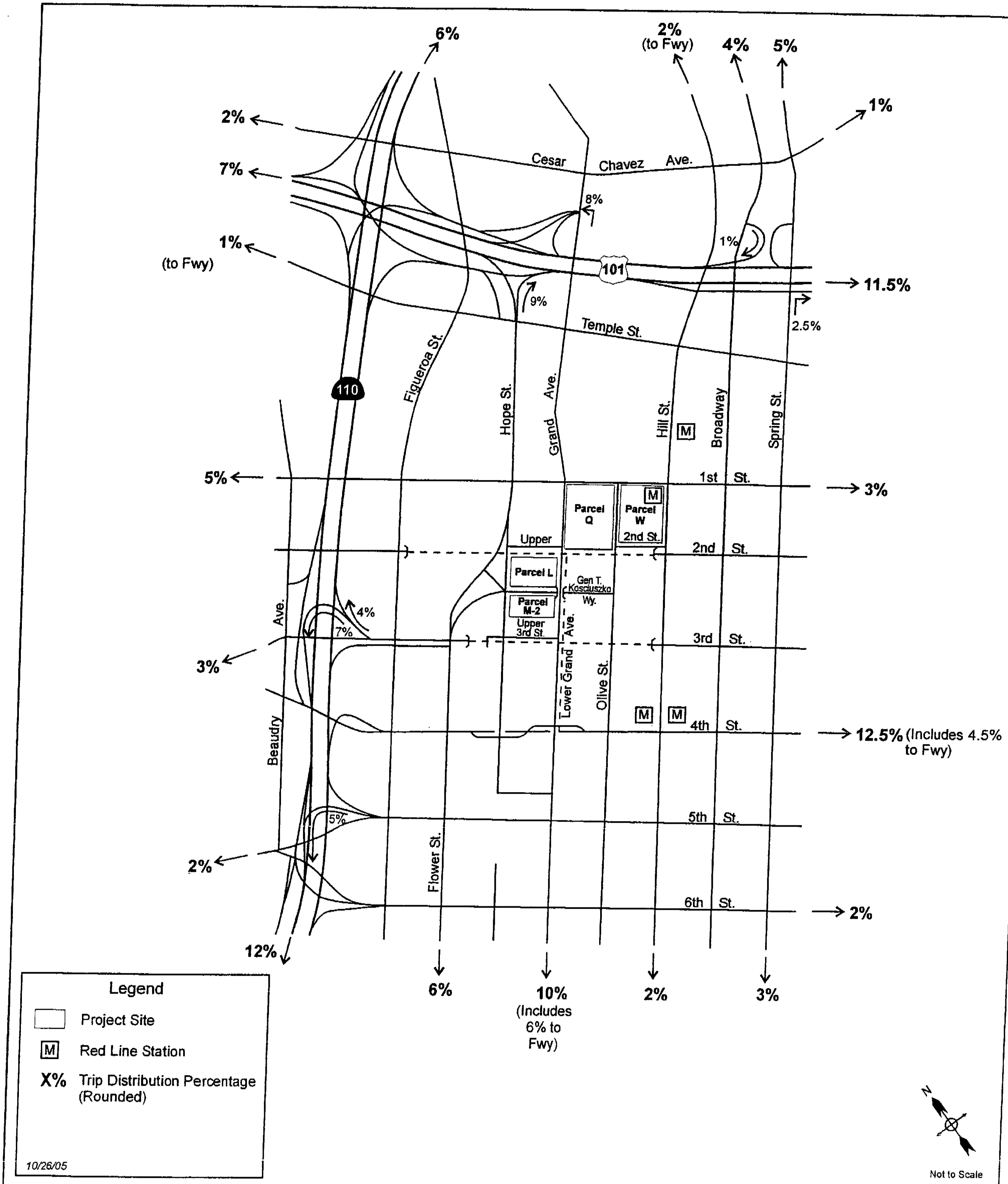

Figure 3b
Project Trip Distribution - Outbound

Grand Avenue Project

The Mobility Group
Transportation Strategies & Solutions

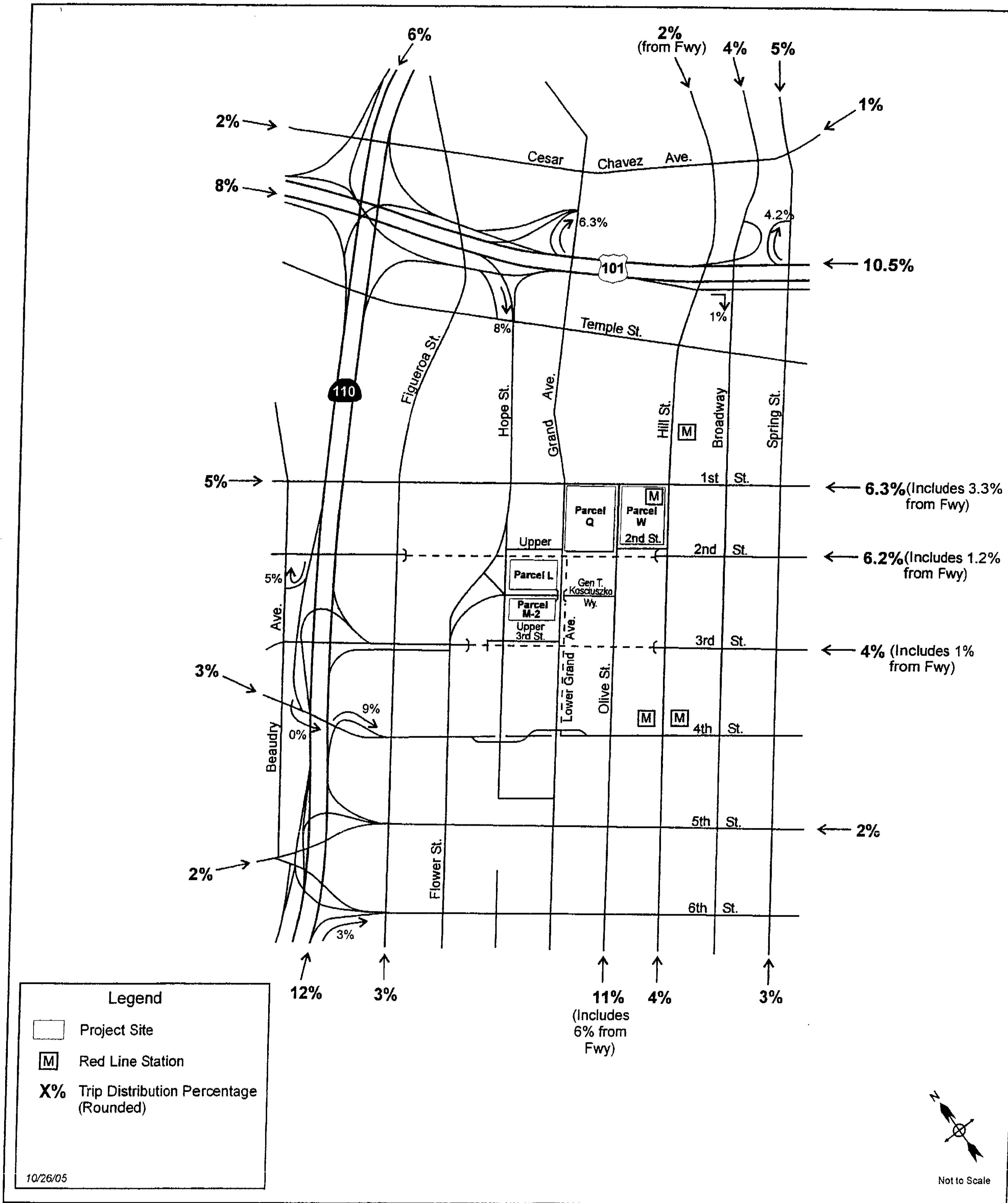

Figure 3c
Project Trip Distribution - Inbound - For Parcel Q Ramp Distribution

Grand Avenue Project

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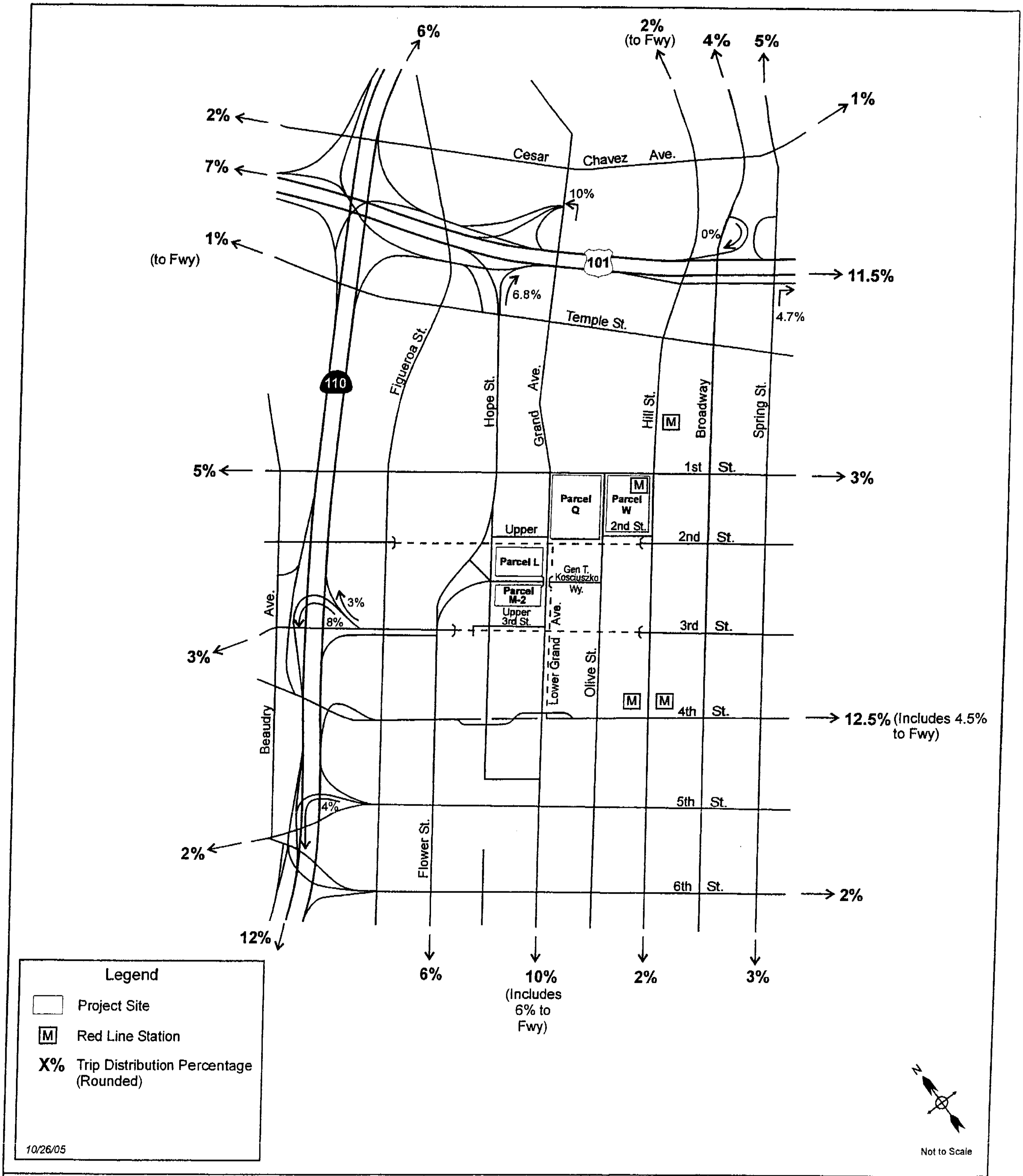

Figure 3d
Project Trip Distribution - Outbound - For Parcel Q Ramp Distribution

Grand Avenue Project

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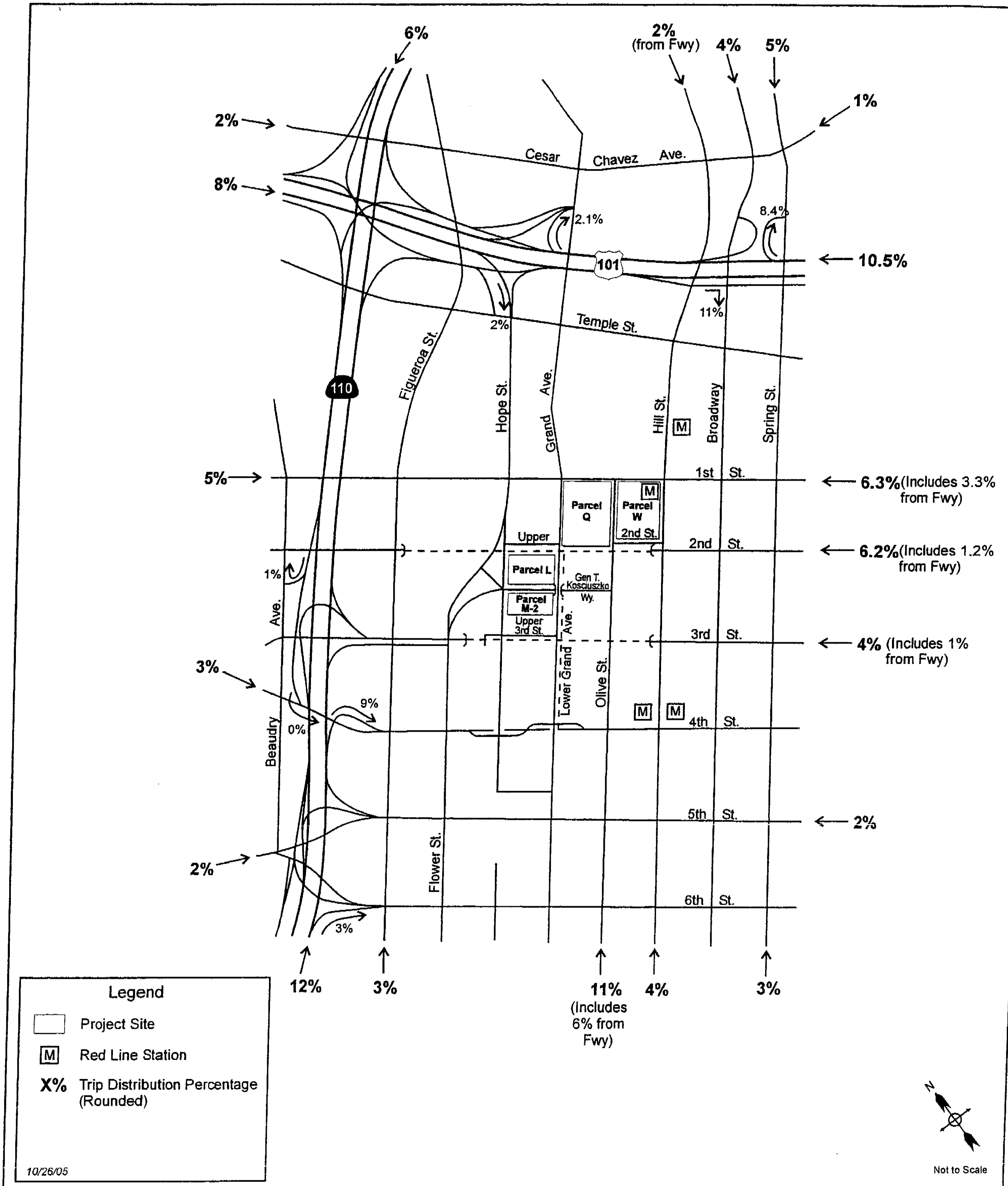

Figure 3e
Project Trip Distribution - Inbound - For Parcel W Ramp Distribution

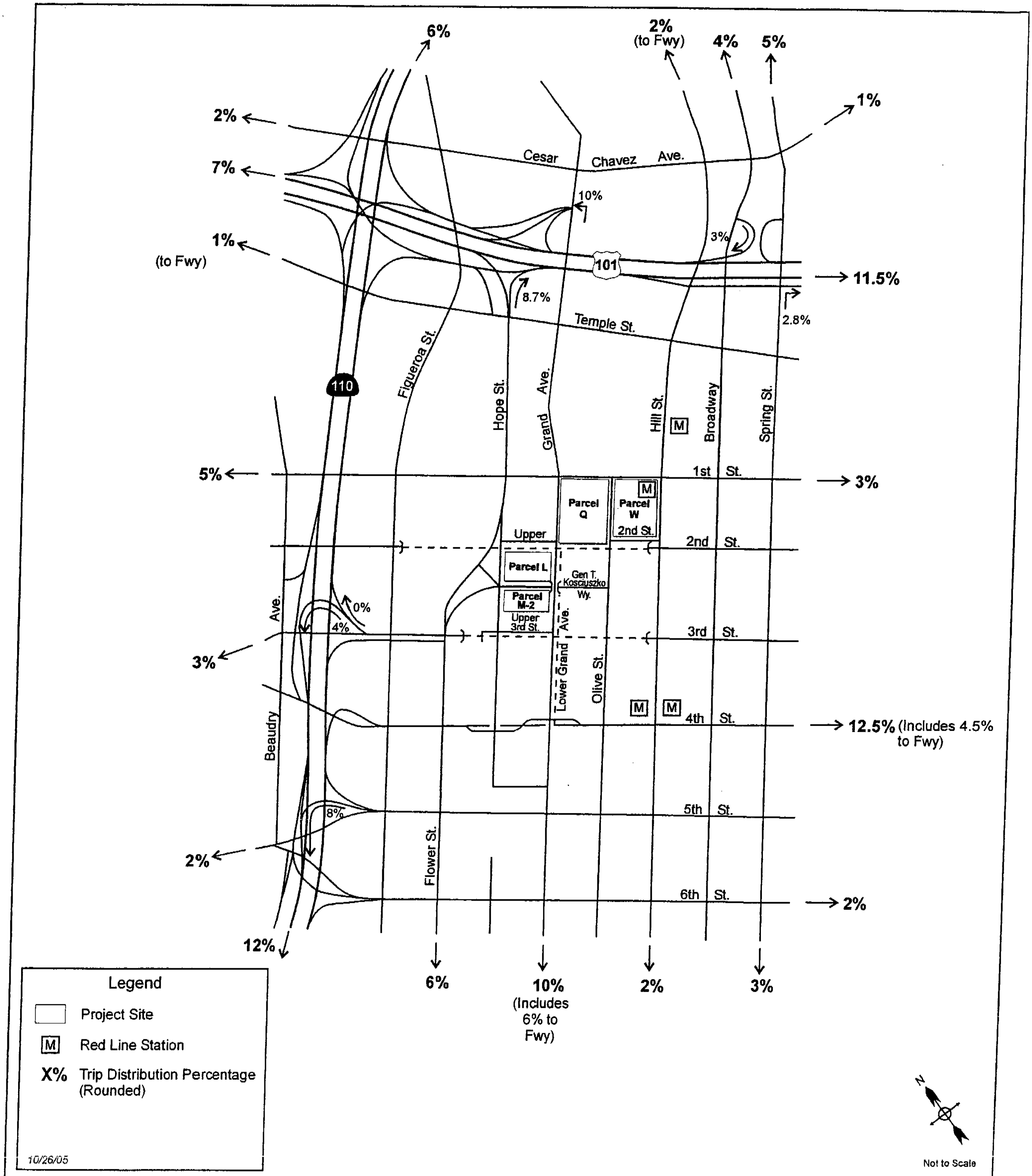

Figure 3f

Project Trip Distribution - Outbound - For Parcel W Ramp Distribution

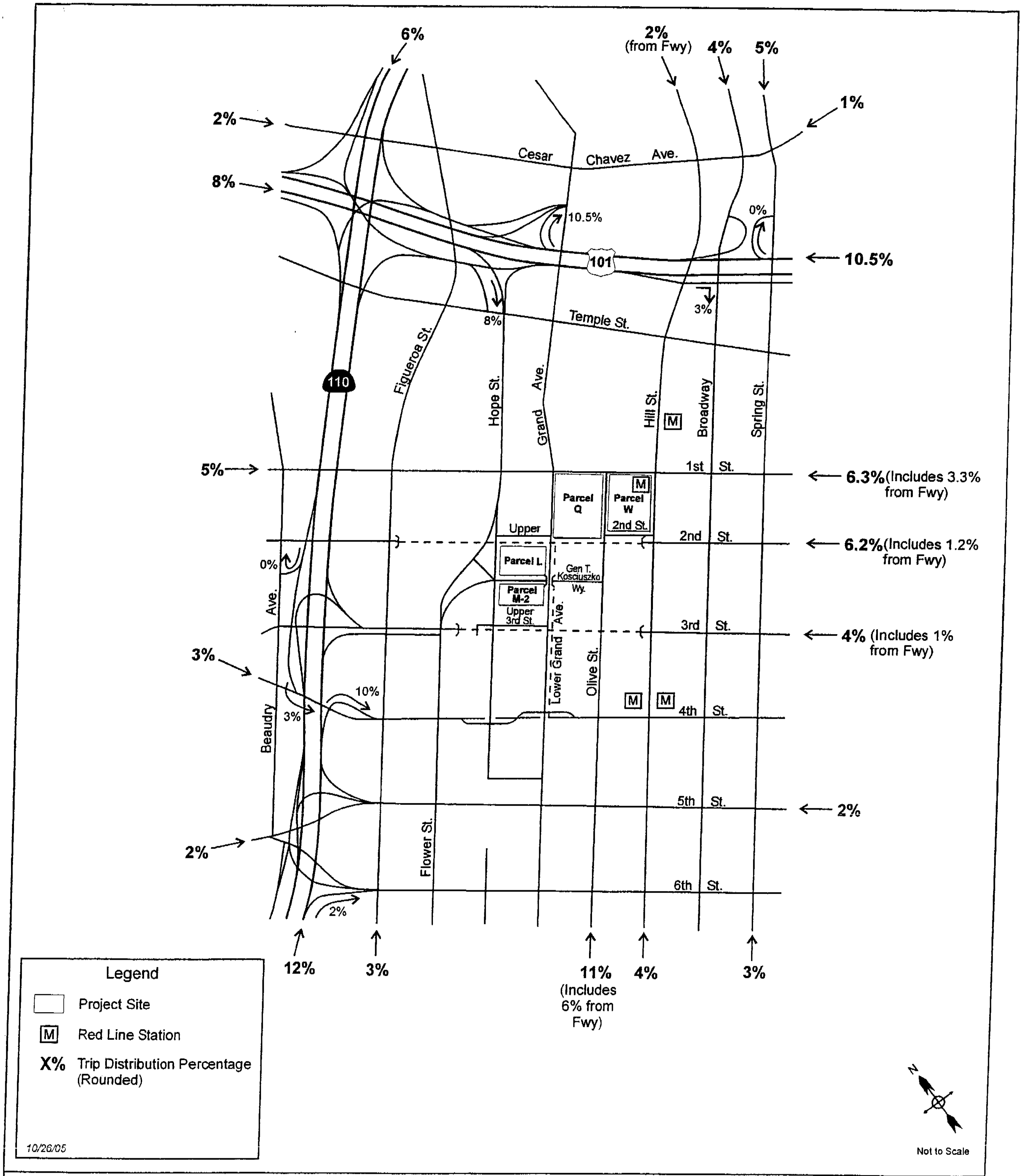

Figure 3g

Project Trip Distribution - Inbound - For Parcel L / M 2 Ramp Distribution

Grand Avenue Project

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Transportation Strategies & Solutions

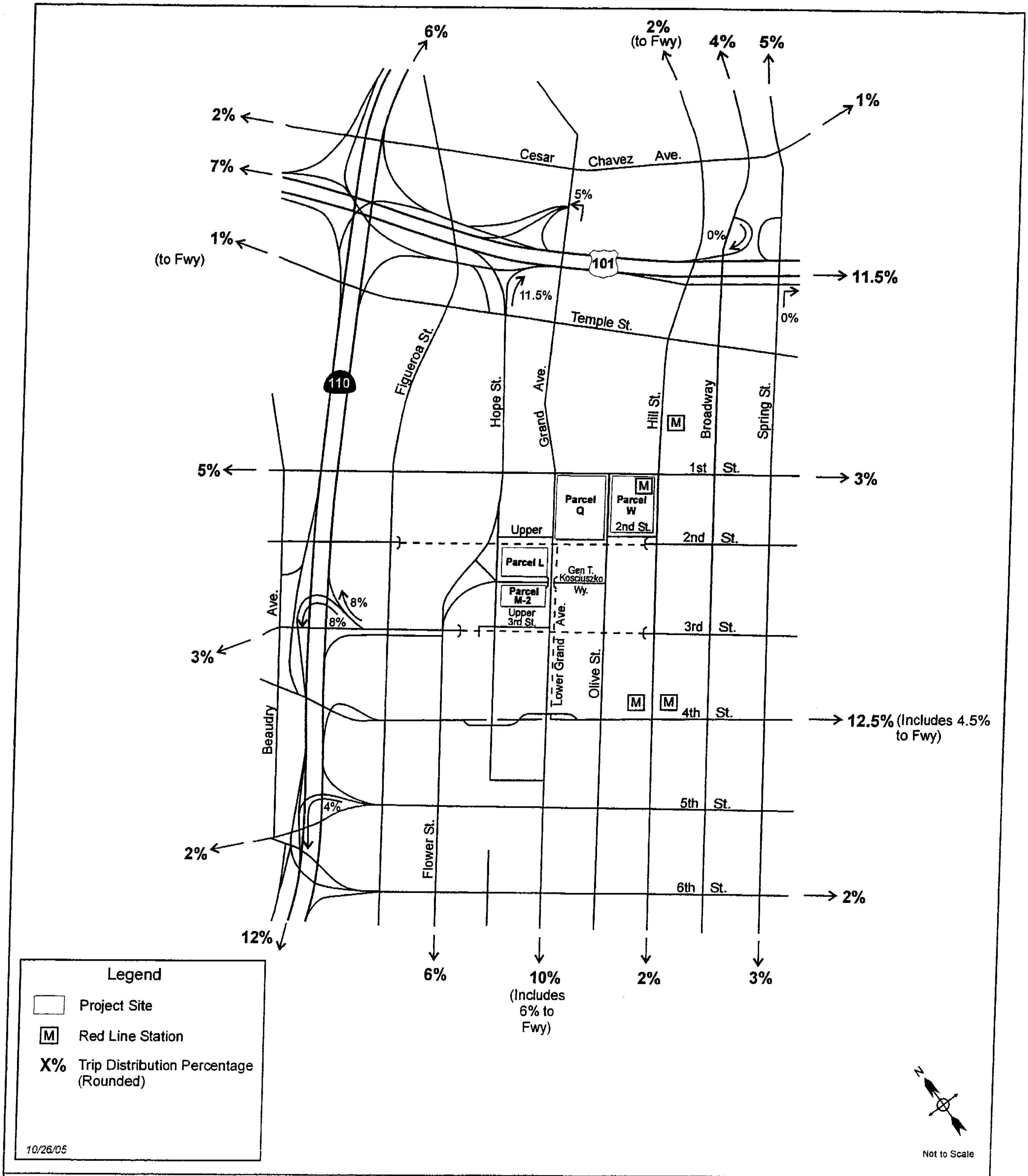

Figure 3h
Project Trip Distribution - Outbound - For Parcel L / M 2 Ramp Distribution

Grand Avenue Project

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Transportation Strategies & Solutions

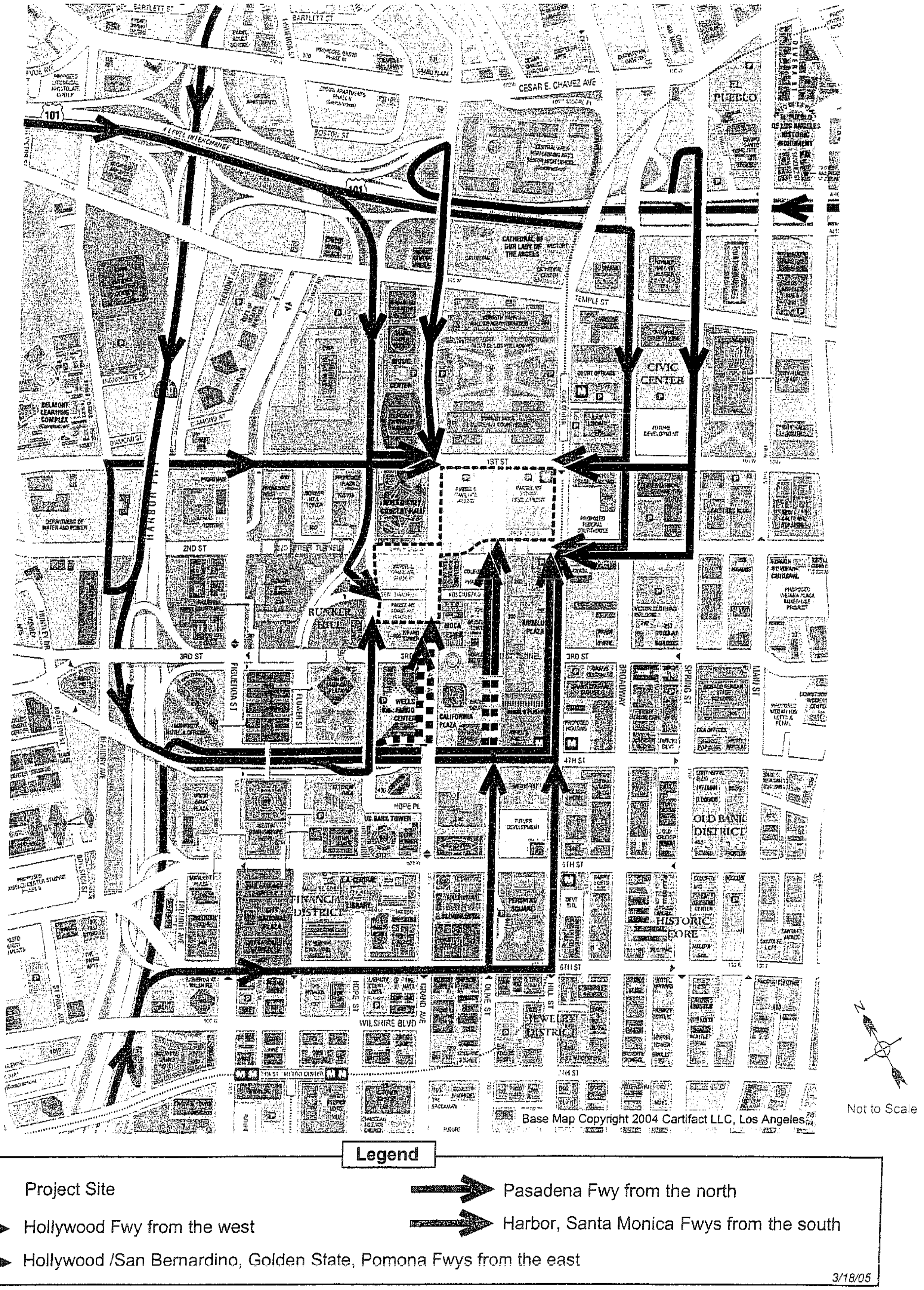


Figure 4
Access Routes From Freeways

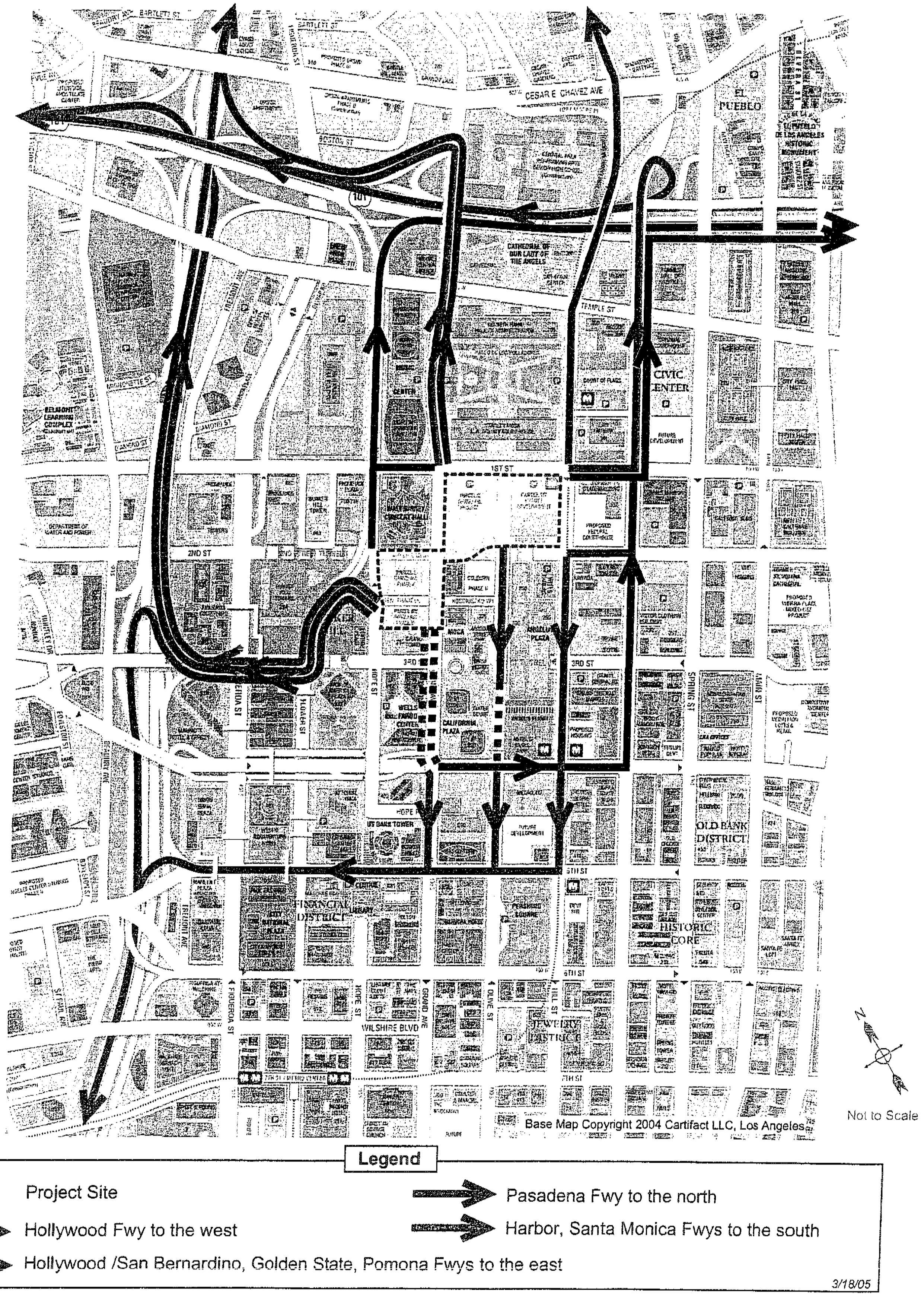


Figure 5
Egress Routes To Freeways

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

Attachment C

Trip Generation

Grand Avenue Implementation Plan

Trip Generation Adjustments

04-18-06

Category	Element	% Project Internal	% Walk In/ % Walk Out	% Transit/ Shuttle/ Rideshare Pass	% Pass-By	**Net Reduction Factor**
Residential	Condominiums	5%	15%	5%	-	**24%**
	Apartments	5%	20%	25%	-	**48%**
	Average					**29%**
Hotel		5%	10%	20%	-	**34%**
Commercial	Retail	15%	20%	5%	30%	**55%**
	Market	15%	10%	5%	40%	**55%**
	Restaurant	15%	30%	5%	10%	**50%**
	Event	5%	5%	5%	10%	**23%**
	Health Club	20%	35%	5%	20%	**62%**
Office		5%		40%	-	**43%**

Table 1 Grand Avenue Project - Trip Generation Estimates - A.M Peak Hour

4/18/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400 534,562	D.U S.F	0.36	1,2	145	5%	15%	5%		110	78%	19%	21	81%	89
Apartments	100 98,375	D.U S.F	0.30	1,3	30	5%	20%	25%		17	56%	25%	4	75%	13
Subtotal Residential	500 632,937	D.U S.F			175					127	73%	20%	25	80%	102
Hotel	275 230,000	Rooms S.F	0.52	1,4	143	5%	10%	20%		97	68%	61%	59	39%	38
Office	0	S.F	0.00	1,5	0							88%		12%	
Market	53,000	S.F	3.89	1,6	206	15%	10%	5%	40%	88	43%	61%	54	39%	34
Retail	97,750	S.F	1.58	1,7	154	15%	20%	5%	30%	67	43%	61%	41	39%	26
Restaurant	42,000	S.F	0.81	1,8,9	34	15%	30%	5%	10%	16	47%	52%	8	48%	8
Event Facility	250 24,000	Seats S.F	0.00	1,10	0	5%	5%	5%	10%	0			0		0
Health Club	50,000	S.F	1.21	1,11	61	20%	35%	5%	20%	21	34%	42%	9	58%	12
Subtotal Commercial	266,750	S.F			455					192	42%	58%	112	42%	80
Total Parcel Q	1,129,687	S.F			773					416	54%	47%	196	53%	220
Parcel W-1 / W-2															
Condominiums	568 591,691	D.U S.F	0.34	1,2	193	5%	15%	5%		147	76%	19%	28	81%	119
Apartments	142 139,728	D.U S.F	0.30	1,3	43	5%	20%	25%		24	56%	25%	6	75%	18
Subtotal Residential	710 731,419	D.U S.F			236					171	73%	20%	34	80%	137
Hotel	0 0	Rooms S.F	0.00	1,4	0					0		61%	0	39%	0
Office	681,000	S.F	1.69	1,5	1,153	0%	5%	40%	0%	657	57%	89%	585	11%	72
Retail	54,400	S.F	2.00	1,7	109	15%	20%	5%	40%	40	37%	61%	25	39%	15
Restaurant	10,000	S.F	0.81	1,8,9	8	15%	30%	5%	10%	4	49%	52%	2	48%	2
Event Facility	0 0	Seats S.F	0.00	1,10	0					0			0		0
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	745,400	S.F			1,270					701	55%	87%	612	13%	89
Total Parcel W-1 / W-2	1,476,819	S.F			1,506					872	58%	74%	646	26%	226

Table 1

Grand Avenue Project - Trip Generation Estimates - A.M Peak Hour

4/18/2006

Land Use	Quantity	Units	Trip Rates	Foot - note	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680	D.U	0.33	1,2	226	5%	15%	5%		172	76%	19%	33	81%	139
	708,364	S.F													
Apartments	170	D.U	0.30	1,3	51	5%	20%	25%		29	56%	25%	7	75%	22
	167,280	S.F													
Subtotal Residential	850	D.U			277					201	73%	20%	40	80%	161
	875,644	S.F													
Hotel	0	Rooms	0.00	1,4	0					0		61%	0	39%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		88%	0	12%	0
Retail	73,100	S.F	1.77	1,7	130	15%	20%	5%	30%	56	43%	61%	34	39%	22
Restaurant	15,000	S.F	0.81	1,8,9	12	15%	30%	5%	10%	6	47%	52%	3	48%	3
Event Facility	0	Seats	0.00	1,10	0					0			0		0
	0	S.F													
Health Club	0	S.F	1.21	1,11	0					0		42%	0	58%	0
Subtotal Commercial	88,100	S.F			142					62	44%	60%	37	40%	25
Total Parcel L / M-2	963,744	S.F			419					263	63%	29%	77	71%	186
Total All Parcels	3,570,250	S.F			2,698					1,551	57%	59%	919	41%	632

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2004, except otherwise noted.
2. ITE 232 trip generation equation (T=0.29(X)+28.26) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip generation equation (LN(T) = 1.24*LN(X) - 2.00) for Hotel was used.
5. ITE 715 trip generation equation (T = 1.66*(X) + 22.94) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (LN(T) = 1.70*LN(X) - 1.42) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.60*LN(X) + 2.29) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. Directional distribution for the AM peak hour is not available. Directional distribution of 52 % entering and 48 % existing was assumed based on ITE 932 for High-Turnover Sitdown Restaurant.
10. ITE 444 trip rate for Movie Theater with Matinee was used.
11. ITE 492 trip rate for Health / Fitness Club was used.

Table 2

Grand Avenue Project - Trip Generation Estimates - P.M Peak Hour

4/18/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel Q															
Condominiums	400	D.U	0.38	1,2	151	5%	15%	5%		115	76%	62%	71	38%	44
	534,562	S.F													
Apartments	100	D.U	0.35	1,3	35	5%	20%	25%		20	56%	61%	12	39%	8
	98,375	S.F													
Subtotal Residential	500	D.U			186					135	72%	62%	83	39%	52
	632,937	S.F													
Hotel	275	Rooms	0.59	1,4	162	5%	10%	20%		110	68%	53%	58	47%	52
	230,000	S.F													
Office	0	S.F	0.00	1,5	0							17%		83%	
Market	53,000	S.F	10.66	1,6	565	15%	10%	5%	40%	241	43%	51%	123	49%	118
Retail	97,750	S.F	6.31	1,7	617	15%	20%	5%	30%	267	43%	48%	128	52%	139
Restaurant	42,000	S.F	7.49	1,8	315	15%	30%	5%	10%	148	47%	67%	99	33%	49
Event Facility	250	Seats	0.07	1,9	18	5%	5%	5%	10%	14	77%	75%	11	25%	3
	24,000	S.F													
Health Club	50,000	S.F	4.05	1,10	203	20%	35%	5%	20%	69	34%	51%	36	49%	33
Subtotal Commercial	266,750	S.F			1,718					739	43%	54%	397	46%	342
Total Parcel Q	1,129,687	S.F			2,066					984	48%	55%	538	45%	446
Parcel W-1 / W-2															
Condominiums	568	D.U	0.37	1,2	209	5%	15%	5%		158	76%	62%	98	38%	60
	591,691	S.F													
Apartments	142	D.U	0.35	1,3	50	5%	20%	25%		28	56%	61%	17	39%	11
	139,728	S.F													
Subtotal Residential	710	D.U			259					186	72%	62%	115	38%	71
	731,419	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	681,000	S.F	1.57	1,5	1,070	0%	5%	40%	0%	610	57%	15%	91	85%	519
Retail	54,400	S.F	7.70	1,7	419	15%	20%	5%	40%	155	37%	48%	74	52%	81
Restaurant	10,000	S.F	7.49	1,8	75	15%	30%	5%	10%	35	47%	67%	23	33%	12
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	745,400	S.F			1,564					800	51%	23%	188	76%	612
Total Parcel W-1 / W-2	1,476,819	S.F			1,823					986	54%	31%	303	69%	683

Table 2 Grand Avenue Project - Trip Generation Estimates - P.M Peak Hour

4/18/2006

Land Use	Quantity	Units	Trip Rates	Foot - notes	Base Vehicle Trips	% Project Internal	% Walk-In / Walk-Out	% Transit, R/S, & Taxi	% Pass-By	Net Vehicle Trips	Net as % Base	Inbound		Outbound	
												%	Trips	%	Trips
Parcel L / M-2															
Condominiums	680	D.U	0.36	1,2	247	5%	15%	5%		187	76%	62%	116	38%	71
	708,364	S.F													
Apartments	170	D.U	0.35	1,3	60	5%	20%	25%		34	57%	61%	21	39%	13
	167,280	S.F													
Subtotal Residential	850	D.U			307					221	72%	62%	137	38%	84
	875,644	S.F													
Hotel	0	Rooms	0.59	1,4	0					0		53%	0	47%	0
	0	S.F													
Office	0	S.F	0.00	1,5	0					0		17%	0	83%	0
Retail	73,100	S.F	6.96	1,7	509	15%	20%	5%	30%	220	43%	48%	106	52%	114
Restaurant	15,000	S.F	7.49	1,8	112	15%	30%	5%	10%	53	47%	67%	36	33%	17
Event Facility	0	Seats	0.07	1,9	0					0		75%	0	25%	0
	0	S.F													
Health Club	0	S.F	4.05	1,10	0					0		51%	0	49%	0
Subtotal Commercial	88,100	S.F			621					273	44%	52%	142	48%	131
Total Parcel L / M-2	963,744	S.F			928					494	53%	56%	279	44%	215
Total All Parcels	3,570,250	S.F			4,817					2,464	51%	45%	1,120	55%	1,344

1. ITE Rates and Equations from Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, DC, 2004, except otherwise noted.
2. ITE 232 trip generation equation (T=0.34(X)+15.47) for High-Rise Condominium / Townhouse was used.
3. ITE 222 trip rate for High-Rise Apartments was used.
4. ITE 310 trip rate for Hotel was used.
5. ITE 710 trip generation equation (T=1.52(X)+ 34.88) for Single Tenant Office Building was used.
6. ITE 850 trip generation equation (Ln(T) = 0.79*LN(X) + 3.20) for Supermarket was used.
7. ITE 820 trip generation equation (LN(T) = 0.66*LN(X) + 3.40) for Shopping Center was used.
8. ITE 931 trip rate for Quality Restaurant was used.
9. ITE 444 trip rate for Movie Theater with Matinee was used.
10. ITE 492 trip rate for Health / Fitness Club was used.

Attachment D

Related Projects

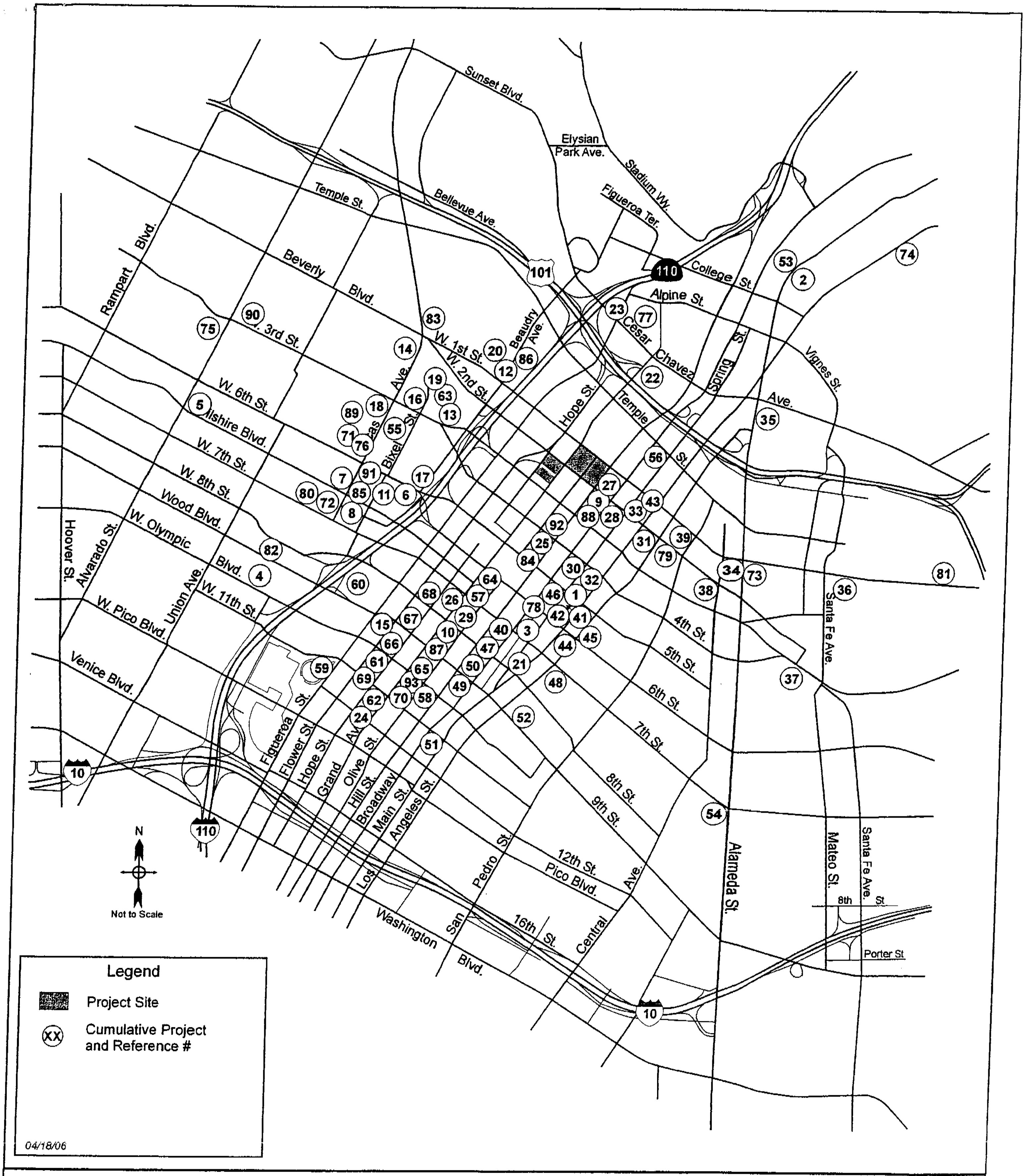


Figure 6
Location of Cumulative Projects

Grand Avenue Project

The **Mobility** Group
Transportation Strategies & Solutions

Table 3

Related Project List and Trip Generation Estimates

4/18/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1	Plaza de Cultura Y Arte	500 block of N. Main St.	32,000 s.f 25,000 s.f 14,100 s.f 23,700 s.f	Community Bldg. Performing Arts Plaza House Educational Center and Museum		20	4	24	82	44	126
2	Capitol Mills	Alameda St. / College St.	30 D.U 5,000 s.f 20,000 s.f	Artist-in-lofts Retail Office	637	33	18	51	26	42	68
3	-	201 - 215 7th St. Or 651 S. Spring	139 D.U	Apartments	934	14	57	71	56	30	86
4	Belmont Primary School # 11	980 S. Albany St. (Olympic / Albany)	380 Students	Kindergarten	490	88	72	160	48	59	107
5	Westlake Intermodal Center	Alvarado St. / Wilshire Blvd.	40,000 s.f 30,000 s.f 40,000 s.f	Grocery Retail Community Facility	6,596	130	79	209	292	316	608
6	Piero (Commercial & Residential Development)	616 Saint Paul St. (Saint Paul St. / Wilshire Blvd.)	10,000 s.f 330 D.U	Commercial (on ground level) Apartments (on 5 levels above ground)	1,496	39	76	115	74	57	131
7	Mixed Use	1234 Wilshire Blvd. (Wilshire Blvd. / Lucas Ave.)	12,500 s.f 210 D.U	Retail Residential	1,930	24	97	121	116	63	179
8	1100 Wilshire	1100 Wilshire Blvd.	460 D.U	Condominiums (conversion of existing bldg.)	2,696	34	168	202	166	82	248
9	-	205 - 207 S. Broadway	162 D.U	Apartments	1,089	17	66	83	65	35	100
10	-	416 - 432 W. 8th St. Or 800 S. Olive St.	110 D.U	Apartments	739	11	45	56	44	24	68
11	G.H Palmer	On 6th St. (Wilshire / St. Paul)	600 D.U 20,000 s.f	Apartments Retail	4,891	74	253	327	278	169	447
12	Central LA High School # 11	Beaudry Ave. / 1st Street	2,600 Students 10.5 acres	High School Park	4,446	736	330	1,066	171	193	364
13	Mixed Use - Residential Over Commercial	1207 W. 3rd St. (3rd St. / Boylston St.)	330 D.U 50,000 s.f	Residential Commercial (construct 330 units over 50,000 s.f commercial)	4,222	33	135	168	196	138	334
14	Apartments	1304 W. 2nd St. (2nd St. / Lucas Ave.)	300 D.U	Apartments	1,932	31	122	153	121	65	186
15	9th & Figueroa Project	9th / Figueroa / Flower	629 D.U 27,000 s.f	Condominiums Retail	2,624	37	146	183	143	95	238
16	Visconti	3rd St. / Bixel St.	300 D.U	High-End Residential Units (new construction)	1,989	24	129	153	125	61	186
17	Los Angeles Ctr Ph - 1 A	North of 6th St.	880,000 s.f	Office	4,500	580	79	659	82	552	634
18	Central LA High School # 10	322 S. Lucas St.	1,713 Students	High School	2,929	485	218	703	113	127	240
19		279 Emerald St.	85 D.U	Apartments	571	9	35	44	34	18	52
20		1030 Mignonette St. (1st / Bixel)	204 D.U	Apartments	1,371	21	83	104	82	44	126

Table 3

Related Project List and Trip Generation Estimates

4/18/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
21	-	756 S. Spring St.	84 D.U	Apartments	564	9	34	43	34	18	52
22	Central Area High School #9	450 N. Grand	64 class-rooms 1,600 Seats	Performing Arts High School Performing Arts Theater	2,736	367	289	656	96	144	240
23	Orsini (Addition II and III)	Figueroa St. / Chesar Chavez	826 D.U 40,000 s.f	Apartments Retail	4,832	102	187	289	259	213	472
24	Lot 114 - 1155 South Grand Project	Grand Ave. / 12th St.	311 D.U 7,294 s.f	Condominiums Retail	1,230	18	75	93	70	42	112
25	Metro 217	417 S. Hill St.	277 D.U	Luxury work-live lofts (conversion of the Subway Terminal Building)	1,837	23	118	141	115	57	172
26	-	600 W. 7th Street	70 D.U	Apartments	470	7	29	36	28	15	43
27	Los Angeles Courthouse	Between Broadway & Hill St and 1st St. & 2nd St.		41 U.S. District Courtrooms, 40 Judges chambers, court-related support offices and a circuit satellite library. Subterranean parking provides 150 spaces.	2,091	150	29	179	247	87	334
28	Douglas Building	257 S. Spring St.	50 D.U 20,000 s.f	Condominiums (conversion of 1898 structure) Retail	1,106	4	18	22	40	39	79
29	8th & Grand Project	North of 8th St. between Grand and Olive	875 D.U 34,081 s.f 10,000 s.f	Condominiums Retail Restaurants	4,162	52	205	257	230	142	372
30	Rowan Building	458 S. Spring St.	209 D.U	Loft Apartments (conversion of Rowan Building)	1,386	17	90	107	87	43	130
31	LA City Tokyo Branch Library	203 S. Los Angeles St.	12,500 s.f	Library	432	7	1	8	28	29	57
32	4th Street and Main St.	4th Street and Main St.		Residential Lofts and Retail	7,948	27	144	171	291	276	567
33	-	108 W. 2nd Street	146 D.U	Condominiums	656	11	53	64	53	26	79
34	Trammell Crow Reisdential Mixed-Use	1st Street / Alameda Street	863 D.U	Luxury Apartments (To be built in 3 phases - phase 1 (303 units), phase 2 (175 units), and phase 3 (385 units plus retail)	6,763	72	379	451	393	213	606
35	Alameda District Plan	Alameda St. / Los Angeles St.	8,200,000 s.f 750 Rooms 300 D.U 250,000 s.f 70,000 s.f	Office Hotel Apartments Retail Museum	40,210	2,242	604	2,846	1,210	2,173	3,383
36	SCI-Arc Lot	West of SCI-Arc at Santa Fe Avenue	300 D.U	Loft Apartments	1,131	28	62	90	68	49	117
37	The Freight Yard	3rd St. / Santa Fe	596,000 s.f	Multi-Use Development	7,532	490	327	817	328	492	820
38	2nd and Central	375 E. 2nd St.	124 D.U 12,500 s.f	Apartments Retail	1,101	18	48	66	61	41	102
39	LA Public Safety Facility MP		433 Employees 512 Beds 30,000 s.f 21 Employees	EOC/POC/FDC Metro Jail Occupational Health & Services Division (OHSD) Fire Station #4	1,726	175	37	212	60	125	185
40	Convert Theatre to Dance Hall	740 S. Broadway (Broadway / 7th St.)	12,500 s.f	Dance Hall (convert former Theatre to Dance Hall)	937	0	0	0	33	33	66
41	Arcade Building	541 S. Spring St.	143 D.U	Loft Apartments (conversion of 12-story 1924 building)	948	12	61	73	60	29	89
42	Valuta Bldg. (Wilson Bldg.)	548 S. Spring St.	157 D.U	Loft Apartments	592	15	32	47	35	26	61

Table 3

Related Project List and Trip Generation Estimates

4/18/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
43	Police Headquaters Facility (PHF)	1st / Main St.	2,400 Employees 56 Employees 60,000 s.f 300 Stalls	Police Headquaters Facility (PHF) Motor Transport Division (MTD) Recreation Center Aiso St. Parking Facility	3,342	190	25	215	91	255	346
44	Pacific Electric Building	610 S. Main St.	314 D.U	Lofts with gym and roof garden. (conversion of existing building)	2,082	26	134	160	131	64	195
45	Santa Fe Lofts	121 E. 6th St.	103 D.U	Lofts (development of 1917 Santa Fe Aneex inot 103 lofts, with renovation of 32 units in Santa Fe building next door)	895	11	58	69	56	28	84
46	Security Building	510 S. Spring St.	153 D.U	Housing Units (development of 153 units in Historic Security Bank Building)	1,014	12	66	78	64	31	95
47	The Union	325 8th St.	91 D.U	Live-work lofts (conversion)	603	7	39	46	38	18	56
48	Santee Court	3 Blocks between Los Angeles St., Maple Ave., 7th St., and 9th St.	80 D.U 299 D.U	Condominiums Apartments	2,738	34	177	211	172	84	256
49	Broadway Plaza Lofts	901 S. Broadway	82 D.U	Lofts (conversion of former Blackstone's Department Store (built 1916) into 82 lofts, with 16 designated as affordable housing)	697	10	44	54	44	23	67
50	Eastern Columbia Building	849 S. Broadway	280 D.U	Lofts / Condos (conversion of existing 12-story 1930 Art Deco Structure)	1,641	21	102	123	101	50	151
51	Herald Examiner Building	11th St. / Broadway	150,000 s.f	Creative Office (restoration and renovation of Herald Examiner Bldg.)	1,652	206	28	234	38	186	224
52	-	305-327 9th Street	74,000 s.f 157,000 s.f	Office Retail	10,490	257	99	356	465	560	1,025
53	Blossom Plaza	900 Broadway (Broadway / College)	223 D.U 7,000 s.f 15,000 s.f 25,000 s.f	Condominiums Museum Restaurant Retail	2,767	54	101	155	104	74	178
54	Los Angeles Apparel	744 Alameda St.	640,000 s.f	Warehouse Division	3,174	236	52	288	78	242	320
55	Apartments	1311 5th Street	80 D.U	Apartments	538	8	33	41	32	18	50
56	Hall of Justice	Temple Street / Spring St.	30 Employees 1,000 Space	Net increase in number of employees from 1630 to 1660 Parking Structure	1,052	134	18	152	25	121	146
57	Residential and Retail	515 W. 7th St. (7th St. / Olive St.)	55 D.U 28,000 s.f	Condominiums Retail	1,432	22	26	48	63	63	126
58	Balasco Theatre	1050 Hill St. (Hill St. / Olympic Blvd.)	33,423 s.f	Entertainment (variance to use existing Theatre)	1,220	0	0	0	163	164	327
59	LAED Entertainment District	Figueroa St. / 11th St.	1,200 Rooms 3,600 Seats 7,000 Seats 345,000 s.f 498,000 s.f 165,000 s.f 800 D.U	Hotel Cinema Theatre Restaurants Retail Office Apartments	47,777	927	551	1,478	1,881	1,731	3,612

Table 3

Related Project List and Trip Generation Estimates

4/18/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
60	Metropolis	8th St. / Francisco St.	600 Rooms 1,600,000 s.f 223,000 s.f	Hotel Office Retail	24,644	1,817	409	2,226	904	2,151	3,055
61	Quality Restaurant & Night Club	605 W. Olympic Blvd. (Olympic Blvd. / Hope St.)	7,142 s.f	Quality Restaurant and Night Club (in existing office building with 18 on-site and 100 off-site spaces).	630	0	0	0	36	17	53
62	Elleven	1111 S. Grand Ave. (Grand Ave. / 11th St.)	417 D.U 15,000 s.f	Condominiums Retail	1,872	29	117	146	104	66	170
63	LAUSD - Central LA High School # 12	1201 Miramar St. (Miramar / Huntley)	500 Students	High School	855	141	64	205	33	37	70
64	Library Court	630 W. 6th St	90 D.U	Conversion of Old University Club	597	7	39	46	38	18	56
65	Olympic Lofts	Olympic Blvd. / Olive St.	78 D.U	Live-work lofts with restaurant and bar. (conversion of the Federal Reserve Bank Building)	967	8	36	44	57	28	85
66	Union Bank Building	Hope St. / Olympic Blvd.	116 D.U	Market-Rate Lofts with 450 space parking garage. (conversion of former Union Bank Building)	769	9	50	59	48	24	72
67	South Village (CIM Project)	8th St. & Hope St., 9th St. & Flower St.	939 D.U 83,700 s.f 50,000 s.f	Condominiums Retail / Restaurant Supermarket	9,067	124	246	370	425	343	768
68	Gas Co. Lofts	800-820 Flower St.	282 D.U 371,699 s.f	Apartments Office (removed)	1,824	23	120	143	115	56	171
69	Metropolitan Lofts	11th / Hope / Flower	230 D.U 3,500 s.f	Apartments Retail	1,711	27	66	93	76	54	130
70	Grand / 11th NE Project	Grand Ave. / 11th St.	128 D.U 3,472 s.f 2,200 s.f	Condominiums Retail Restaurant	676	8	33	41	38	23	61
71	Gratts Primary Ctr & Early Education Ctr	477 Lucas St.	380 Students	Primary School	490	88	72	160	48	58	106
72		622 Lucas St.	311 D.U	Condominiums	1,822	23	114	137	109	53	162
73	Bar & Lounge	701 3rd Street	8,770 s.f	Bar / Lounge	789	0	0	0	44	22	66
74	Chinatown Condos	1101 Main St. (Main / Rondout)	300 D.U	Condominiums	1,254	19	83	102	71	43	114
75		2100 W. 3rd Street	24,075 s.f	Medical Building	870	47	13	60	24	66	90
76		1311 W. 5th Street	80 D.U	Apartments	538	7	33	40	32	18	50
77	500 Bunker Hill	Bunker Hill / Cesar Chavez	17,000 s.f 4,200 s.f	Supermarket Retail	1,924	37	23	60	98	91	189
78	Shybarry Tower	215 W. 6th St.	84 D.U 6,000 s.f	Condominiums Bar	1,311	6	31	37	74	38	112
79	Little Tokyo Block 8 Project	200 Los Angeles St. (Los Angeles / 2nd St)	510 D.U 240 D.U 50,000 s.f	Condominiums Apartments Retail	4,331	59	189	248	187	147	334

Table 3

Related Project List and Trip Generation Estimates

4/18/2006

S.No	Project Name	Location / Address	Project Description		Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
80	Mayfair Hotel	1256 W. 7th St.	250 D.U	Condominiums (Conversion of 294 Room Hotel)	1,045	16	69	85	59	36	95
81	LAUSD ELA High School # 1	1201 1st Street (1st / Mission)	1,206 Students	High School	2,062	341	153	494	79	90	169
82	James Wood Apartments	1322 & 1405 James Wood Blvd.	61 D.U 45 Students	Apartments Child Care	612	25	42	67	42	33	75
83	Northwest Gateway	2nd / Glendale	276 D.U	Apartments	1,855	28	113	141	111	60	171
84	Title Guarantee Building	411 W. 5th St	74 D.U	Apartments	497	8	30	38	30	16	46
85	Wilshire Court	Wilshire / Bixel	201 D.U	Apartments	1,351	21	82	103	81	44	125
86	Mixed - Use	110 Beaudry Ave (Beaudry / 1st)	200 D.U 5,000 s.f	Apartments Retail	1,055	18	47	65	52	37	89
87	810 Grand Lofts	801 S. Grand Ave.	132 D.U	Live - Work Condos	551	5	36	41	31	19	50
88	Mixed - Use	250 Hill St. (Hill / 3rd)	450 D.U 15,000 s.f	Apartments Rtail	2,145	32	116	148	114	78	192
89	1010 Wilshire Building	1010 Wilshire Building	240 D.U	Condominiums	1,003	16	66	82	56	35	91
90	House Ear Institute	Third / Alvarado	30,000 s.f	Medical Offices	1,084	58	16	74	30	82	112
91	Villa Verona	Wilshire - Bein Bixel & Wilmer	234 D.U 10,000 s.f	Lofts Retail	983	17	53	70	50	32	82
92	Bunker Hill Design & Development Program EIR - Parcel Y	Block bounded by 3rd St., Olive St., Hill St., & 4th St.	960,000 s.f 100,000 s.f	Office Retail	8,004	473	74	547	188	660	848
93	City House and The Olympic Tower	Southeast corner of Grand / Olympic	331 D.U 10,000 s.f 5,985 s.f	Condominiums Retail Restaurant	2,351	30	98	128	128	83	209
				Total Trips	301,325	12,008	9,320	21,328	13,296	14,896	28,192

Attachment E

List of Analysis Intersections

Grand Avenue Implementation Plan

Intersection Analysis Locations

Figueroa and Third
Figueroa and Fifth
Figueroa and Sixth
Flower and Third
Flower and Fifth
Flower and Sixth
Hope and Temple (2)
Hope and First
Hope and Second
Grand and US-101 WB
Grand and Temple
Grand and First
Grand and Second
Grand and Fifth
Olive and First
Olive and Second
Olive and Fourth
Olive and Fifth
Olive and Sixth
Hill and Temple
Hill and First
Hill and Second
Hill and Third
Hill and Fourth
Hill and Sixth
Broadway and Temple
Broadway and First
Broadway and Second
Broadway and Fourth
Spring and First
Spring and Second

Total of 32 intersections. See also attached Figure 7.

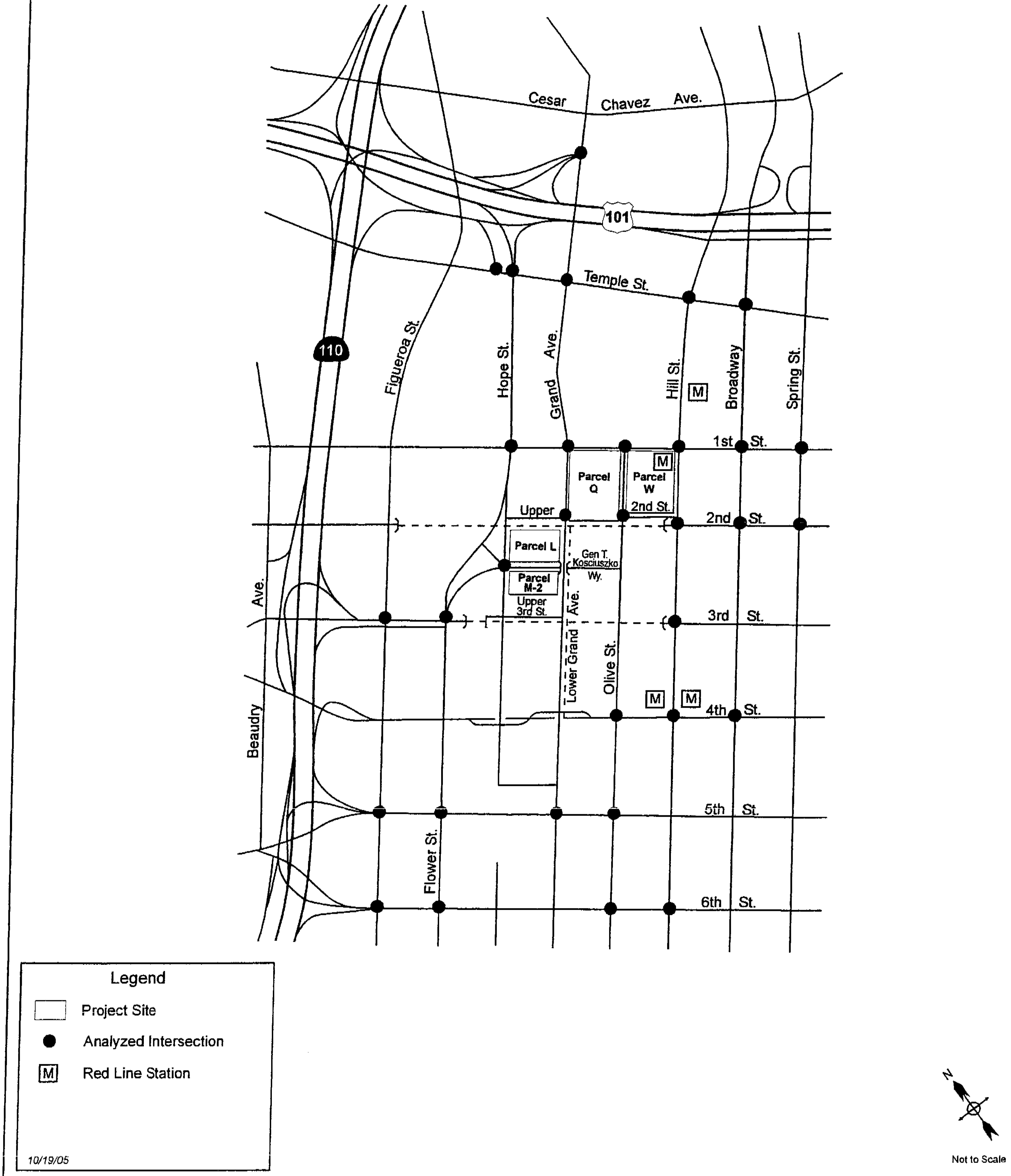


Figure 7
Analysis Locations

Attachment F

Other Issues

Grand Avenue Implementation Plan - Other Issues

1. ATSAC/ATCS

The following assumptions will be uses regarding ATSAC and ATCS.

1. ATSAC has been fully implemented at all intersections in the downtown and study area.
2. ATCS has only been implemented at intersections on and south of 8th Street. Therefore ATCS has not been implemented at any of the study intersections.

2. Future Roadway Improvements

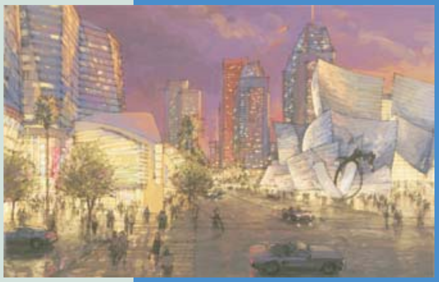
The only roadway improvement assumed in the study area in the future (both Future Without Project and Future With Project) is the CRA Project to construct a new segment of Upper 2nd Street as a two-way road between Grand Avenue and Olive Street.

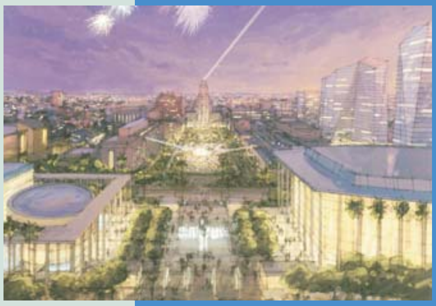
Appendix E

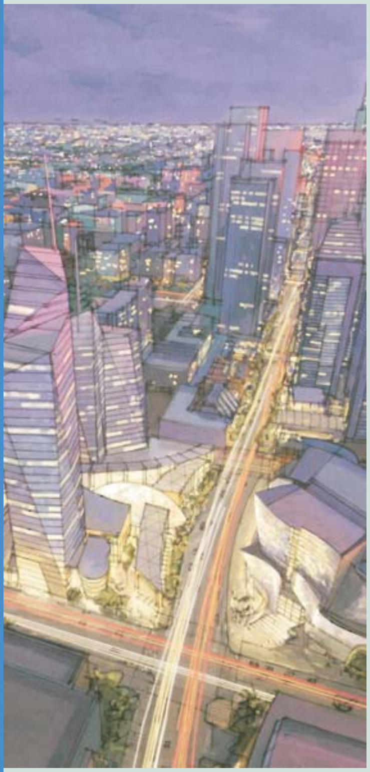
Intersection Level of Service Analysis Sheets

LOS Calculations Sheets on File to LADOT

Appendix C: Historic Resources Study







Grand Avenue Project

HISTORIC RESOURCES TECHNICAL REPORT

Historic Resources Survey, Evaluation, and Analysis of Project Impacts

Prepared by
PCR Services Corporation
233 Wilshire Boulevard, Suite 100
Santa Monica, California 90401

June 2, 2006

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

LIST OF FIGURES

LIST OF TABLES

I. INTRODUCTION

A. STATEMENT OF PURPOSE

The purpose of this technical report is to identify and evaluate any historic resources that may be affected by the proposed Grand Avenue Project (the "Project"), to assess any potential impacts of the Project on those historic resources identified, and to recommend mitigation measures, if appropriate. This report is prepared to facilitate environmental compliance of the Project under the provisions of the California Environmental Quality Act (CEQA). This technical report includes a discussion of the relevant regulatory framework, a description of the environmental setting, a brief contextual history of the study area, an assessment and evaluation of properties located within the study area, and an analysis of potential impacts the proposed Project may have on the identified historic resources.

The Project site is located in downtown Los Angeles, in an area generally bounded by the Harbor Freeway (I-110) on the west, Spring and Main Streets on the east, Fifth Street on the south, and the Hollywood/Santa Ana Freeway (I-101) on the north. The downtown Los Angeles area is highly urbanized with many notable buildings associated with hotels, commerce, professional services, and residential uses; federal, state, and municipal offices and courts; and cultural and entertainment uses. The City's financial district is located generally along Grand Avenue, Flower Street, and Figueroa Street south of the Project site. The proposed Project site (Figure 1 on page 2) includes the Civic Center Mall between Los Angeles' City Hall and Grand Avenue, (Figure 2 on page 3) the streetscape along Grand Avenue between Fifth Street and Cesar Chavez Avenue; and five development Parcels located along, and in proximity to, Grand Avenue and Second Street. Most of the Project site is within the CRA/LA's Bunker Hill Redevelopment Project Area. The area north of First Street and just north of the intersection of Fifth Street and Grand Avenue is within the Amended Central Business District (CBD) Redevelopment Project Area.

B. PROJECT DESCRIPTION

The Grand Avenue Project consists of the following three components: (1) the creation of a Civic Park by expanding to a total of 16 acres the existing Civic Center Mall so that the new Civic Park connects Los Angeles' City Hall to Grand Avenue; (2) streetscape improvements along Grand Avenue between 5th Street and Cesar Chavez Avenue to attract and accommodate more pedestrian traffic; and (3) development of five parcels located within the

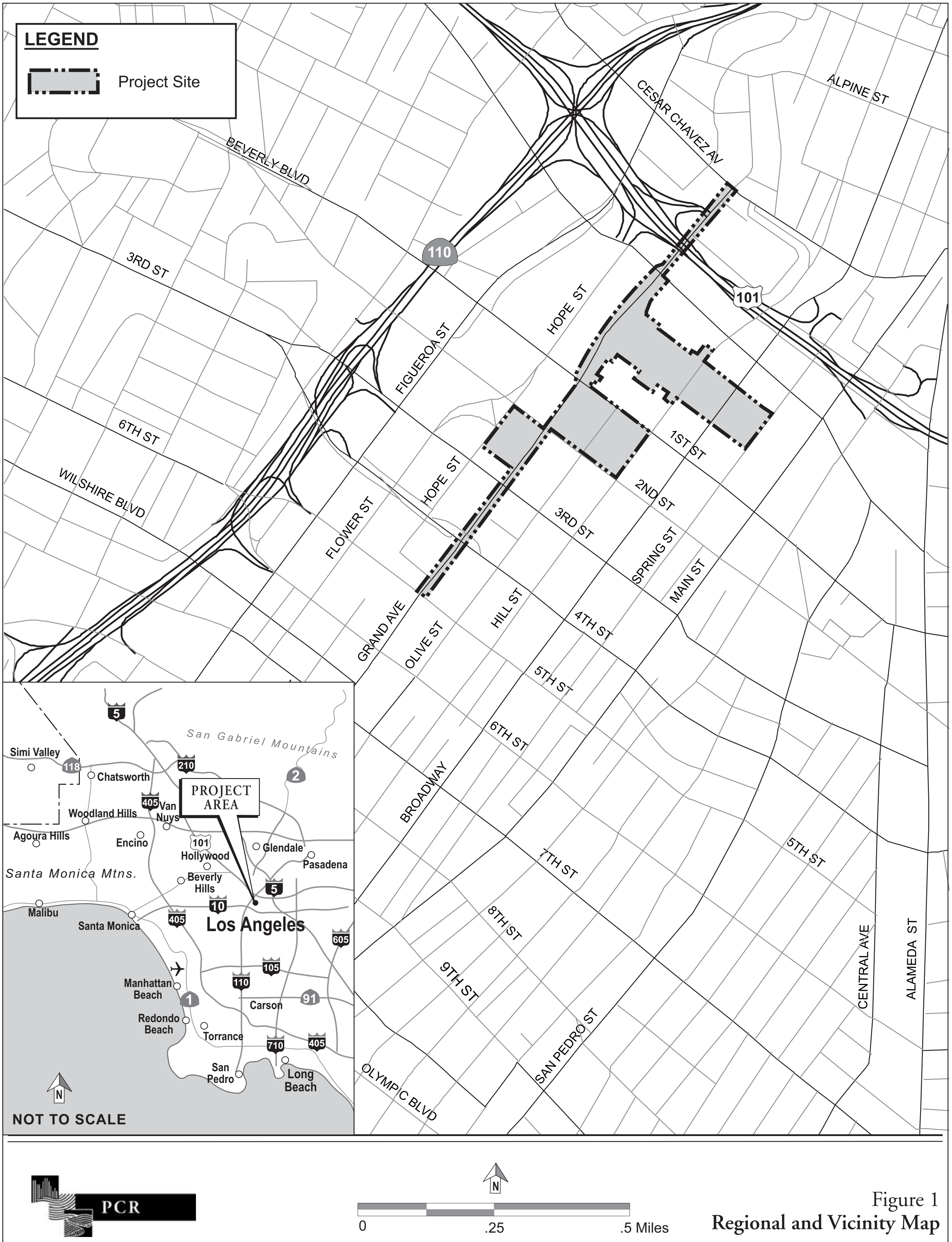


Figure 1
Regional and Vicinity Map

Source: PCR Services Corporation, 2005.

Figure 2
Proposed Project Site

Source: Eagle Aerial, May, 2001.

Bunker Hill Redevelopment Project Area that are referred to as Parcels Q, W-1, W-2, L, and M-2.

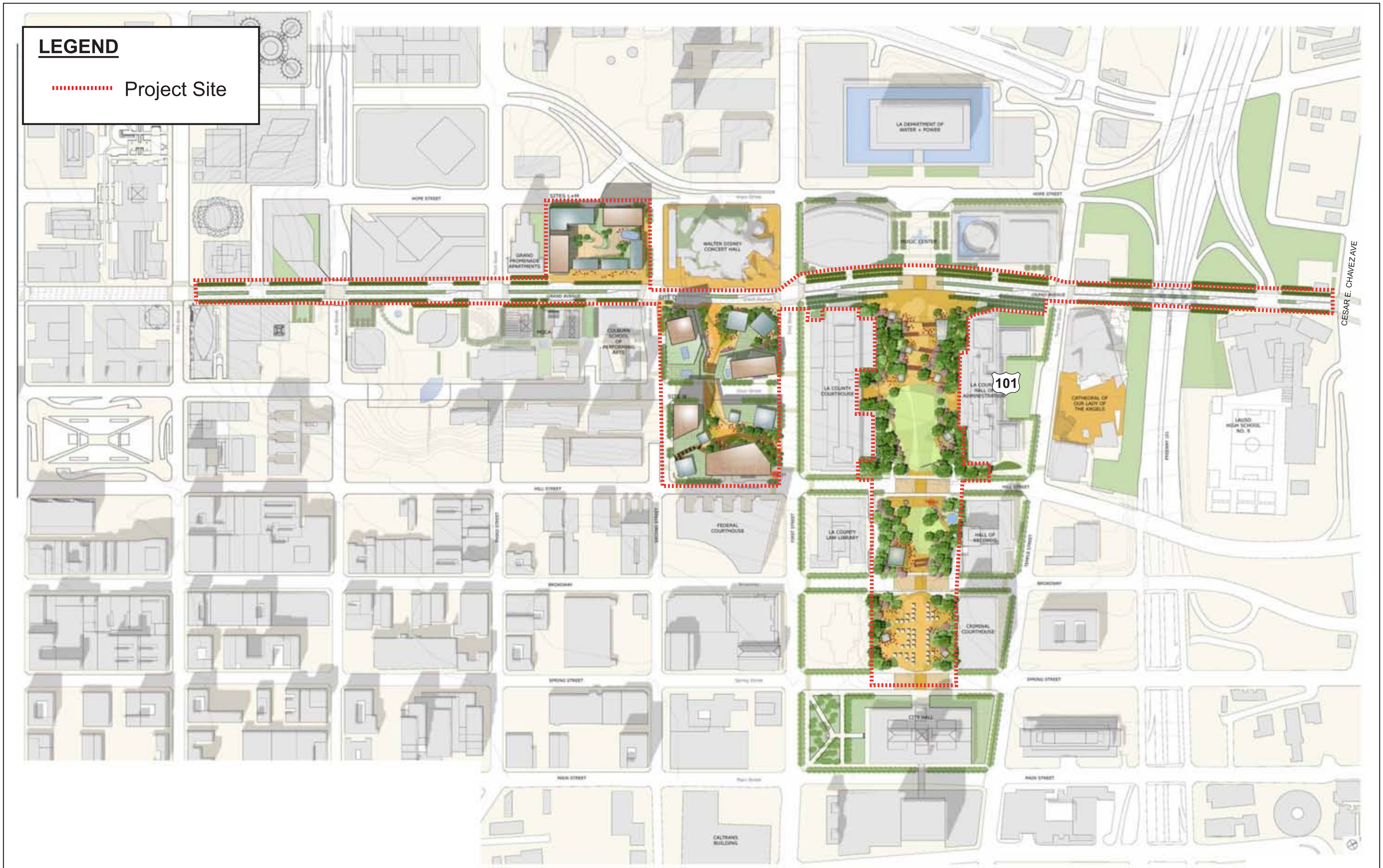
Projected land uses on the five Parcels consist of a combination of residential, retail, office, and hotel uses. The proposed Project consists of two land use programs. This Project definition reflects the situation wherein the County of Los Angeles retains an option to develop a County Office Building within the Project site. As final decision-making for this building is beyond the time frame of this EIR, this development scenario is analyzed throughout the Draft EIR as well as a development scenario wherein residential development replaces the County Office Building in the event that the County decides not to build a new facility within the Project site.

Under the Project with County Office Building Option, development on the five proposed parcels consists of up to 2,060 residential units, 20 percent of which (412 units) would be provided as affordable housing; up to 275 hotel rooms; up to 449,000 square feet of commercial space; and up to 681,000 square feet of office space to be used as a potential County Office building (Figure 3 on page 5).

Under the Project with Additional Residential Development Option, the 681,000-square foot potential County Office Building would be replaced by an additional 600 residential units. Thus, development on the five proposed parcels consists of up to 2,660 residential units, 20 percent of which (532 units) would be provided as affordable housing; up to 275 hotel rooms and up to 449,000 square feet of commercial space.

The existing Civic Center Mall, which would be expanded to be the Civic Park under the proposed Project, is an integral open space component within the existing downtown Los Angeles Civic Center area. The Civic Center Mall and the Court of Flags is an east-west oriented public open space area located between Broadway and Grand Avenue on the west, with an expansion parcel between Broadway and Los Angeles' City Hall on the east. This area is divided by Hill Street and Broadway into three defined sections, is located mid-block, and is bordered by public buildings to the north and south, which, themselves, front on Temple Street to the north and First Street to the south. Major governmental offices, businesses, cultural and entertainment venues currently frame the Civic Center Mall and include the Music Center Complex on the west; the Los Angeles County Courthouse and Law Library on the south; Los Angeles’ City Hall on the east; and the County Criminal Courts Building, Hall of Records, and Kenneth Hahn Hall of Administration on the north.

Grand Avenue is located in Downtown Los Angeles between, and running parallel to, Hope and Olive Streets. It is a north-south street that traverses the heart of Los Angeles’ Financial District and, in the Project area, borders the east sides of the Walt Disney Concert Hall



N

0 400 800 Feet

PCR

Figure 3
Overview of Grand Avenue Conceptual Plan

Source: Grand Avenue The Related Componies, 2005 and the Los Angeles Music Center. In the Project area, Grand Avenue also passes the west end of the existing Civic Center Mall and, as such, provides connectivity to the Los Angeles Civic Center. Other notable structures and features along Grand Avenue include the Los Angeles Museum of Contemporary Art (MOCA), the Colburn School of Performing Arts, the Gas Company Tower, California Plaza, the Wells Fargo Center, as well as other banks and major hotels.

The five parcels proposed for development are located on the east and west sides of Grand Avenue in the Bunker Hill Redevelopment Project in downtown Los Angeles. Parcels Q and W-1/W-2 comprise an approximate two-block area, bounded by First Street to the north, Hill Street to the east, Second Street to the south, and Grand Avenue to the west. Olive Street, which borders Parcel Q on the east and Parcel W-1/W-2 on the west, divides the two parcels. In this area, Second Street tunnels under Bunker Hill to Figueroa Street. Parcel Q is located directly across Grand Avenue from the Walt Disney Concert Hall and across First Street from the Civic Center Mall, the Los Angeles County Courthouse, and the Dorothy Chandler Pavilion. Parcels W-1/W-2 are also located directly across First Street from the Civic Center Mall. The northeast corner of Parcels W-1/W-2 adjoins the Civic Center subway station along the Metro Red Line.

Parcels M-2 and L are located on the west side of Grand Avenue and are bounded by Hope Street to the west, Second Street on the north, and Grand Avenue to the east. The Grand Tower high-rise residential building adjoins the Project site on the south. The Walt Disney Concert Hall is located directly to the north and across Second Street from Parcel L, while MOCA and the Colburn School of Performing Arts are located to the east directly across Grand Avenue from Parcel M-2. Other surrounding uses include California Plaza and the Wells Fargo Center, to the south and east.

C. METHODOLOGY

In order to identify and evaluate historic resources, a multi-step methodology was utilized. A record search to identify previously documented historic resources was conducted. This search included a review of the National Register of Historic Places, determinations of eligibility for National Register listings, and the California Historical Resources Inventory database maintained by the State Office of Historic Preservation (OHP). The results of the record search by the South Central Coastal Information Center (SCCIC) are attached to this technical report as Appendix A. Site inspections were made to document existing conditions, identify character-defining features of those properties evaluated as potentially significant, and define the historic resources study area. A reconnaissance-level survey of the study area, including photography and background research, was then made. Additional background and site-specific research was conducted in order to evaluate historic resources within their historic context. Criteria of the National Register of Historic Places (National Register), California

Register of Historical Resources (California Register), and the City of Los Angeles were employed to assess the significance of the properties. More specifically, in conducting the identification and evaluation of historic resources located within the study area, the following tasks were performed:

- Searched records of the National Register of Historic Places, California Historical Resources Inventory and the City of Los Angeles;
- Conducted field inspections of the study area;
- Photographed potential historic resources located within the study area;
- Collected and reviewed historic images, maps, and archives of the study area including, but not limited to, those at the Los Angeles Public Library;
- Conducted site-specific research on historic resources including City of Los Angeles building permits, Los Angeles County tax assessor records, Sanborn Fire Insurance Maps, and other relevant archival documents;
- Reviewed and analyzed previous documentation, ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs; and
- Evaluated potential historic resources based upon criteria used by the National Register, the California Register, and the City of Los Angeles Historic-Cultural Monuments (LAHCMs). Assessed properties utilizing the survey methodology of the State Office of Historic Preservation (OHP).

II. REGULATORY FRAMEWORK

Historic resources fall within the jurisdiction of several levels of government. Federal laws provide the framework for the identification, and in certain instances, protection of historic resources. Additionally, states and local jurisdictions play active roles in the identification, documentation, and protection of such resources within their communities.

Numerous laws and regulations require federal, state, and local agencies to consider the effects of a proposed project on historic resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office and the Advisory Council on Historic Preservation). The National Historic Preservation Act (NHPA) of 1966, as amended; the California Environmental Quality Act (CEQA); the California Register of Historical Resources, Public Resources Code (PRC) 5024; the City of Los Angeles Cultural Heritage Ordinance (Los Angeles Administrative Code, Section 22.130) are the primary federal, state, and local laws governing and affecting the preservation of historic resources of national, state, regional, and local significance. Additional local regulations and policies pertinent to historic resources and the proposed Project include the City of Los Angeles, Board of Cultural Affairs Commissioners Control over Works of Art (Los Angeles Administrative Code, Section 22.109) and the City's Historic Preservation Element. A description of the most relevant laws and regulations is provided below.

A. FEDERAL LEVEL

1. National Register of Historic Places

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the National Historic Preservation Act (NHPA) of 1966, as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[1] The National Register recognizes properties that are significant at the national, state, and local levels.

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[1] *Code of Federal Regulations (CFR), 36 Section 60.2.*

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. Four criteria have been established to determine the significance of a resource:[2]

A. It is associated with events that have made a significant contribution to the broad patterns of our history; or

B. It is associated with the lives of persons significant in our past; or

C. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. It yields, or may be likely to yield, information important in prehistory or history.

A property eligible for the National Register must meet one or more of the above criteria. In addition, unless the property possesses exceptional significance, it must be at least fifty years old to be eligible for National Register listing. Certain types of properties normally excluded from consideration, such as being less than fifty years of age, may be eligible for the National Register if they meet special requirements called Criteria Considerations.

Ordinarily, cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past fifty years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do not meet criteria or if they fall within one of the above referenced categories (Criteria Considerations A through G).

For the purposes of this historic resources assessment, the special circumstance associated with properties less than fifty years of age is applicable. National Register Criteria Consideration G; Properties That Have Achieved Significance Within The Last Fifty Years stipulates the requirements a property must meet to qualify under this particular criteria

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[2] *How to Complete the National Register Registration Form, National Register Bulletin, U.S. Department of Interior, National Park Service, 1997. This bulletin contains technical information on comprehensive planning, survey of cultural resources and registration in the National Register of Historic Places.*

consideration category. The phrase "exceptional importance" does not require that the property be of national significance. It is a measure of a property's importance within the appropriate historic context, whether the scale of that context is local, regional, State, or national.[3] In applying this criteria consideration it is important for a property to be evaluated only when sufficient historical perspective exists to determine that it is exceptionally important. The necessary perspective can be provided by scholarly research and evaluation, and must consider both the historic context and the specific property's role in that context.

As noted above, the National Register includes significant properties, classified as buildings, sites, districts, structures, or objects. The following definitions of these particular categories have been excerpted from the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*.

- Building. A building, such as a house, barn, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn; e.g., houses, stables, garages, city halls, commercial buildings, factories, hotels, mills, and train depots.

- Structure. The term "structure" is used to distinguish buildings from functional constructions made usually for purposes other than creating human shelter; e.g., bridges, tunnels, gold dredges, fire lookout towers, canals, dams, power plants, silos, systems of roadways and paths, kilns, earthworks, and bandstands.

- Object. The term "object" is used to distinguish buildings and structures from constructions that are primary artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment; e.g., sculpture, statuary, monuments, boundary markers, and fountains.

- Site. A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure; e.g., habitation sites, rock shelters, cemeteries, gardens, battlefields, ruins of historic buildings and structures, mining sites, shipwrecks, locations of treaty signings, trails, designed landscapes, and land areas having traditional cultural significance.

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[3] *National Register Bulletin: How to Apply the National Register Criteria for Evaluation, U.S. Department of the Interior, National Park Service, Preservation Assistance Division, 1995. page 42.*

- District. A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development; e.g., college campuses, business districts, large forts, industrial complexes, rural villages, canal systems, large farms, ranches, estates or plantations, transportation networks, large landscaped parks, residential areas, and collections of habitation and limited activity sites. Upon its identification, a district

- can be further divided into contributing and noncontributing properties. A district can be considered eligible even if all of the properties within the district are not eligible for individual listing distinction, as long as the grouping of properties achieves significance as a whole within its historic context. While a district can also contain buildings, structures, sites, objects, or open spaces that do not contribute to the significance of the district, the majority of contributing properties must still convey the district's sense of time and place and historic development. Additionally, the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity (see below), as must the district as a whole.

In addition to meeting the criteria of significance, a property must also have integrity. "Integrity is the ability of a property to convey its significance."[4] According to the *National Register Bulletin*, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity, a property will always possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.[5] The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. The following is excerpted from the *National Register Bulletin, How to Apply the National Register Criteria for Evaluation,* which provides guidance on the interpretation and application of these factors:

- Location is the place where the historic property was constructed or the place where the historic event occurred.[6]

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[4] *How to Apply the National Register Criteria for Evaluation, National Register Bulletin, U.S. Department of Interior, National Park Service, 1997. p. 44.*

[5] *Ibid.*

[6] *"The relationship between the property and its location is often important to understanding why the property was created or why something happened. The actual location of a historic property, complemented by its setting is particularly important in recapturing the sense of historic events and persons. Except in rare cases, the relationship between a property and its historic associations is destroyed if the property is moved." Ibid.*

- Design is the combination of elements that create the form, plan, space, structure, and style of a property.[7]

- Setting is the physical environment of a historic property.[8]

- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.[9]

- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.[10]

- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.[11]

- Association is the direct link between an important historic event or person and a historic property.[12]

In assessing a property's integrity, the National Register criteria recognize that properties change over time, therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity.[13]

For properties which are considered significant under National Register Criteria A and B, the *National Register Bulletin No. 15, How to Apply the National Register Criteria for*

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[7] *"A property's design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors of surface materials; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape." Ibid.*

[8] *Ibid, p.45.*

[9] *"The choice and combination of materials reveals the preferences of those who created the property and indicated the availability of particular types of materials and technologies. Indigenous materials are often the focus of regional building traditions and thereby help define an area's sense of time and place." Ibid.*

[10] *"Workmanship can apply to the property as a whole or to its individual components. It can be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. It can be based on common traditions or innovative period techniques." Ibid.*

[11] *"It results from the presence of physical features that, taken together, convey the property's historic character." Ibid.*

[12] *"A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, association requires the presence of physical features that convey a property's historic character. . . Because feeling and association depend on individual perceptions, their retention alone is never sufficient to support eligibility of a property for the National Register." Ibid.*

[13] *Ibid, p. 46.*

Evaluation, states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).[14]

In assessing the integrity of properties which are considered significant under National Register Criterion C, the *National Register Bulletin No. 15* provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.[15]

B. STATE LEVEL

The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also carries out the duties as set forth in the Public Resources Code (PRC) and maintains the California Historical Resource Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions. Also implemented at the state level, CEQA requires projects to identify any substantial adverse impacts which may affect the significance of identified historical resources.

1. California Environmental Quality Act

Under CEQA, a "project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment."[16] This statutory standard involves a two-part inquiry. The first involves a determination of whether the project involves a historical resource. If so, then the second part involves determining whether the project may involve a "substantial adverse change in the significance" of the historical resource. To address these issues, guidelines that implement the 1992 statutory amendments relating to historical resources were adopted in final form on October 26, 1998 with the addition of State CEQA Guideline Section 15064.5. The CEQA Guidelines provide that for the purposes of CEQA compliance, the term "historical resources" shall include the following:[17]

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[14] *Ibid.*

[15] *"A property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. The property is not eligible, however, if it retains some basic features conveying massing but has lost the majority of the features that once characterized its style." Ibid.*

[16] *California Public Resources Code § 21084.1.*

[17] *State CEQA Guidelines, 14 CCR § 15064.5(a).*

- “A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.

- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements in section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources, which are as follows:

    1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

    2. Is associated with the lives of persons important in our past;

    3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

    4. Has yielded, or may yield, information important in prehistory or history.

The Guidelines further provide that: "the fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.”

2. California Register of Historical Resources

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the California Register of Historical Resources (California Register) is “an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[18] The criteria for eligibility for the California Register are based upon National Register criteria.[19] However, they have been modified for state use in order to include a range of historical resources that better reflect the history of California. Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.[20]

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places;[21]
- California Registered Historical Landmarks from No. 770 onward; and
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.[22]

Other resources which may be nominated to the California Register include:

- Individual historical resources;
- Historical resources contributing to historic districts;
- Historic resources identified as significant in historical resources surveys with significance ratings of Category 1 through 5;[23] and
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.[24]

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[18] *California Public Resources Code § 5024.1(a).*

[19] *Ibid, § 5024.1(b).*

[20] *Ibid, § 5024.1(d).*

[21] *Ibid, § 5024.1(d)(1).*

[22] *Op. Cit.*

[23] *See Appendix B for an explanation of significance rating categories.*

To be eligible for the California Register, a historic resource must be significant at the local, state, or national level, under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. Is associated with the lives of persons important to local, California, or national history; or
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Like the National Register, the California Register criteria have exceptions to what can be considered eligible for inclusion. These exceptions mostly address resource type rather than significance and are called Special Considerations.

The California Code of Regulations Title 14, Chapter 11.5, Section 4852(d) defines those properties that may be "Special Considerations." Such properties include moved buildings, structures, or objects; properties achieving significance within the past fifty years; and reconstructed buildings.

With respect to moved resources, the regulations provide that the State Historical Resources Commission encourages the retention of historical resources on site and discourages the non-historic grouping of historic buildings into parks or districts.[25] However, it is recognized that moving an historic building, structure, or object is sometimes necessary to prevent its destruction.[26] Therefore, a moved building, structure, or object that is otherwise eligible may be listed in the California Register if it was moved to prevent its demolition at its former location and if the new location is compatible with the original character and use of the historical

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[24] *California Public Resources Code § 5024.1(e).*

[25] *California Code of Regulations, Title 14, Chapter 11.5, Section 4852(d)(1).*

[26] *Ibid.*

resource.[27] An historical resource should retain its historic features and compatibility in orientation, setting, and general environment.[28]

For resources achieving significance within the past fifty years, the regulations provide that in order to understand the historic importance of a property less than fifty years of age, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource.[29] A resource less than fifty years old may be considered for listing in the California Register if it can demonstrate that sufficient time has passed to understand its historical importance.[30]

Additionally, reconstructed properties can be considered for listing in the California Register. Reconstructed buildings are those buildings not listed in the California Register under the criteria listed above (Section 4852(b)(1), (2), or (3).[31] A reconstructed building less than fifty years old may be eligible if it embodies traditional building methods and techniques that play an important role in a community's historically rooted beliefs, customs, and practices; e.g. Native American roundhouse.[32]

The California Register criteria for evaluation purpose uses similar categories to those used for the National Register for identifying types of historic resources eligible for designation: building, structure, object, site, and district. The following definitions have been excerpted from the California Code of Regulations Title 14, Chapter 11.5 Section 4852(a), the California Register of Historical Resources.

- Building. A resource, such as a house, barn, church, factory, hotel, or similar structure created principally to shelter or assist in carrying out any form of human activity. "Building" may also be used to refer to an historically and functionally related unit, such as a courthouse and jail or a house and barn.

- Site. A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historical, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by

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[27] *Ibid.*

[28] *Ibid.*

[29] *California Code of Regulations, Title 14, Chapter 11.5, Section 4852(d)(2).*

[30] *Ibid.*

[31] *California Code of Regulations, Title 14, Chapter 11.5, Section 4852(d)(3).*

[32] *Ibid.*

physical remains if it is the location of a prehistoric or historic event, and if no buildings, structures, or objects marked it at that time. Examples of such sites are trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.

- Structure. The term "structure" is used to describe those constructions made for a functional purpose rather than creating human shelter. Examples of structures include mines, bridges, and tunnels.
- Object. The term "object" is used to describe those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed, as opposed to a building or a structure. Although it may be movable by nature or design, an object is associated with a specific setting or environment. Objects should be in a setting appropriate to their significant historic use, role, or character. Objects that are relocated to a museum are not eligible for listing in the California Register. Examples of objects include fountains, monuments, maritime resources, sculptures, and boundary markers.
- Historic District. Historic districts are unified geographic entities which contain a concentration of historic buildings, structures, objects, or sites united historically, culturally, or architecturally. Historic districts are defined by precise geographic boundaries. Therefore, districts with unusual boundaries require a description of what lies immediately outside of the area, in order to define the edge of the district and to explain the exclusion of adjoining areas.

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Additionally, a historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance to be recognizable as a historic resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.[33]

The state regulations define "integrity" of an historic resource as the authenticity of the resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. The resource must also be judged with reference to the particular criteria under which it is proposed for eligibility. It is

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[33] *California Code of Regulations, California Register of Historical Resources (Title 14, Chapter 11.5), Section 4852(c).*

possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.[34]

3. California Office of Historic Preservation Survey Methodology

The evaluation instructions and classification system prescribed by the OHP in its *Instructions for Recording Historical Resources* provide a three-digit evaluation code for use in classifying potential historic resources. The first digit indicates one of the following general evaluation categories for use in conducting cultural resource surveys:

1. Listed on the National Register or the California Register;
2. Determined eligible for listing in the National Register or the California Register;
3. Appears eligible for the National Register or the California Register through survey evaluation;
4. Appears eligible for the National Register or the California Register through other evaluation;
5. Recognized as Historically Significant by Local Government;
6. Not eligible for any Listing or Designation; and
7. Not evaluated for the National Register or California Register or needs re-evaluation.

The second digit is a letter code indicating whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a number which is used to further specify significance and refine the relationship of the property to the National Register and California Register. Under this system, categories 1 through 4 pertain to various levels of National Register or California Register eligibility. Category 5 pertains to properties that are ineligible for National Register or California Register listing, but are recognized as historically significant by local government. In addition, properties not eligible for listing or designation in the National Register, California Register, or a local register are given an evaluation code of 6.

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[34] *Ibid.*

C. LOCAL LEVEL

1. County of Los Angeles

a. Los Angeles County Historical Landmarks and Records Commission

The County Historical Landmarks and Records Commission (Commission) considers and recommends to the County of Los Angeles Board of Supervisors local historical landmarks defined to be worthy of registration by the state of California Department of Parks and Recreation either as “California Historical Landmarks” or as “Points of Historical Interest.”

A resource must meet one or more of the following criteria for designation as a State Historical Landmark:

- Is the first, last, only, or most significant of its type in the State or within a large geographic region (Northern, Central, or Southern California);
- Is associated with an individual or group having a profound influence on the history of California; and/or
- Is a prototype of, or is an outstanding example of, a period, style, architectural movement or construction, or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

The same criteria apply for designation as a State Point of Historical Interest, but pertain to local and county regions.

The Commission may consider and comment for the Board of Supervisors on applications related to the National Register. The Commission makes its considerations and recommendations in light of criteria for designation, including significance and access, and provision for maintenance, as specified in state law, including the California Public Resources Code, or in regulations and interpretations of the State Historical Resources Commission.

b. County of Los Angeles General Plan

The County of Los Angeles General Plan establishes specific goals related to the conservation of cultural resources:

- Encourage cultural and social diversity and the preservation of the cultural heritage of the County of Los Angeles; and

- Protect cultural heritage resources.

c. Los Angeles County Arts Commission

For any county-owned artwork, statues, fountains, or memorial plaques, the Los Angeles County Arts Commission oversees a program that established a set of policies and procedures for the long-term care, repair, or replacement of such civic art (referred to as the County of Los Angeles Civic Art Policy and Procedures).[35] The Policy and Procedures include guidelines on the routine maintenance, conservation and replacement, acceptance of gifts and loans, and deaccessioning of civic art on County-owned property. The Los Angeles County Arts Commission is an advisory group to the County Board of Supervisors.

2. City of Los Angeles

a. Historic - Cultural Monuments

The City of Los Angeles adopted a Cultural Heritage Ordinance, in 1962, that was amended in 1985 (Los Angeles Administrative Code, Sections 22.120 et seq.). The Ordinance created a Cultural Heritage Commission and criteria for designating Historic-Cultural Monuments (LAHCMs). Once a property has been designated an LAHCM, the City's Cultural Heritage Commission and its staff review permits to alter, relocate, or demolish these landmarks. The Cultural Heritage Commission and its staff are under the purview of the City Planning Department.

The Los Angeles Cultural Heritage Ordinance (Los Angeles Administrative Code, Section 22.130) establishes criteria for designating local historic resources and/or historic districts (historic preservation overlay zones) as LAHCMs. These properties must reflect one of the following elements:

- The proposed site, building, or structure reflects or exemplifies the broad cultural, political, economic, or social history of the nation, state, or City (community);
- The proposed site, building, or structure is identified with historic personages or with important events in the main currents of national, state, or local history;
- The proposed site, building, or structure embodies certain distinguishing architectural characteristics of an architectural-type specimen, inherently valuable for a study of a period style or method of construction; or

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[35] *Approved December 7, 2004.*

- The proposed site, building, or structure is a notable work of a master builder, designer, or architect whose individual genius influenced his age.

The Historic Preservation Overlay Zone (HPOZ) Ordinance was adopted in 1979 and revised in 1997. An HPOZ is a planning tool that recognizes the special qualities of areas that are historically, culturally, or architecturally significant. Evaluation criteria for Historic Preservation Overlay Zones state that structures, natural features, or sites within the involved area, or the area as a whole, shall meet one or more of the following:

- Adds to the historic architectural qualities or historic associations for which a property is significant because it was present during the period of significance, and possesses historic integrity reflecting its character at that time;

- Owing to its unique location or singular physical characteristics, represents an established feature of the neighborhood, community, or City;

- Retaining the structure would help preserve and protect an historic place or area of historic interest in the City.

The City of Los Angeles Cultural Heritage Commission Policy Guide excludes from consideration as Los Angeles Historic-Cultural Monuments properties over which it has no jurisdiction. Included in this category are federal, state, county, or school district properties located within the City of Los Angeles. Those properties discussed in the following paragraphs that are either owned by the federal, state, or county government are not eligible for City designation as Historic-Cultural Monuments nor are they eligible as contributors to a potential city-level historic district.

III. ENVIRONMENTAL SETTING

A. HISTORIC CONTEXT

1. Los Angeles

Prior to the arrival of the Spanish in California, the Los Angeles area was inhabited by the Gabrielino Indians who lived in a village located between Fort Moore Hill and the Los Angeles River. The earliest explorers to the region arrived in 1769 with the Gaspar de Portola Expedition. In 1781, Mexican settlers under the direction of Spanish Governor Felipe de Neve founded El Pueblo de La Reina de Los Angeles. The pueblo grant also included the four square leagues (approximately 36 square miles) which stretched from Hoover Street to Indian and from Fountain Avenue to the line of Exposition Boulevard. The vast acreage surrounding the pueblo in all directions was divided into numerous ranchos of various sizes during the Mexican period (1822 - 1848). The San Francisquito, Potrero Grande, and San Antonio ranchos were established east of the pueblo. Portions of the land to the north of the pueblo became part of Rancho San Rafael.

In 1850, California was admitted as the 31st state in the Union and, in the same year, the City of Los Angeles was formally incorporated, centered around a plaza which was located just northeast of the current plaza. Many Americans and recent immigrants flocked to California in hopes of finding gold. During the 1860s and 1870s, land to the west and north of the present-day Harbor Freeway (State Highway 110) was settled as Los Angeles began to expand. In the 1870s and 1880s, immigrants established Chinatown just to the north of the city center. By the 1880s, southern California began attracting Midwesterners and Easterners who could now travel by railroad directly to the west coast. Streetcars also made possible the development of residential neighborhoods beyond downtown Los Angeles during the late 1880s and early 1890s. The former ranchos were eventually further subdivided into smaller communities, such as Highland Park, Brooklyn Heights, Boyle Heights, East Los Angeles, and Angelino Heights.

During the first quarter of the 20th century, the success of the motion picture business, discovery of oil within the region, a successful citrus industry, and a booming real estate market continued to entice new settlers, particularly Midwesterners, to the Los Angeles region. To support the growing commercial and agricultural ventures, immigrants from Mexico, Japan, and China also moved to the area. The Owens Valley Aqueduct was completed in 1913, providing water to outlying areas of Los Angeles and promoting further development in the area.

2. Bunker Hill

Although the Bunker Hill area today is defined as within 1st Street (north), Hill Street (east), 5th Street (south), and the Harbor Freeway (west), the crest of the actual hill, named in 1875 to commemorate the Revolutionary War Battle of Bunker Hill, was at the intersection of 1st Street and Grand Avenue. It sloped to the north down towards where the Hollywood Freeway now runs, to the south towards 5th Street, to the east down to Spring Street, and to the west down to where the Harbor Freeway now runs.

Bunker Hill was developed by businessman Prudent Beaudry, who in 1867 paid $517 to build a subdivision with lots offering views of the Los Angeles basin and neighboring hills. Wealthy families started building large houses on the hill in the late 1860s after a series of floods encouraged residential development on higher ground. High style homes of the Victorian period were built here by some of Los Angeles' most wealthy residents.

With the booming expansion of the City, housing was at a premium, and apartment buildings and hotels soon started making their way into the Bunker Hill area in the 1880s. City Hall at that time was located on Broadway between 2nd and 3rd Streets right at the base of the hill. In the early part of the twentieth century, the Angels Flight funicular railroad that climbed the steep grade from Hill Street up 3rd Street further contributed to the transformation of Bunker Hill, making it easier to gain access to the higher neighborhoods.

Until the end of World War I, the Bunker Hill area was a respectable residential area with most of the occupants employed in businesses and industries located at the bottom of the hill along Broadway and farther to the east towards the industrial section of the City and the rail yards. During the Depression years, the Bunker Hill area became a slum with the houses and apartment buildings falling into disrepair due to poverty and neglect. Those residents who could afford to escaped into the new communities being established away from the City center.

At the same time that the residential area of Bunker Hill was becoming an ever larger eyesore, the City fathers started developing plans to establish a civic center for the quickly sprawling city.

3. Civic Center

The geographic area that is referred to as the "Civic Center" can be defined in a number of ways depending on the purpose of the definition as well as who is defining the area. For the purposes of this report, unless explicitly stated otherwise, the geographic area that is referred to as the Civic Center is the description set forth below.

When the pueblo of Los Angeles was founded in 1781, one side of the central plaza was set aside to erect church and government buildings. The seat of city government later moved to a one story wood-frame building across from the present city hall. In 1885, city offices moved to Second and Spring Streets, and in 1889, a four-story masonry city hall was erected on Broadway between Second and Third Streets. Plans for a unified civic and cultural center were developed starting at the turn of the century by Charles Mulford Robinson. The Central Library was eventually constructed on the site that Robinson had envisioned as a cultural center, and a Hall of Records building was completed on the proposed civic center site in 1910.

Between 1890 and 1910, the City's population greatly expanded with the influx of easterners who benefited from a price war between the two railroad lines serving the Pacific coast. The efficient streetcar system built lines into the neighboring communities to carry workers away from the city to the suburbs at night so they could enjoy living in the country. Distances between home, work, and recreation increased while the commercial center moved south to Third Street and then west to Spring Street where the City's first skyscraper, the still-standing 12-story Braly Block, was constructed in 1904.

As early as 1900, there were discussions of creating a "City Beautiful" Civic Center for the City and County of Los Angeles. In 1905, a Municipal Arts Commission was appointed, and this group, in turn, engaged the pioneer city planner, Charles Mulford Robinson, to prepare a plan, which it published in 1909. The tasks of carrying forward the then highly popular idea of a City Beautiful Civic Center fell into the hands of a newly formed City Planning Association, formed in 1913. The Southern Californian Chapter of the A.I.A. advocated that a national competition should be held to select an architect/planner to design a civic center for the City.

During the teens and twenties, additional proposals for a Civic Center were developed. One of the most ambitious was prepared by a consortium of architects called Allied Architects. The Allied Architects Association was founded by Jess E. Stanton. Their plan extended the Civic Center north to the Plaza and west to Bunker Hill. An echo of its north-south axis can still be seen in the orientation of City Hall, constructed in 1927, and the Federal Courthouse building, constructed in 1937. (See Figure 4 on page 26).

In 1939, both Union Station and the Federal Courthouse were dedicated. Six years later, the Civic Center Authority was created to revise plans submitted by the Allied Architect's Association and others for the proposed master planning of the Civic Center. In 1940, the Pasadena Freeway was opened connecting downtown Los Angeles with the northern suburbs. The impact that the automobile was making on this huge sprawling city, and the need for building more freeways, postponed the plans for the civic center until the early 1950s. At the

Figure 4

Plan for Los Angeles Civic Center 1933

Source: Herald Examiner Collection.

same time, the federal government embarked on an urban renewal campaign aimed at clearing slums for private development.

In 1948, to make room for the Hollywood Freeway and the four level interchange between the Hollywood Freeway and the Pasadena Freeway, buildings were razed and the engineers literally cut away sections of Bunker Hill and Fort Moore Hill to make room for the roadways. The Community Redevelopment Agency of the City of Los Angeles, armed with the power of eminent domain, started removing slum dwellings in the area and by 1960, all of the community of Bunker Hill had been scraped down to dirt and all remnants of curving streets and hilly terraces had been shaved into a new profile.

The Civic Center’s east-west orientation was fixed by the completion of the Hollywood Freeway in 1952, which blocked development to the north, and by the availability of land on Bunker Hill, which encouraged development to the west. The Civic Center began expanding east when two blocks of Little Tokyo were acquired in 1948 for a new police headquarters. The eastern boundary of the Civic Center was further extended to Alameda Street. This plan also designated the blocks east of Spring Street and north of Temple Street for buildings of the federal government and the blocks south of Temple Street for the City of Los Angeles.

As a sign of the times in the early 1950s, the Civic Center Mall was to be the site of a proposed garage/air raid shelter combination. The Los Angeles City Planning Commission proposed to have the Civic Center underground garages double as air raid shelters when completed, capable of holding 90,000 people.

The plan for the Civic Center that did develop was a modified Beaux-Arts plan. An east-west axis runs from the Water and Power Building (1964) at the west end to the City Hall (1927) on the east. Lining the axis are the buildings of the Music Center (1964-69); then to the north, the Kenneth Hahn Hall of Administration (1960), the Hall of Records (1962), and the Criminal Court Building (1962); to the south, the Courthouse (1958), Law Library (1953), and State Office Building (the building was demolished in the early 1980s due to damage incurred from an earthquake. The concrete foundation is still in place). The City Hall was to have been the termination of this major axis and to have been the center of a north-south axis. The latter idea never was achieved. Somewhat off-center, the Department of Water and Power Building forms a sort-of termination of the major east-west axis. By the end of the 1960s, the first portion of the terraced mall, with its underground parking garages, was completed.

In 1951, the County of Los Angeles Board of Supervisors approved the current location of the County of Los Angeles Mall, on First Street between Hill Street and Grand Avenue, for construction of the County Courthouse. The Associated Architects, Stanton, Stockwell, Paul R. Williams; Adrian Wilson; and Austin, Field & Fry were commissioned to draft plans for the County Courthouse and Kenneth Hahn Hall of Administration. To accommodate the proposed buildings, First Street and Grand Avenue were lowered, and Olive Street was eliminated between

First Street and Temple Street. The County Courthouse was completed in 1958. The Kenneth Hahn Hall of Administration was completed in 1961. At that time, functions housed in the Old Hall of Records (1934-1958) were relocated to the Kenneth Hahn Hall of Administration including the Board of Supervisors, Chief Administrative Officer, County Counsel, the Assessor, the Auditor, and Tax Collector. (See Figure 5 on page 29).

The public open space between the County Courthouse and the Kenneth Hahn Hall of Administration, known as the El Paseo de los Pobladores, was developed in 1966 by the firm of Cornell, Bridges, and Troller. As senior partner, Cornell was involved in the design of the Paseo de los Pobladores but is better known for his work on the Franklin D. Murphy Sculpture Garden and the Sunset Canyon Recreation Center on the University of California Los Angeles campus, both of which won national design awards."[36]

The only structures remaining in the area from the urban renewal era include City Hall, the Hall of Justice, and the Federal Building (now the Federal Courthouse). Architectural characteristics of these civic institutions vary greatly, yet they all have associations with government service and share a common physical interrelationship with each other as a unified grouping in the downtown area.

B. SURVEY STUDY AREA DEFINED

The historic resources study area was identified based on the potential direct and/or indirect changes in the character or use of identified historic resources by the proposed Project. Because historic resources can be affected by land use changes, visual, noise, or atmospheric intrusions, the study area was defined as the Project site, which includes the Civic Center Mall and Court of Flags between City Hall and Grand Avenue; the streetscape along Grand Avenue between Fifth Street and Cesar Chavez Avenue; the five Parcels located within the CRA/LA's Bunker Hill Redevelopment Project Area; and those properties fronting the streets that define the Project site. For example, the City's DWP building, located on the west side of Hope Street and north of First Street, was not included in this analysis as no part of the Project site adjoins the DWP Building. The historical significance of the entire potential historic district was evaluated, but the survey study area did not extend to encompass the entire potential historic district. Figure 6 on page 30 illustrates the survey study area and identifies those properties located within it.

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[36] *Grand Avenue and Environs Project Final Environmental Impact Report, County of Los Angeles, 2002.*

Photograph 1: Aerial view of City Hall and Bunker Hill circa 1940.

Photograph 2: Aerial view of City Hall and Civic Center circa 1980.

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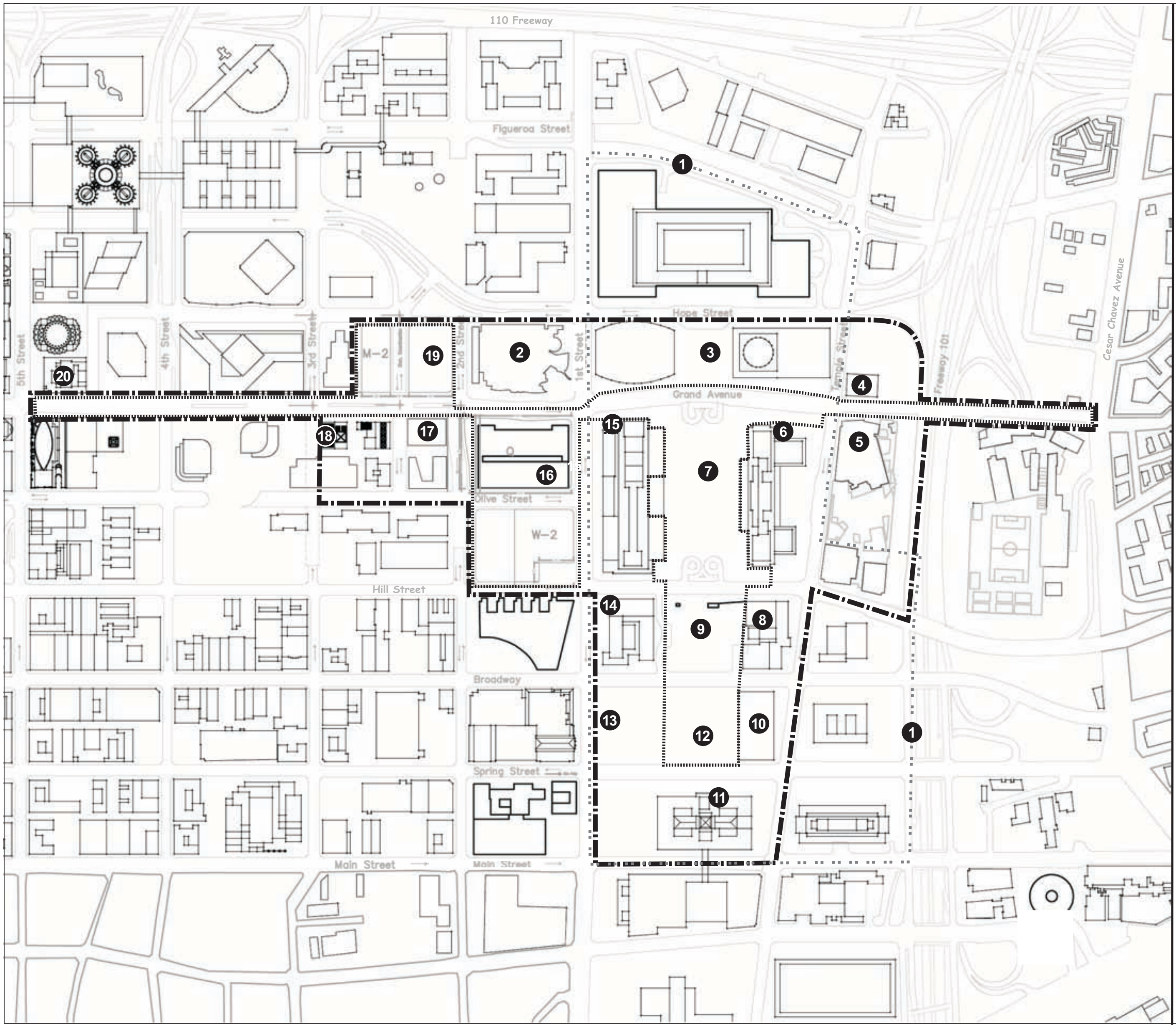
Figure 5
**Aerial Photographs of City Hall
and Civic Center Circa 1940 and 1980**

Source: SPNB Collection, Los Angeles Public Library.



LEGEND

1 Potential Los Angeles Civic Center Historic District (potentially eligible for California Register) - includes contributing and non-contributing buildings/features
2 Walt Disney Concert Hall
3 The Music Center
4 Music Center Annex
5 Cathedral of Our Lady of the Angels
6 Kenneth Hahn Hall of Administration
7 County of Los Angeles Mall
8 Hall of Records
9 Court of Flags
10 Clara Shortridge Foltz Criminal Justice Center
11 Los Angeles City Hall
12 Parking Lot
13 Vacant Lot-Concrete foundation of former State Office Building
14 Los Angeles County Law Library, Mildred E. Lillie Building
15 Los Angeles County Courthouse/Stanley Mosk Courthouse
16 Parcels Q and W-1/W-2
17 Colburn School of Performing Arts
18 Museum of Contemporary Art (MOCA)
19 Parcels M-2 and L

┈┈┈ Project Site
━ · ━ Survey Study Area
· · · Potential Historic District Boundary

PCR

Figure 6
Survey Study Area

Source: PCR Services Corporation, 2006.

C. EVALUATION OF HISTORIC RESOURCES WITHIN STUDY AREA

The California Historical Resources Information System (CHRIS) indicates that there are five (5) properties in the study area that are listed in the California Historical Resources Inventory maintained by OHP. These five previously recorded properties include the Kenneth Hahn Hall of Administration, the Los Angeles County Courthouse, the Civic Center Mall (Paseo de los Pobladores park), Los Angeles City Hall, and the Southern California Edison building. The first three referenced properties were surveyed and evaluated in 2002 as part of a Federal Highway Administration (FHWA) Section 106 project. Because a federal agency was involved the properties were only surveyed for National Register eligibility. State and local eligibility potential was not considered at the time. Under the Section 106 process, they were found to be ineligible for the National Register because of their age (less than fifty years old) and were, therefore, each given a National Register status code of 6Y2.[37] The survey assessment entitled *Historical Resources Assessment, Grand Avenue and Environs Project, Los Angeles, California* Greenwood and Associates (2002), documented the findings of this survey. The Los Angeles City Hall building is noted in the OHP database as being formally evaluated a number of times as eligible for National Register listing under Criteria A (historical associations) and C (architecture). Currently, this property is a designated City of Los Angeles Historical-Cultural Monument. The Southern California Edison building located at 601 West 5th Street has also been formally evaluated for National Register significance. The Art Deco building is eligible for the National Register under Criterion C based on its distinguishing architectural style and association with a prominent architect. The building, currently referred to as One Bunker Hill (the Southern California Edison building), is also a designated Los Angeles Historic-Cultural Monument.

In December 2005, the Kenneth Hahn Hall of Administration, the County Courthouse, Hall of Records, and the Clara Foltz Criminal Justice Center were evaluated for federal and state significance as individual resources in a historical analysis by Brenda Levin and Associates and Theresa Grimes (sometimes referred to in this current report as the "Grimes report"). This survey assessment was included in a larger report entitled the “Kenneth Hahn Hall of Administration: Strategic Real Estate and Facilities Options” prepared for the Los Angeles County Chief Administrative Office. The Grimes historical assessment also looked at the Los Angeles Civic Center as a possible historic district. Eleven buildings within this area were identified and c evaluated for historical significance using federal and state criteria. The eleven properties considered in this analysis were the Los Angeles City Hall, the Law Library, the State Courthouse, the Kenneth Hahn Hall of Administration, the Paseo de los Pobladores, the Hall of Records, the Department of Water and Power, the Dorothy Chandler Pavilion, the Ahmanson

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[37] *National Register Status Code 6Y2: determined ineligible for listing in the National Register through a concensus determination of a federal agency and the State Historic Preservation Officer.*

Theater, the Mark Taper Forum and the Clara Foltz Criminal Justice Center. This survey assessment concluded that a potential historic district comprised of these eleven buildings was not eligible for the National Register or California Register because it did not possess exceptional importance within a historic context, such as city planning or late Modern architecture. The Grimes report did state that this potential district may become eligible for listing in the National Register, and by extension the California Register, when more time has passed and when there is a context for evaluating its historic significance.[38]

The Grimes report also acknowledged that there have been claims that the Kenneth Hahn Hall of Administration, the Stanley Mosk Courthouse, and the Paseo de los Pobladores might be considered to be an historic district, and that there could be a potential larger potential historic district including the Music Center and the Department of Water and Power, and that these possibilities must be considered in any plans to adversely impact these resources. The current survey process for this EIR was conducted in accordance with OHP's Instructions for Recording Historical Resources (1995), which give a 45-year threshold for surveying properties for inclusion in the OHP filing system. According to OHP's introduction to its recordation methodology, any physical evidence of human activities over 45 years old may be recorded for the purposes of inclusion in its inventory database.

As a general rule, a 50 year age threshold for historical significance is applied in evaluations for the state register. Although the California Register does not specifically call out a fifty year threshold for significance, it does refer to being "consistent" with the National Register criteria, and indirectly addresses a 50 year rule in its regulations dealing with special considerations.[39] The 45 year age threshold recommended by OHP for recordation purposes recognizes that there is commonly a five year lag between resource identification and the date that planning decisions are made. OHP explicitly encourages the collection of data about resources that may become eligible for the National Register or California Register within that planning period. Its methodology, however, also acknowledges that …"More restrictive criteria (such as the National Register criteria, the California Register criteria, and/or local government criteria) must be met before a resource included in OHP's filing system is listed, found eligible for listing, or otherwise determined to be important in connection with federal, state, and local legal statutes and registration programs."

The planning decisions for this project are scheduled to be considered by the lead and responsible agencies beginning in 2006. Therefore, this survey assessment utilizes the 45 year threshold (properties completed before 1961) for identifying potential historic resources. However, the 50 year age threshold (those properties completed before 1957) is used when

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[38] *Grimes, Theresa and Brenda Levin and Associates. "Historic Analysis - Kenneth Hahn Hall of Administration: Strategic Estate and Facilities Options." Los Angeles County Chief Administrative Office, December 2005.*

[39] *California Code of Regulations Section 4852.*

evaluating potential resources for historical significance under the National Register and California Register criteria.

For evaluation purposes, four properties built either in or before 1956, including the Los Angeles City Hall discussed above, were identified within the study area. Summarized findings of the properties are noted in Table 1 on page 34 and are discussed later in this section.

Those properties that were identified as post-1956 construction, including those along Grand Avenue south of 2nd Street and north of 5th Street, were not documented or evaluated in the current survey process unless they appeared to have a potential for satisfying the threshold of significance for "exceptional" importance under the National Register Criteria Considerations and/or the category of "special considerations" of the California Register criteria.[40,41] Besides satisfying the regular federal and/or state criteria a property under 50 years of age must also meet the special requirements of either the National Register's Criteria Consideration G: Properties That Have Achieved Significance within the Past Fifty Years[42] or the California Register's Special (Criteria) Consideration for properties less than fifty years old or both. Under these circumstances, six of the post-1956 properties located within the survey study area exhibited possible exceptional significance sufficient enough for National Register and/or California Register eligibility consideration

A summary of the results of the historic resources survey and evaluation of the properties within or adjacent to the Project site (as listed in Table 1) is presented on the following pages, including descriptions and evaluations of significance.

1. Potential Los Angeles Civic Center Historic District

Representing the "public sector" are the institutional buildings, structures, sites, and objects of the Civic Center. For this survey analysis the core of this grouping extends from Hope Street to Main Street (west-east boundary) and Temple Street to First Street (north-south boundary). This boundary may be extended upon further research and analysis of the area, the public facilities within it, and the historic context developed. Furthermore, the potential exists that more than one potential historic district may be present.

Although not under any formal determination of eligibility or designation as part of this study, a potential California Register historic district comprised of a sufficient number of public buildings, structures, sites, and objects located within proximity of one another united physically

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[40] *As defined in National Register Bulletin 15, p. 42.*

[41] *CCR Section 4852(d)(2)*

[42] *Ibid.*

Table 1

Properties Surveyed Within the Study Area

Site No.	Description	Year Completed	Rating
1	Los Angeles Civic Center Historic District (Potential)[a]	1953-2003	3CS
2	Walt Disney Concert Hall	2003	3S
3	The Music Center		3S/3CD
	A. Dorothy Chandler Pavilion	1964	--
	B. Mark Taper Forum	1967	--
	C. Ahmanson Theatre	1967	--
4	Music Center Annex	Circa 1960	6Z
5	Cathedral of Our Lady of the Angels	2002	3S
6	Kenneth Hahn Hall of Administration	1960	3CD
7	Civic Center Mall – El Paseo de los Pobladores de Los Angeles	1966	3CD
8	Hall of Records	1962	3CD
9	Civic Center Mall – Court of Historic Flags	1968	3CD
10	Clara Shortridge Foltz Criminal Justice Center	1972	3CD
11	Los Angeles City Hall	1928	2S2/3CD
12	Parking lot	Unknown	6Z
13	Vacant lot – concrete foundation of former State Office Building	Unknown	6Z
14	Los Angeles County Law Library, Mildred E. Lillie Building	1953	3CD
15	Los Angeles County Courthouse/Stanley Mosk Courthouse	1958	3CD
16	Parking lot (Parcels Q and W-1/W-2)	Unknown	6Z
17	Colburn School of Performing Arts	1998	6Z
18	Museum of Contemporary Art (MOCA)	1987	6Z
19	Parking lot (Parcels M-2 and C)	Unknown	6Z
20	Southern California Edison (One Bunker Hill)	1930	2S2

Explanation of Codes:

2S2 Individually determined eligible for National Register by consensus through Section 106 process.

3CS Appears eligible for California Register as an individual property through survey evaluation.

3S Appears eligible for National Register as an individual property through survey evaluation.

3CD Appears eligible for California Register as a contributor to a California Register eligible district through survey evaluation.

6Z Found ineligible for National Register, California Register, or local designation through survey evaluation.

Note:

[a] *Although not formally designated, for the purposes of this analysis a historic district that is potentially eligible for listing on the California Register has been identified.*

Source:

and historically was identified for CEQA purposes. As the Project may adversely impact portions of this potential historic district, its identification and inclusion within this report is appropriate.

For historical significance, a property eligible for the National Register that is less than fifty years of age must be of exceptional importance. The exact definition of exceptional significance and its application are defined in the National Register Bulletin entitled "How to Apply the National Register Criteria for Evaluation." The phrase "exceptional importance" is usually applied to the extraordinary importance of an event or to an entire category of resources. Further, the phrase does not require that the property be of national significance. It is a measure of a property's importance within the appropriate historic context developed.

For California Register eligibility, however, the criteria consideration for an historic resource that is less than fifty years of age is different than it is in the National Register. For a state register evaluation, a historic resource does not need to possess "exceptional importance" to be considered to be eligible for listing; but rather it needs to meet the California Register category of Special Considerations for properties less than fifty years old. This regulation stipulates that a resource that is less than fifty years old may be considered for listing the California Register if it can be demonstrated that sufficient time has passed to understand its historical importance. In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. The "California Office of Historic Preservation Technical Assistance Series #6 Bulletin: California Register and National Register – A Comparison," (2001) further elaborates the differences between the federal and state criteria.

Four levels of government are represented by the buildings, structures, sites, and objects within the Civic Center – federal, state, county, and city. Two large examples of public sector facilities within the potential Los Angeles Civic Center Historic District are the Los Angeles County buildings along the east side of Grand Avenue across from the Music Center – the Kenneth Hahn Hall of Administration and the County Courthouse. They form two sides of a rectangle that encloses a portion of the Civic Center Mall (Paseo de los Pobladores de Los Angeles). The terraced park continues downhill eastward to its neighbor, the Court of Flags, which is flanked by the Hall of Records building to the north and the County Law Library. Further east is the Criminal Justice Center, City Hall, City Hall East and South, and the Los Angeles Police Headquarters (Parker Center). North of the survey area, along the north side of Temple Street are the Hall of Justice, Federal Courthouse, Federal Office Building, the Edward Roybal Center, and the Metropolitan Detention Center. The City of Los Angeles Department of Water and Power building forms the potential district's western terminus along Hope Street.

Outside of Washington, D.C., the Los Angeles Civic Center boasts the largest collection of government buildings in the country.[43,44] Most of these buildings are products of the spare, cost effective, and functional mid-century Moderne architecture of the 1950s and 1960s. To the

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[43] *Herman, Robert. "Downtown Los Angeles: A Walking Guide." City Vista Press, Claremont, California, 1997, p.115.*

[44] *Los Angeles Times. "New Plans Offered for Civic Center." August 14, 1951, pg. A1.*

far west, along Hope Street, is the City's Department of Water and Power building, a multi-story structure floating within a grouping of shallow pools and fountains. To the east, the area includes City Hall, the Federal Office Building, and Parker Center (which is currently undergoing redevelopment, i.e., remodeling, demolition and new construction), among other public facilities. The development of a centralized civic center for the Los Angeles downtown area was first considered as early as 1906. Since that time, such plans evolved into grander more formalized ideas that ultimately came together as a master plan that civic leaders could agree upon and approve. Impetus for the forward movement of the master plan was the 1933 Long Beach earthquake. A 1938 proposal called for a vast, block-wide garden extending north from 1st Street a few blocks and west to Grand Avenue. City, county, State, and federal buildings were to surround this park area. An expanded master plan was developed by a group of prominent local architects, including J.E. Stanton; W.E. Stockwell; Paul R. Williams; Adrian Wilson; and the firm of Austin, Field & Fry in 1947. This plan was modified in 1951 to include more civic buildings in a slightly expanded area with additional facilities north of the freeway (which had not been built yet). The freeway now serves as a physical dividing line between the El Pueblo Historic Park to the north and the Civic Center to the south.

County manager Arthur J. Will managed this later proposal and was noted as stating "that the new Civic Center will be the most beautiful public project of its kind in the nation, unmatched by any city in the country."[45] The *Los Angeles Times* ran countless articles and illustrations in its paper showing the layout of the proposed master plan. An example is presented in Figure 7 on page 37. Much of what was presented in the plan became a reality during the 1950s and 1960s. The current Civic Center, with its varied civic uses and diverse architecture, is a physical manifestation of those early ideas brought to fruition. The Civic Center is a key component in downtown Los Angeles' urban framework and open space network. It was designed to serve as an important focal point for the City as the geographic center of government facilities, and it continues to do so today.

At the National Register level of significance, this grouping of buildings does not appear eligible for designation as a potential historic district because it does not appear to possess sufficient "exceptional" importance as defined by National Register Criteria Consideration G: Properties That Have Achieved Significance within the Past Fifty Years.[46] These findings are consistent with those of the Grimes report discussed earlier in this report.

The December, 2005 report to the County of Los Angeles Chief Administrative Officer described earlier in this report acknowledged that there may be one or more potential historic districts involving public buildings in the area, including, the Music Center, the Hall of

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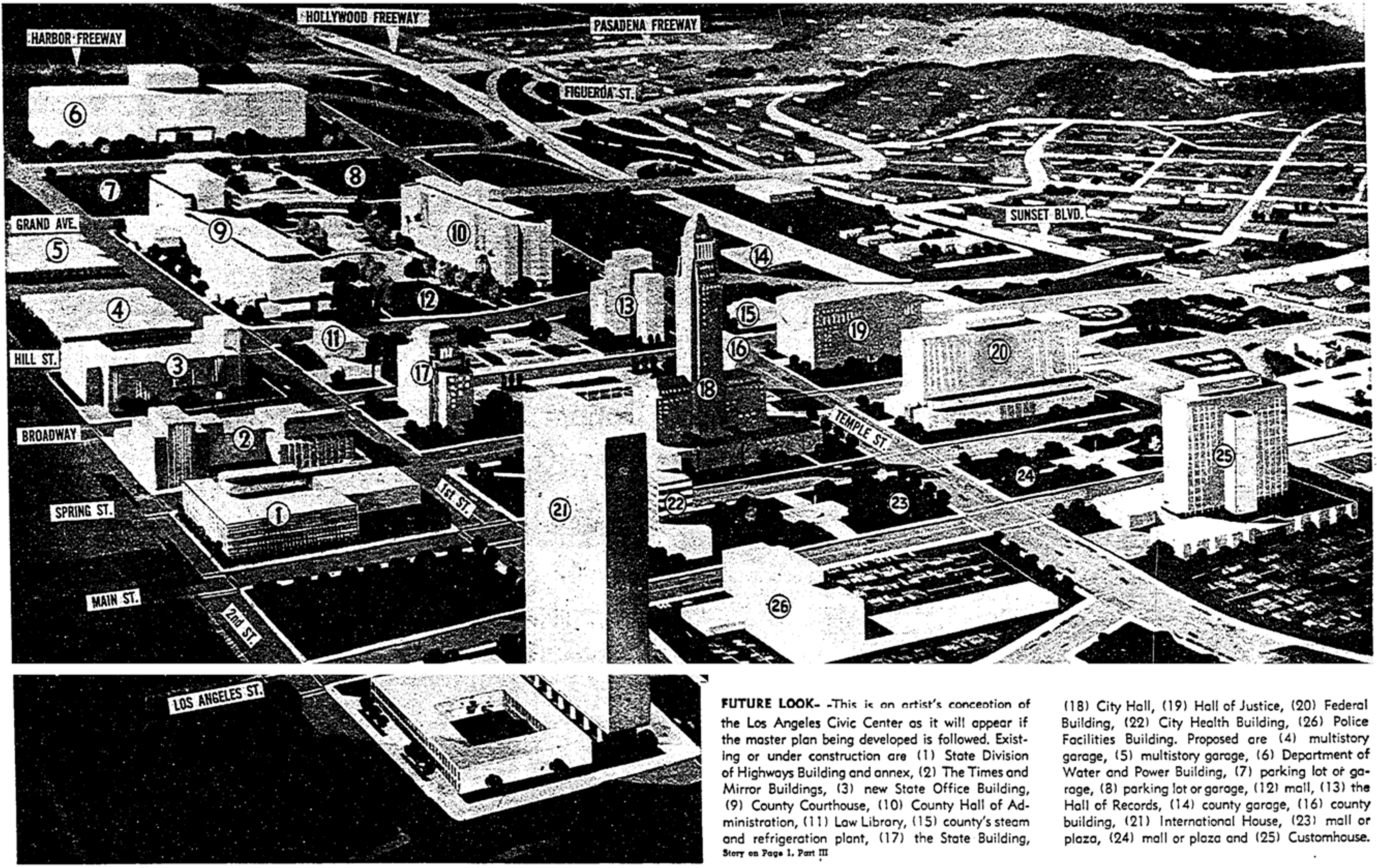
[45] *Los Angeles Times. "Civic Center to be Marvel of Beauty." June 25, 1956, pg. A2.*

[46] *National Register Bulletin: How to Apply the National Register Criteria for Evaluation, pgs. 41-43.*

Los Angeles Civic Center as Envisioned in Master Plan



FUTURE LOOK- -This is an artist's conception of the Los Angeles Civic Center as it will appear if the master plan being developed is followed. Existing or under construction are (1) State Division of Highways Building and annex, (2) The Times and Mirror Buildings, (3) new State Office Building, (9) County Courthouse, (10) County Hall of Administration, (11) Law Library, (15) county's steam and refrigeration plant, (17) the State Building, (18) City Hall, (19) Hall of Justice, (20) Federal Building, (22) City Health Building, (26) Police Facilities Building. Proposed are (4) multistory garage, (5) multistory garage, (6) Department of Water and Power Building, (7) parking lot or garage, (8) parking lot or garage, (12) mall, (13) the Hall of Records, (14) county garage, (16) county building, (21) International House, (23) mall or plaza, (24) mall or plaza and (25) Customhouse.

Story on Page 1, Part III

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Figure 7

Civic Center Master Plan (Circa 1956)

Source: Los Angeles Times, March 4, 1958.

Administration and Courthouse building on the block between Grand Avenue and Hill Street, and the grouping of buildings between Broadway and Hope Street that were built between 1953 and 1967.

Though the Brenda Levin/Theresa Grimes historic analysis of the Kenneth Hahn Hall of Administration building, the County Courthouse, the Hall of Records, the Clara Foltz Criminal Justice Center, and the Civic Center identified the buildings as ineligible for National Register and California Register designation apparently based on applying criteria that is one and the same, this report prepared for the proposed Project reaches a different conclusion with respect to the State Register criteria and interpretation of the State's special criteria consideration for resources less than fifty years old .

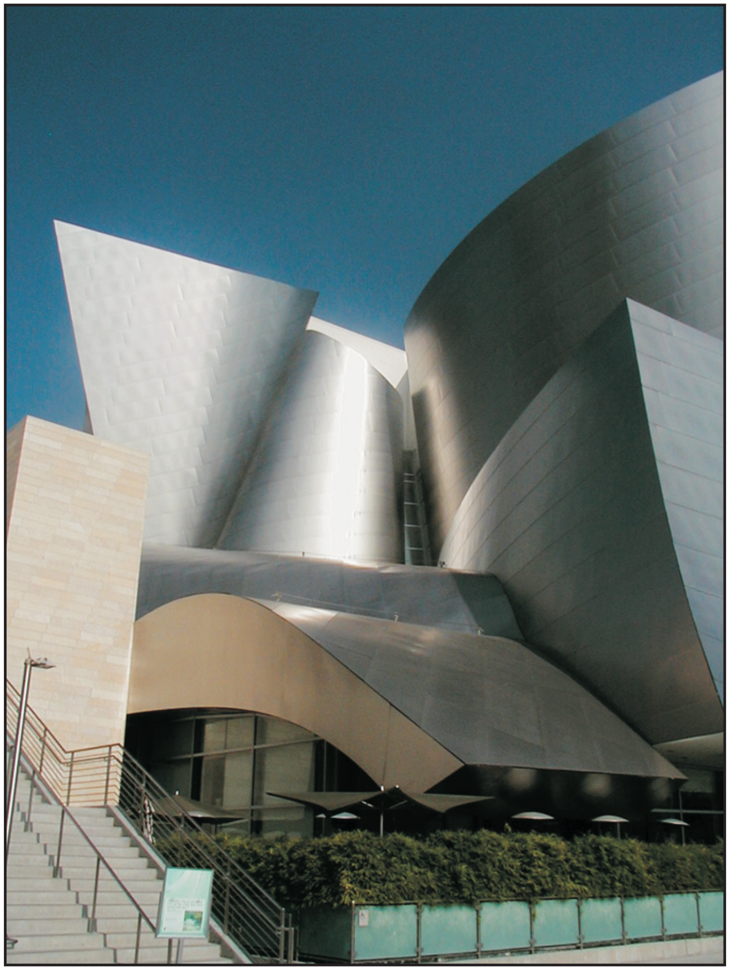
However, at the State level of significance the various public properties that comprise the Civic Center form a unified entity planned and developed by a formalized master plan and by function. The Civic Center appears to satisfy the California Register Special Consideration for properties less than fifty years of age because of its direct historical associations and functions with the various levels of government and its physical manifestation as an important civic and cultural center of the community. It is also particularly noteworthy for its direct association with locally prominent architects and for its eclectic array of architecture integrated into governmental facilities by plan, including mid-century Modern, New Formalism, Mediterranean Moderne, Beaux Arts influenced Italianate, and International style. Sufficient time has passed to gather a collective understanding and appreciation of the Civic Center's historical importance and architectural significance in its relationship to the government philosophies and architectural programs of the time. Therefore, for the purposes of CEQA compliance, this potential historic district is considered a historical resource pursuant to Section 154064.5(a) of the CEQA Guidelines.

2. Walt Disney Concert Hall

a. Architectural Description

The curvaceous, stainless steel clad exterior surfaces of the Walt Disney Concert Hall seem to rise, swoop, and dive from their street level base at the corner of Grand Avenue and 2nd Street. (See Figure 8 on page 39). The signature style that its architect Frank Gehry established with the Wiseman Art Museum in Minneapolis and the Guggenheim Museum in Bilbao, Spain has reached another level of artistry with the huge expanses of smooth curved metal covered walls that look like huge, full, billowing sails. This effect is emphasized by the first floor being very shallow, and the metal forms rise from the street between glass and metal walls. The metal forms are not constrained by the building foundation and move forward or back, up or down as they please, creating an organic, living creation. Color and texture is added to break the concrete

Photograph 1: Walt Disney Concert Hall at Grand Avenue and 1st Street.



Photograph 2: Walt Disney Concert Hall.

Figure 8
Photographs of Walt Disney Concert Hall

Source: PCR Services Corporation, 2005.

and metal mixture along the Grand Avenue elevation by vegetation and tinted, solid glass panel railings.

The building's formal opening is located within the folds of wings, placed at an angle at the intersection of Grand Avenue and 2nd Street. A tall, three-story clear glass paneled atrium is situated within the folds to create a large entrance hall. Shallow steps and smooth steel railings lead up to the main entrance.

Outside of the auditorium, the Walt Disney Concert Hall also houses an underground parking garage, pre-concert foyer, green room and support spaces, two outdoor amphitheaters, and California's smallest state park on the 3.6-acre site. A public garden wraps around the western and southern sides of the site, providing panoramic views of the City while maintaining a sense of enclosure.

b. Building Significance

The realization of the Walt Disney Concert Hall started in 1987 with a $50 million gift to the Music Center by Lillian Disney, Walt Disney's widow. Architect Frank O. Gehry and Associates worked with the County of Los Angeles to bring his design for the concert hall to house the Los Angeles Philharmonic to fruition. In addition to the Philharmonic, the hall is also the new home for the Los Angeles Master Chorale and the Roy and Edna Disney Cal Arts Theater. It was Frank Gehry's first major public commission in Los Angeles and was a follow-up project to his design of the Guggenheim Museum in Bilbao, Spain. The $274 million project took over sixteen years to complete and required over 30,000 architectural drawings. Because of the building's many curved surfaces and exacting design specifications, structural steel beams had to be placed using a sophisticated aerospace software called CATIA (Computer-Aided Three-dimensional Interactive Application), similar to the more common Global Positioning System or GPS.[47] Structural beams were welded into place only when they intersected at the exact x-y-z coordinates in space mandated in the building plans.[48]

Initially intended to be covered with stone, the cladding of the building was changed by Gehry to be dressed in stainless steel. Among his many reasons, he felt that the shiny surface would work well changing and reflecting the bright Southern California sun. The building was designed from the inside out with the hall's interior defining the façade. With 2,265 seats, arranged in steep tiers on three sides of the stage, the hall provides for an intimate concert experience. The lobby columns branch out like giant trees, which they are intended to resemble.

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[47] *Music Center. "Architectural and Garden Highlights: Walt Disney Concert Hall (brochure)." Music Center Performing Arts Center of Los Angeles County, 2005.*

[48] *Ibid.*

The acoustics of the concert hall were carefully designed by Nagata Acoustics of Tokyo to produce the finest possible musical performances by focusing on the needs of the performers.

Though less than fifty years of age, the building is an exceptional piece of architecture that was designed by a master architect. The hall's flamboyant undulating exterior, whose stainless steel forms unfold along downtown's Grand Avenue, is a sublime expression of contemporary cultural values. It is historically and architecturally significant on a number of levels: (1) in that it is directly associated with Frank Gehry, a Pritzker Architecture Prize Laureate architect; (2) possesses high artistic values for its ability to so fully articulate a particular concept of design that it expresses an aesthetic ideal; 3) embodies distinctive characteristics of a type of architectural style and method of construction; and 4) is a cultural and social landmark as well as a visual icon within the downtown area of Los Angeles. Because of its historical and architectural importance, it appears to satisfy National Register Criteria A and C, as well as Criteria Consideration G: Properties That Have Achieved Significance within the Last Fifty Years. The building also appears eligible for listing in the California Register. For the purposes of CEQA compliance, this property is considered a historical resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

3. The Music Center

Designed by Welton Beckett and Associates in 1967, the original Music Center complex is composed of the Dorothy Chandler Pavilion, the Mark Taper Forum, the Ahmanson Theatre, and an underground parking structure. It is home to the Los Angeles Opera, Center Theatre Group, and the Music Center Dance group.

a. Architectural Description

i. Dorothy Chandler Pavilion

Designed by Welton Becket and Associates, with landscape design by Cornell Bridges and Troller, the Dorothy Chandler Pavilion, a 3,250-seat symphony hall, built in the New Formalism style on a monumental scale, is a five-level structure that reaches a height of 92 feet from the first promenade level to its sculptured roof. A 252-foot wide expanse of glass and granite faces the central plaza and extends back 330 feet. The Pavilion presents a peripteral form with dramatic colossal-scale tapered fluted columns, faced in textured white quartz aggregate precast-concrete panels, rising the full height of the building and continuing around its entire perimeter. The columns support a stylized entablature and exceptionally broad overhanging eaves. The building features gracefully curved sides and walls that are finished and faced with dark gray granite at the lower level. Above, glazed walls of matching dark gray tinted glass panels in patterned aluminum muntins extend to the eaves. A wide outdoor promenade surrounds the structure at the plaza level, and there is a balcony at the second level with a balustrade of white terrazzo. (See Figure 9, Photograph 1, on page 43).[49]

ii. Mark Taper Forum

Designed for the production of intimate drama, recitals, chamber music concerts, intimate opera, lectures, forums, and major civic-cultural events, the circular Mark Taper Forum originally rose from a 175-foot square reflecting pool. The amphitheater-style seating accommodates audiences of up to 750 people in a steeply raked semi-oval configuration. The upper level of the structure is cantilevered to a diameter of 140 feet. Wrapping the upper portion is a 378-foot long precast concrete “sculptural mural” composed of 63 panels, each 27 feet high and 6 feet wide; a stylized expression of the movement of dance. Contrasting with the off-white mural and upper level is the base of the structure, sheathed with dark, precast concrete exposed aggregate panels with vertical, light-colored bands. The principal entry is on the south-central plaza side, approached via a bridge-like walkway covered by a flat canopy. Above the entrance is a large grey-tinted window wall overlooking the plaza fountain. Along the theater’s west side, an open terrazzo stairway rises to the upper level. The structure is covered by a low-profile domed roof, not visible from the plaza. (See Figure 9, Photograph 2).

The first modifications to the Mark Taper Forum were undertaken in 1980 to accommodate Americans with Disabilities Act (ADA) improvements (ramp integrated into reflecting pool bridge, front door recessed, and ticket window lowered). In 1994, two quadrants of the reflecting pool, located on the northeastern side of the Mark Taper Forum were filled with concrete to the level of the surrounding plaza. In 2001, the northeastern half of the rear façade of the Mark Taper Forum, beneath the cantilevered upper level, was modified to accommodate a disabled access ramp, dressing rooms, and storage. The modified portion of the façade was finished in a green composite material, creating a distinct contrast to the historic fabric.

iii. Ahmanson Theatre

The 2,100-seat Ahmanson Theatre is located immediately north of the Mark Taper Forum. A nearly square, three-level structure with a flat roof, the theater features a fully glazed front (south) elevation that wraps around the east wall for one bay-width. The glazed front of the building contrasts with three walls of off-white precast concrete panels textured with large, strongly exposed off-white onyx stone aggregate. Deep-cut vertical reveals at the panel joints emphasize the structure’s height, and these are widened to form a frieze along the roofline. The side and rear elevations are largely devoid of fenestration, emphasizing the pure geometric form of the building. A one-story ticket office clad in gray composite panels that projects outward is

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[49] *Ibid.*

Photograph 1: Dorothy Chandler Pavilion at Grand Avenue and 1st Street.

Photograph 2: Mark Taper Forum on Grand Avenue.

Figure 9
Photographs of Dorothy Chandler Pavilion and Mark Taper Forum

Source: PCR Services Corporation, 2005.

located on the western end of the primary elevation. The adjacent theater entrances are sheltered by a flat metal canopy supported by paired metal struts that span the elevation. The building is bordered on three sides by a monumental covered colonnade of precast concrete columns. On the north elevation, the colonnade is engaged with the building and the inner columns are expressed as pilasters. The colonnade also extends around the Mark Taper Forum. The building has been modified over the years, although its physical character-defining features that define it as historically significant have been retained. (See Figure 10, Photograph 1, on page 45).

b. Building Significance

Designed in the New Formalism style as architecture and urban design, The Music Center is a three building performing arts complex consisting of the Dorothy Chandler Pavilion, a symphony hall, opera house, and theater dedicated in December 1964; the Mark Taper Forum, a theater in the round conceived for chamber music and experimental theater, dedicated in April 1967; and the Ahmanson Theatre, an auditorium used for legitimate theater and musical performances, also dedicated in April 1967. The three buildings rest on a rectangular raised base or podium, which is elevated one story above grade from Grand Avenue and placed over a four-level, 2,000-car parking structure.[50]

The Dorothy Chandler Pavilion, named after the woman who spearheaded the private funding efforts to develop a music center in the City, dominates the southern end of the complex. Occupying the north end are the geometric forms of the circular Mark Taper Forum and the nearly square Ahmanson Theatre, which together are circumscribed by a 48-foot tall, 25-foot wide freestanding colonnade. Their united forms provide a visual counterbalance to the freestanding Pavilion. A large depressed plaza at the center of the complex represents a formal courtyard at the western end of the Civic Center Mall and serves to focus and unite the Music Center composition. Landscape elements are used to reinforce the formal geometry of the plaza through the use of parallel rows of trees, while concrete edge planters frame the composition, softening the hard edges of the complex and creating a buffer along the street.[51]

The Music Center Plaza and the theatres around it are excellent examples of New Formalism architecture as applied to a publicly owned venue. The complex is reflective of the New Formalism style in that it combined civic authority and classical monumentality in its design. The country’s other two major performing arts centers Lincoln Center in New York and Kennedy Center in Washington, D.C., were also built in this idiom. The past host of the Academy Awards ceremonies for many years, the Dorothy Chandler Pavilion is a modern

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[50] *Grand Avenue and Environs Final EIR, County of Los Angeles, 2002.*

[51] *Ibid.*

Photograph 1: Ahmanson Theatre on Grand Avenue.

Photograph 2: Music Center Annex on Grand Avenue.

Figure 10

Photographs of Ahmanson Theatre and Music Center Annex

Source: PCR Services Corporation, 2005.

interpretation of an ancient classical pavilion.[52] In an effort not to show its back to any part of the City, it is completely encircled by 92-foot high fluted concrete columns. For balance, the two smaller theatres are enclosed inside their own 47-foot high colonnade.[53] The Music Center is significant for its direct link with and contribution to the cultural and entertainment history of the City; its long association with Dorothy Chandler without whom the Music Center may not have been fully realized or established at its current location; and for its architectural merit which represents an important aspect of Welton Beckett's overall body of work and physically manifests those distinctive architectural characteristics that distinguish its style as New Formalism. Therefore, the Music Center appears eligible for listing in the National Register under Criteria A, B, and C, and also satisfies Criteria Consideration G: Properties That Have Achieved Significance within the Last Fifty Years. Because of its notable historical and architectural importance, the property also appears eligible for listing in the California Register. In accordance with Section 15064.5(a) of the CEQA Guidelines, this property is considered a historical resource for the purposes of CEQA compliance.

4. Music Center Annex

a. Architectural Description

The Music Center Annex building is a two-story rectangular shaped structure with a flat roof. The poorly executed Mid-century Modern inspired building has concrete walls punctuated by large rectangular windows comprised of nine or twelve fixed lights. On the second floor of the east elevation, vertically fixed wood louvers hide an open area between sections of the second floor. The vernacular building is otherwise devoid of notable ornamentation. There have been some modifications made to it over the years, including inappropriate door and window replacements/alterations. According to tax assessor records, Sanborn Maps, and architectural style and materials, the building was built sometime around 1965. (See Figure 10, Photograph 2).

b. Significance

The Annex building is currently used as office and rehearsal space for one of The Music Center's associated theatrical programs. Over the years, it has undergone some exterior alterations thereby compromising its integrity. In reviewing background research material for this survey assessment, the building is not associated with any events that have made a significant contribution to the broad patterns of the City's, County's, or State's history or cultural heritage. Architecturally, it does not embody distinctive characteristics, nor does it represent the

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[52] *"Explore the Architecture of Grand Avenue: A Downtown Los Angeles Walking Tour (brochure)." 2005.*

[53] *Ibid.*

work of an important individual or manifest high artistic values. Further, it does not appear to possess exceptional significance necessary for National Register Criteria Consideration G consideration or the State's Special Criteria Consideration for properties less than fifty years of age. For the purposes of CEQA compliance, this property is not considered a historical resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

5. Cathedral of Our Lady of the Angels

a. Architectural Description

Designed by the Spanish architect Jose Rafael Moneo with Los Angeles-based architect Leo A. Daly as the executive architect, this is the third largest cathedral in the world and the first cathedral to be built in over twenty-five years. The grand scale adobe colored concrete building with its eleven-story tall bell tower, is located on almost six acres. The complex includes a rectory and conference center. The pedestrian entrance is through a large portal on Temple Street that opens to an interior courtyard space. Large monumental doors open to a 200-foot long ambulatory that connects to the 58,000 square foot nave with seating for 3,000 people. The interior walls are polished concrete, the floors are Spanish limestone, and the windows are of thin sheets of Spanish alabaster. (See Figure 11, Photograph 1, on page 48).

b. Significance

The Cathedral of Our Lady of the Angels was the first Roman Catholic Cathedral to be erected in the western United States in 30 years when construction began in May 1999.[54] The church was completed in the spring of 2002. Designed by Pritzker winning architect José Rafael Moneo, he created a contemporary cathedral with virtually no right angles. This geometry contributes to the Cathedral's feeling of mystery and its aura of majesty. The Cathedral is built with architectural concrete in a color reminiscent of the sun-baked adobe walls of the California Missions. The 151 million pound Cathedral rests on 198 base isolators so that it will float up to 27 inches during a magnitude 8 point earthquake. The design is so geometrically complex that none of the concrete forms could vary by more than 1/16th of an inch. The church is a new and vibrant expression of the 21st-century Catholic peoples of Los Angeles.[55] It is one of the most notable pieces of Modern architecture within the downtown area of Los Angeles. The church shows hallmarks of Modernism, but its monumental blocky forms, especially on the east end, have much in common with eleventh-century Romanesque style churches. The architect, Moneo, maintained important architectural and Catholic liturgical traditions in his design that are evident in the building's configuration and aesthetic qualities. His aim was to create an inner

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[54] *n.a. "Explore the Architecture of Grand Avenue (brochure)." 2005.*

[55] *Ibid.*

Photograph 1: Cathedral of Our Lady of the Angels at the corner of Grand Anenue and Temple Street.

Photograph 2: Aerial view of the County Mall with the County Courthouse to the left and Hall of Administration to the right, circa1970.

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Figure 11

Photographs of Cathedral of Our Lady of the Angels and Aerial View of the County Mall

Source: PCR Services Corporation, 2005 and SPNB Collection, Los Angeles Public Library.

voyage, one that would draw the visitor away from the urbanism and visual noise of the surrounding area into a more contemplative world. Although there is a pedestrian entrance on Temple Street, the main approach to the Cathedral is via the escalator from the parking lot below to the dazzling cloistered plaza above. The adjacent streets and the freeway are irrelevant. On an urban scale, the cathedral, along with the Walt Disney Concert Hall, inserts something startling and visually different into the built environment of downtown.

Though less than fifty years of age, the Cathedral of Our Lady of the Angels appears to satisfy National Register Criteria A and C as well as the special requirements of Criteria Consideration G: Properties That Have Achieved Significance within the Last Fifty Years and Criteria Consideration A: Religious Properties. The Cathedral is an exceptional piece of architecture and also expresses a particular idea of design by Jose Rafael Moneo, an internationally acclaimed master architect. The building's urban design is representative of its era with a strong sense of place and time in its physical manifestation. It also illustrates the broad and important impact of the Archbishop of Los Angeles Catholic Diocese on the diverse historical development of the local area. Because of its exceptional architectural merit and historical associations, the property also appears to satisfy criteria necessary for California Register listing. It is eligible for designation as a Los Angeles Historic-Cultural Monument as well. For the purposes of CEQA, the Cathedral is considered a historical resource according to Section 15064.5(a) of the CEQA Guidelines.

6. Kenneth Hahn Hall of Administration

a. Architectural Description

Completed in the 1960, the steel frame Kenneth Hahn Hall of Administration building was designed in the Corporate Modern idiom. Elements of the International style are also evident in its use of materials, fenestration, and feeling. The overall massing is rectangular with sharp clean lines and virtually no decorative features other than its use of negative and positive space to create tension on its surfaces. The nine-story building is monolithic, measuring 625 feet long, extending from Grand Avenue to Hill Street, and at its widest point is 125 feet wide. The building plan is a slightly irregular "U" plan with the short ends facing Temple Street. The building's overall footprint is 127,000 square feet. (See Figure 11, Photograph 2).

Both the east and west elevation share the same design. Doors to the building are placed centrally on the plain façade with only a simple geometric design created from three adjoining rows of deeply inset square openings rising vertically from over the doors. The doors themselves are deeply inset, and the exterior surrounding the doorway is slightly curved and faced with pink granite. Massive half walls of pink granite-faced concrete project from the building on either side of the door, giving the entrance a heavy massive feeling. The building skin is flat concrete, slightly scribed in large squares. (This wall finish is also used on the County Courthouse). (See Figure 12, Photograph 2, on page 51).

The north and south elevations of the building are precisely regular in the spacing of 6-light ribbon windows and the built-in balconies located on the upper floors. The walls are interrupted on the south façade by the use of the deep, square louvered openings that rise vertically up six floors. (See Figure 12, Photograph 1).

The two wings located on the Temple Street (north) elevation are lower in height and are placed at the ends of a very wide and two-story tall arcade that serves as the entrance on this side of the building. The arcade is faced entirely in pink granite and is rectangular in design with narrow rectangular posts supporting the arcade roof. The main massing of the building is set well back from the street and provides ample room for raised planters and lawn seating areas. The raised planters are faced with the pink granite. The south elevation, which serves more as an access for workers to and from the County Courthouse and the park, also has an arcade that spans a wide portion of the façade yet is simpler in its overall design.

b. Significance

The Kenneth Hahn Hall of Administration building is a low-lying stack of horizontal lines and rectangles that form a footprint covering half a city block. As part of the evolving master plan that was first made in 1906 and later adopted by the Los Angeles Civic Authority in 1941, and revised in 1949 and 1951, the Kenneth Hahn Hall of Administration building was designed by a consortium of architects that included Paul R. Williams and Associates; Adrian Wilson; Jess E. Stanton, and W.F. Stockwell of the firm Stanton and Stockwell; and the architectural firm of Austin, Field & Fry. This group of architects designed most of the mid-century Modern style public facilities that comprise the western end of the Civic Center.

This structure was erected a few years after completion of the County Courthouse building situated on the other side of the Civic Center Mall to the south. Built by the Gust K. Newberg Company of Illinois, excavation and grading for the new Kenneth Hahn Hall of Administration building began in January 1957, with construction following a few months later. Built at a cost of $24 million, the eight-story, 1 million square foot building, designed to be occupied by some 5,000 county workers, was completed in 1960. Initially, the structure housed the offices of the tax collector, assessor, treasurer, auditor and controller, Civil Service division, communications division, county counsel, chief administrative office, supervisors, Department of Building Service, and the Department of Real Estate Management plus a cafeteria for employees.

Photograph 1: Kenneth Hahn Hall of Administration, south elevation.

Photograph 2: Grand Avenue entrance to the Hall of Administration.

Figure 12

Photographs of Kenneth Hahn Hall of Administration

Source: PCR Services Corporation, 2005.

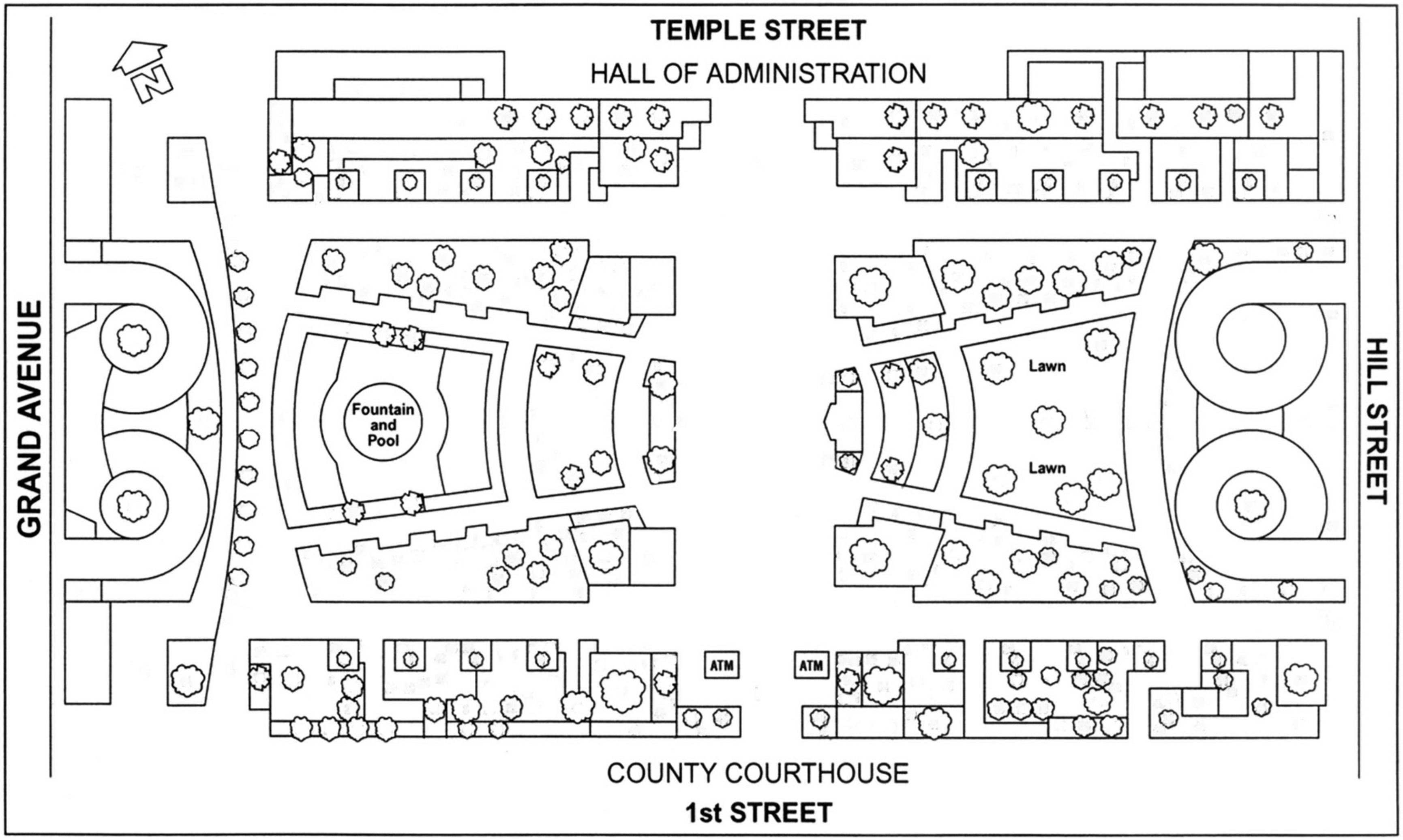
Topography of the site provided for a public entrance from the Civic Center Mall, upper and lower entrances off Temple Street, a public entrance to the supervisor's hearing room off Temple Street, and a public entrance off Grand Avenue. The supervisor's hearing room, a large 750-seat auditorium space, was acoustically designed by Dr. Vern O. Knudsen, a notable southern California acoustic engineer and university professor. The building was financed by the Los Angeles County Employees Retirement Association for long-term lease to the County of Los Angeles.

In assessing its historical significance, the Kenneth Hahn Hall of Administration building does not appear individually eligible for National Register listing under any criteria due to lack of sufficient historical and architectural importance necessary for that level of designation. Further, it does not appear to satisfy the special requirements of National Register Criteria Consideration G for properties less than fifty years of age. The building, though designed in the Corporate Modern style popular for the time, is not an exceptional example of the style and does not fully articulate those distinctive architectural characteristics that truly define and physically manifest the idiom. Its association with a group of prominent Los Angeles-based architects is notable; however, undistinguishable to merit such recognition. Further, the function (purpose) of the building over the years has been to house the regular (normal) daily activities of County government that are not directly reflective of any broad themes of cultural, political, economic, or social history and, as such, does not satisfy the National Register significance criteria. Its association with a group of prominent and well respected architects is noted; however, it is not a well-representative example of their work collectively or individually. As such, the property also appears ineligible for the individual listing on the California Register. It does, however, appear eligible for the California Register as a contributor to a potential historic district comprised of public facilities within the Civic Center area. Because a district can be comprised of features that lack individual distinction and individually distinctive features that serve as focal point, the Hall of Administration appears to satisfy the definition of a contributing property to a potential historic district. Therefore, for the purposes of CEQA, the Kenneth Hahn Hall of Administration is considered a historical resource pursuant to the CEQA Guidelines, Section 15064.5(a).

7. Civic Center Mall (El Paseo de los Pobladores de Los Angeles)

a. Architectural Description

Designed in the mid-century Modern style, the Civic Center Mall, also known as El Paseo de los Pobladores de Los Angeles, is set out in a formal pattern over a series of terraces with the center of the plan located at a point between the south entrance of the Kenneth Hahn Hall of Administration and the north entrance of the County Courthouse. (See Figure 13 on page 53.) The layout of mid-century Modern inspired concrete planters, walking paths, concrete benches, light fixtures, and "hi-fi" sound features, as well as well-manicured lawns and



No scale

Figure 13
Civic Center Mall

Source: Civic Center Mall: A Guide to Ornamental Trees and Shrubs.

ornamental trees, extend out on an east-west axis in a formal fan pattern from between the civic buildings on either side. The west end of the park is lower than Grand Avenue and is reached by foot from a series of wide granite faced stairs located on either side of the spiral-shaped parking lot ramps that lead to a large, multi-level parking lot below the entire park. A large, slightly bowed retaining wall faced primarily with polished pink granite with accents of dark grey granite forms the west end of the park. There are pedestrian pathways that run from east to west near the buildings. The pathway that runs to the north of the County Courthouse is also used as a driveway for cars and trucks that need to make deliveries or have access to that area.

Located just to the east of the wall is the most visible and distinguishing decorative feature of the park, the large, graceful mid-century Modern style Arthur J. Will Fountain. Named in honor of the County's Chief Administrative Officer from 1951 to 1957, the fountain was dedicated to the citizens of Los Angeles County by the Board of Supervisors in 1966. Statues of George Washington and Christopher Columbus are located towards the east end of the park. A flagpole and marker in honor of American Prisoners of War and Missing in Action is located along a walkway in the east end of the park. Other cultural monuments include a plaque to commemorate Ukrainian Victims of Communism and one noting President Jimmy Carter's attendance at a Cinco De Mayo Celebration.

Individual features of the park include:

i. El Paseo de los Pobladores de Los Angeles Plaque

There are two large, inscribed, grey-granite plaques, one located to the north, and one to the south, along the east wall of the park below the grade at Grand Avenue. These plaques illustrate the route taken by the first settlers of Los Angeles, hence, the park's El Paseo de los Pobladores de Los Angeles Plaque, (the Route of the settlers of the City of Los Angeles). They were installed in 1966 when the Civic Center Mall was completed to commemorate its dedication and honor the 44 persons who, as directed by Felipe de Neve, came from Mexico to found Los Angeles on September 4, 1781. (See Figure 14 on page 55).

ii. Arthur J. Will Memorial Fountain

The Arthur J. Will Memorial Fountain was constructed in memory of Arthur J. Will, who served as the County's Chief Administrative Officer for over seven years. Will had worked for the County for 30 years in various positions. He was known as the "Father" of the Civic Center development project. (L.A. Times, 1958) and had been the coordinator of the Mall's development from 1956 until his death in 1960.

Photograph 1: Wall plaque of El Paseo de Los Pobladores de Los Angeles.

Figure 14
Photograph of El Paseo de Los Pobladores de Los Angeles Wall Plaque

Source: PCR Services Corporation, 2005.

The highly modernistic style fountain and its three terraced pools are located in the west end of the park. The shallow pools are tiered and drop from the west to the east. The large fountain is centrally placed within the interior pool walls that form around it in semi-circles. The fountain consists of a monumental shallow bowl with numerous notches placed along its perimeter cusp. Through these notches water pours to form individual rivulets as it runs from the bowl. The bowl is supported by a concrete open arch stand with four prongs on which the bowl sits. The large bowl has two large jets that push a solid water stream vertically and these jets are surrounded by a circle of smaller sprayers that form a circle of water around the large spray. In the upper pool there are two semi circles of small sprayers pointing in the direction of the bowl. The lower pool has two circles of small sprayers at each outside corner. The low walls of the ponds are faced with pink granite and the interior of the pools are painted a light color. The outside walls of the pond are used as a seating area. Together the fountain and the pools occupy 19,180 square feet and hold 110,000 gallons of water which is continually recycled for conservation purposes. The park itself sits on a reinforced concrete structure of 450,000 square feet, which provides two levels of underground parking for approximately 1,300 vehicles. (See Figure 15, Photograph 1, on page 57).

iii. Memorial to Ukrainian Victims of Communism

A plaque in memory of Ukrainian victims of Russian communism is located near the center of the park. The plaque was created in memory of 7,000,000 Ukrainians, who lost their freedom, property and life by order of the Soviet government during the 1932-1933 genocide by starvation in Ukraine. Dedicated by the Genocide in Ukraine Commemorative Committee, Los Angeles. The dedication date is unknown. (See Figure 15, Photograph 2).

iv. Statue of George Washington

The statue of George Washington, President 1789–1796, by Jean Antoine Houdon (1741-1828), is a bronze copy of the granite original. It was originally dedicated and presented by the citizens of Los Angeles Women’s Auxiliary of the Los Angeles Chamber of Commerce, February 22, 1933. It was moved to its present location after occupying different sites in the immediate vicinity. The pedestal upon which the statue stands is made from stone salvaged from the old County Courthouse when it was demolished in 1936. (See Figure 16 on page 58).

v. Statue of Christopher Columbus

A statue of Christopher Columbus, by Francesco Pedrotti, was given to Los Angeles County in 1973 to honor and perpetuate the memory of the discovery of America. It was presented by the United Lodges of Southern California Order Sons of Italy in America. (See Figure 17, Photograph 1, on page 59).

Photograph 1: Arthur J. Will Memorial Fountain.

Photograph 2: Ukrainian Victims of Communism Plaque.

Figure 15
Photograph of Arthur J. Will Memorial Fountain and Ukrainian Victims of Communism Plaque

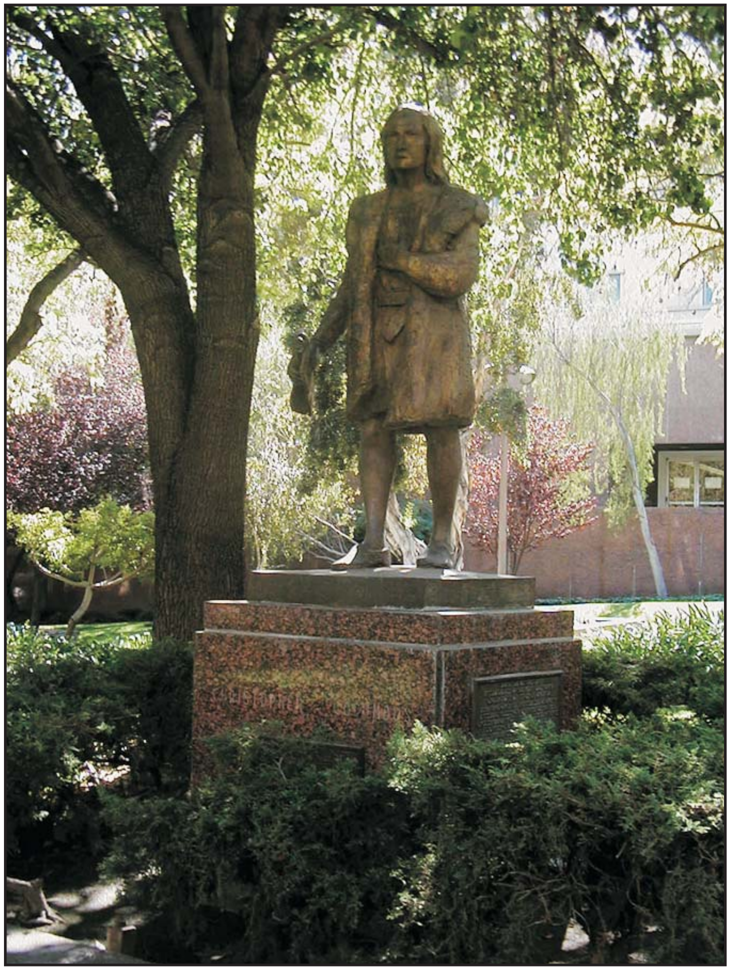
Source: PCR Services Corporation, 2005.

Photograph 1: Statue of George Washington.

Figure 16

Photograph of George Washington Statue

Source: PCR Services Corporation, 2005.



Photograph 1: Statue of Christopher Columbus.

SYMBOLIC OF OUR DETERMINATION TO SECURE A COMPLETE ACCOUNTING OF THE MORE THAN 2,400 AMERICANS MISSING OR PRISONERS OF WAR IN SOUTHEAST ASIA AS A RESULT OF THE WAR IN VIETNAM, THIS OFFICIAL POW/MIA FLAG WAS RAISED ON DECEMBER 14,1987, AND WILL CONTINUE TO FLY UNTIL AN ACCOUNTING IS MADE OF EVERY MISSING AMERICAN.

BY ORDER OF THE BOARD OF SUPERVISORS OF LOS ANGELES COUNTY,NOVEMBER 3,1987,AT THE REQUEST OF MICHAEL D. ANTONOVICH,SUPERVISOR, FIFTH DISTRICT.

Photograph 2: MIA/POW plaque.

Figure 17

Photograph of Christopher Columbus Statue and MIA/POW Plaque

Source: PCR Services Corporation, 2005.

vi. P.O.W./M.I.A. Flagpole and Plaque

A flagpole and marker, with plaque, commemorates the Prisoners of War and Missing in Action. It was erected December 14, 1987. (See Figure 17, Photograph 2).

vii. Elevator Shafts

There are three small buildings enclosing elevator shafts and/or escalators located in and adjacent to the park. One elevator building is located just off of Grand Avenue, near the steps that descend to the park area. The approximately 12 foot by 12 foot, glass wall structure is clad in large, metal louvers with brushed steel doors. This elevator is not original to the Mall and was added in recent years for ADA access to and from Grand Avenue. (See Figure 18, Photograph 1, on page 61).

The other two structures are centrally located within the park and are flanked by the Kenneth Hahn Hall of Administration building to the north and the County Courthouse to the south. Designed in the mid-century Modern idiom, they both shelter elevators and escalators that led to the parking lot below. The square shape buildings are clad with pink granite and feature decorative, copper trim and drip edges. Period style lettering identifies the buildings' function. Both these buildings are original to the park's master plan of the 1960s. A dedication plaque is attached to the eastern wall of the building immediately adjacent to the Kenneth Hahn Hall of Administration building. The plaque physically notes the dedication ceremony that took place in 1965 and deemed the park "El Paseo de los Pobladores de Los Angeles." Referenced as the architects were Adrian Wilson & Associates, associate architects J.E. Stanton and W. Stockwell, and A.C. Martin and Associates. The contractor is also listed as Tom E. Norcross, Incorporated. (See Figure 18, Photograph 2).

viii. Landscape Features

The mid-century Modern style landscape design of the park was developed by the landscape firm of Cornell, Bridgers, and Troller. Installed in 1966, the landscaping features a variety of formal and exotic planting materials, including palm trees, junipers, bamboo, acanthus, magnolias, hibiscus, jacarandas, Hawaiian fern trees, American sweet gums, bottlebrush, ivy, Hong Kong orchid trees, floss-silk trees, and birch trees.[56] Many of these ornamental trees and shrubs are original to the initial landscape plan by Cornell, Bridgers, and Troller.[57] The raised

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[56] *Los Angeles County. "Civic Center Mall: A Guide to Ornamental Trees and Shrubs (brochure)." n.d.*

[57] *Conclusion deduced from a review of historical photographs, Los Angeles Times newspaper articles, and Sanborn Maps.*

Photograph 1: Elevator for Parking Garage at west end of County Mall.

Photograph 2: Elevator located near south entrance of Hall of Administration

Figure 18

Photographs of Elevators located in the Civic Center Mall

Source: PCR Services Corporation, 2005.

planters are clad in pink tinted concrete with a grey aggregate or pink granite and are part of the original design. (See Figure 19, Photograph 1, on page 63).

b. Significance

The Civic Center Mall is a large public park-like area located in the center of the Civic Center surrounded by public buildings to the north and south, Broadway to the east and Grand Avenue (and the Music Center) to the west. The City of Los Angeles' City Hall is located one block to the east. The mall was named in honor of the forty-four settlers from Mexico who founded Los Angeles on September 4, 1781. The post World War II Modern style mall was built at a cost of approximately $6,975,000. Both hardscape and softscape elements were integrated together to reinforce the formal modernistic geometry of the design, The raised flower beds and planters are either faced in the pink granite which ties the park and the County Courthouse and Kenneth Hahn Hall of Administration building together, or are contained in planters constructed of a pink tinted concrete with dark grey aggregate made to resemble the pink granite. All the public art located in this area was installed since the initial development of the Civic Center and were not planned or installed as part of the overall mid-century Modern style layout of the park. These public works of art, which are commemorative in nature, are publicly owned and except for two, were publicly funded.

The County Mall is an oasis of green space in the midst of the Civic Center. Its hardscape features and lush ornamental trees and vegetation that are planted in a well executed design has not drastically changed in location, design, materials, workmanship, setting, feeling, or association since its completion in 1966. The large fountain with its terraced pools is an excellent example of mid-century Modern style monumental art incorporated into an object of notability. The mid-century Modern style concrete benches, walkways, light fixtures, "hi-fi" speaker system, parking ramps, and elevator shaft structures are also complementary features to the overall Civic Center Mall design. Their physical forms, design, and incorporation into the park itself are visual expressions of the avant-garde modernism so popular at the time. The use of clean lines, flat surfaces, and simple geometric shapes help to identify these features as modernist architecture.

Historically, a sketch of the proposed Civic Center, made in August 1938, showed a vast, block-wide garden extending north from 1st Street a few blocks and west to Grand Avenue, the plan for the Civic Center Mall began in earnest as part of the 1947 adopted master plan. A wide mall gently terraced and landscaped with trees, shrubs, and water features was always part of the larger plan for the Los Angeles Civic Center. Early-on there were plans for an atomic bomb shelter and parking garage under the mall. Over the years, such plans were modified due to a lack of funding, political pressures, or unforeseen parking requirements. A working blueprint of the Civic Center's master plan in 1956 called for the Civic Center Mall to be more than 2,200 feet long and between 400 and 600 feet wide. Stretching from the steps of City Hall at Spring

Photograph 1: Looking west from the southeast end of the El Paseo de Los Pobladores Park.

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Figure 19

Civic Center Mall Landscape

Source: PCR Services Corporation, 2005.

Street to the entrance of the Department of Water and Power building on Hope Street, the park under the 1956 master plan was seen as the focal point of the Civic Center. It was designed with the help of an advisory committee who worked with Arthur J. Will, the County Administrator who oversaw much of the Civic Center development. The committee, known as the "Committee of Three" included Millard Sheets, then director of the County Art Institute and internationally noted artist; Lovell Swisher, horticulturist and one of the founders of the Men's Garden Club; and Charles Bennett, former City Planning Director. The overall plan for the Civic Center was designed by a group of architects, including J.E. Stanton; W.E. Stockwell; Paul R. Williams; Adrian Wilson; and the firm of Austin, Field & Fry. The Civic Center Mall landscape was designed by the noted landscape architectural firm of Cornell, Bridgers, and Troller who also completed design projects for other Civic Center facilities, including the County Courthouse, Law Library, Kenneth Hahn Hall of Administration, the Music Center, and the City of Los Angeles Department of Water and Power building. The mall was built by the Tom E. Norcross Company of Long Beach.

According to Will, "Our idea of the Mall was to create a garden, reasonably formal, with fountains and statuary – yet a place that people use. A place of light and air to stroll through, to rest in for a moment. Something people of Los Angeles will identify themselves with and be proud of."[58] The proposed plans for the Mall were adopted in September 1956 by the County Board of Supervisors. Architect Paul Williams, one of the group of architects who designed the center stated that "this is more than a Civic Center, it is rather the center of Los Angeles."[59]

After years of debate over the need for parking, the first phase of the $12 million Civic Center Mall, which included the construction of an underground parking garage, begun in August 1963. The basic premise of the park remained the same as in the earlier plans with the width and the length unchanged; however, the design and layout of the hardscape now reflected the architectural trends of the day, mid-century Modern. The site located off Grand Avenue between the Kenneth Hahn Hall of Administration building and the County Courthouse provided sufficient space for 1,272 automobiles. Upon request from County officials, the parking structure was also designed as a fallout shelter for 10,000 people (reduced from the initially requested 90,000). Spiral entrance ramps leading to the underground parking structure were placed at the east end of the park. Fountains, pools, and gardens formally landscaping the area above the two-level parking structure were called for. A large, concrete fountain (the Arthur J. Will Memorial Fountain, named in honor of the former county administrative officer) was prominently situated within the mall to serve as its focal point. The design of the parking garage allowed patrons of the Courthouse or Kenneth Hahn Hall of Administration to access the two buildings or the mall surface via elevators, escalators, or stairs. Underground access ways also

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[58] *Los Angeles Times. "Civic Center to be Marvel of Beauty." June 25, 1956, pg.2.*

[59] *Los Angeles Times. "Supervisors Approve Civic Center Esplanade Project." September 12, 1956, pg. B1.*

linked the Civic Center Mall under Grand Avenue with the Music Center. The second phase of the Civic Center Mall was completed years later for the easterly half of the mall program. Constructed at a cost of approximately $6,808,3324, this phase included an underground parking structure and above ground park area, referred to as the Court of Flags.

A month after the project began the park was named “El Paseo Grande” (The Grand Mall). Selected by a seven-man committee comprised of county officials they deemed the name appropriate in recognition of the county’s Spanish-Mexican heritage and to connote the great scale of the mall.[60] Eight months later, however, the four-block Civic Center Mall was officially renamed “El Paseo de Los Pobladores de Los Angeles” (The Walk of the First Settlers of Los Angeles) after a group of 44 individuals from Mexico who founded Los Angeles on September 4, 1781.

The underground parking structure was completed and opened, as newspapers of the day recorded, to pomp and circumstance in September 1965. The upper level of the garage and the landscaped mall were completed and dedicated in May 1966. Over the years, the Civic Center Mall has undergone very little change since it was built. Many public ceremonies have been held within its large plaza space, including a memorial to the late Robert Kennedy in 1968 and a number of Los Angeles County Sheriff graduations. The park now features a Starbucks and ATM kiosk, and is used primarily during the weekdays by patrons of the surrounding public offices and courthouse.

In evaluating historical significance, the Civic Center Mall appears ineligible for National Register listing due to its collective lack of exceptional historical and architectural significance necessary for a property less than fifty years of age.[61] Because the threshold for significance at the state level is interpreted differently than the federal level, the park; however, does appear eligible for individual designation to the California Register due to its ability to physically manifest and exemplify its architectural importance in its physical form, design, materials, and workmanship as a mid-century Modern inspired public park situated in downtown Los Angeles. It also appears eligible for the California Register as a contributor to a potential historic district comprised of public buildings, structures, sites, and objects in the downtown Los Angeles area that collectively define the city’s Civic Center by function and plan. Sufficient time has passed to identify and understand the design concepts and vocabulary of this Modern-era style as evident in the Civic Center Mall and the adjacent public buildings surrounding it. In reviewing this property and the other contributing features to the district in proper context a scholarly perspective of their historical associations with the development of the City’s civic center and

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[60] *Los Angeles Times. “Mall to Bear Spanish Name.” September 5, 1963, pg. A2.*

[61] *National Register Criteria Consideration G: Properties That Have Achieved Significance within the Last Fifty Years.*

architectural integration is obtained. Because of its state eligibility to the California Register, the Civic Center Mall is also considered a historical resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

Despite its constant maintenance over the years, the park derives its individual importance from its overall mid-century Modern design and formal physical characteristics as applied to a public park in a high-density urban setting. Architecturally specific character-defining features of the park that support its individual eligibility for State designation are as follows: (1) the mid-century Modern style water feature (both the fountain and pools); (2) many of the pink granite clad planters, pink granite clad retaining walls, and concrete benches; (3) the circulation system (concrete walkways and open space); (4) the existing elevator shaft structures located within the center of the park; (5) many of the light poles with saucer-like canopies and the pole type "hi-fi" speakers with saucer-like canopies; (6) the circular shaped vehicular ramps leading to the underground parking garage from Hill Street; and (7) the granite faced stairs and spiral shaped parking lot ramps off of Grand Avenue.

As noted above, the Civic Center Mall is also eligible for the California Register as a contributing property to a potential historic district comprised of civic buildings, structures, objects, and sites. It is historically important to the district because of it being the Civic Center's primary public gathering space and governmental center. Those features that convey its historical significance as a contributor to a potential historic district, which are different than the character-defining features of the park that support its individual eligibility for State designation, include its overall monumental size, shape, location, function, association, and physical characteristics (hardscapes and landscaping, materials, and east-west axis set between public buildings), ownership and purpose.

While many of the smaller plants and shrubs have been replaced, the changes appear consistent with the objectives, intent, and form of the original design of the park. National Register Bulletin 18 entitled "How to Evaluate and Nominate Designated Historic Landscapes" acknowledges the "unique attributes" that complicate landscape evaluation and states that "although a landscape need not retain all the characteristic features that it had during its period of significance, it must retain enough or have restored enough of the essential features to make its historic character clearly recognizable." Because the hardscape features are intact and the original design intent has been retained in the current planting scheme, the landscaping continues to contribute to the park's overall historical and architectural significance as a mid-century Modern public space..

8. Hall of Records

a. Architectural Description

Reflective of the International style, the building is designed by combining seemingly discordant rectangular blocks of different materials and sizes, and using applied features to give tension and movement to the building which seems firmly anchored on the corner of Temple Street and Broadway. The main block of the structure is eight stories with the more interesting elevation on the south facing the Court of Historic Flags. (See Figure 20, Photograph 1, on page 68).

Seen from the south, the center of the building appears to be made up of a close group of various sized rectangular blocks, and these blocks seem to push outward to the east and west to where large flat panels pull the building towards them. Large vertical curved louvers shade windows from the afternoon sun and give movement to the wall surface by hiding the flat glass wall structure underneath them. The 125-foot high movable aluminum louvers were operated by a glass-enclosed mechanism located on the roof. An electronic eye would scan the sky and tell the louvers what to do. On the north elevation, facing Temple Street, the wall surfaces have smaller, individual window sized vertical louvers. These smaller louvers give the wall a static appearance. The front façade is also irregular, with the west half of the building closer to the street than the east end. There is the tall narrow projection in the middle between the two ends and a low two-story, rectangular block by the entrance. The wall surfaces range from small colored glass tiles, to rectangular scored concrete panels, to large ceramic tile panels. On the flat middle part of the front façade the concrete panels are placed in a vertical running bond pattern to give movement “up” the building.

The primary entrance is on Temple Street. Also on the Temple Street elevation is an eighty-foot long mosaic, made with small glass tile, called “Topographical Map of Water Sources in Los Angeles County” by Joseph Young (1962).

b. Significance

Ground was broken for the construction of the Hall of Records building in April 1959. Completed in 1962, it was designed by a group of architects that included internationally acclaimed architect Richard J. Neutra and partner Robert Alexander; as well as architects Honnold and Rex; Herman Charles Light and James Friend. The overall design primacy was ultimately delegated to Neutra and Alexander. In furtherance of the master plan of the Civic Center, the multi-story Hall of Records was built at a cost of approximately $11,464,000 by a joint-venture construction team that comprised of the Twaits-Wittenberg Company and

Photograph 1: Hall of Records south elevation.

Photograph 2: Court of Flags looking east to City Hall.

PCR

Figure 20

Photographs of Hall of Records and Court of Flags

Source: PCR Services Corporation, 2005.

Morrison-Knudsen Company. The Hall of Records initially housed the County Recorder's Office, Probation and Welfare Departments, and the County Regional Planning Commission.[62]

The Los Angeles County Hall of Records building was the central repository for all county records for a period of approximately 40 years. It was planned for the anachronistic storage of records in bulk, though within a few years of opening, the County turned to an almost total reliance on microfilm, rendering the new building's windowless stack areas functionally obsolete. In recent years, the County Office of the Registrar-Recorder/County Clerk has moved out from the building to an office in Norwalk. Because of its relatively short period as the County's central "hall of records" and lack of sufficient time to properly obtain a scholarly perspective on the events the property may be associated with it, the Hall of Records building is not associated with events that have made a significant contribution to the broad patterns of local, regional, or State history or cultural heritage. Further, it is not associated with the lives of persons important in our past. It does, however, embody distinctive characteristics of an architectural style and period, though it is not of exceptional notability necessary for National Register designation. The building is associated with a master architect, Richard Neutra, though Robert Alexander claimed that much of the final design was his idea.[63] The fully executed result is one lacking the stark modernity that is usually evident in Neutra designed buildings. Because of this, the property does not appear to satisfy National Register Criteria Consideration G: Properties That Have Achieved Significance within the Last Fifty Years, nor does it appear eligible for National Register listing under Criterion C for architecture.

In applying the California Register criteria, the property appears eligible for State listing for merits based on architectural design vocabulary and architect. Because of its interrelationship with governmental affairs and its physical presence within the Civic Center it also appears eligible as a contributor to a potential California Register historic district comprised of public buildings in the Civic Center area. The application of the California Register Special Considerations criteria is appropriate for this property because of its age. Upon placing this property in its proper context sufficient time has passed to adequately reflect back and obtain a scholarly perspective on the property and its association with the development of the City's civic center and distinctive architectural styling and connection with a master architect. For the purposes of CEQA compliance, therefore, the building is considered a historical resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

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[62] *Los Angeles Times. "Big County Structure Is On Its Way." April 5, 1959, pg. H1.*

[63] *Hines, Thomas. "Richard Neutra and the Search for Modern Architecture." Oxford University Press, pg. 245.*

9. Civic Center Mall – Court of Historic Flags

a. Architectural Description

The Court of Historic Flags is a concrete paved courtyard situated between the Hall of Records building to the north, the Los Angeles Law Library to the south, Hill Street to the west, and Broadway to the east. The courtyard is lower than the sidewalk on Hill Street, so you step down into the courtyard from that direction. On each side of the wide concrete courtyard is a raised concrete panel, slightly tilted, faced with dark brown brick. Set into the brick surface are brass plaques describing the history of each flag. A raised flag is on each flagpole. The current American flag is located at the east end of the court. At the west end, is a low concrete barrier with a plaque describing the courtyard. Coach lantern-type pole lights have been placed within the courtyard. The plaza is located over a large four level underground parking structure (See Figure 20, Photograph 2).

The Vietnam Memorial is located at the end of the court. The Vietnam Veterans Memorial Marker was placed in the courtyard by Los Angeles Board of Supervisors in 1973. The artist is Frank Ackermann (1933-?). The memorial is a freestanding granite marker with polished sides and a quarry-faced top, placed in recognition of the men and women of Los Angeles County who served in Vietnam from 1961 to 1973. The marker was designed with a bronze battle helmet placed on the top surface of the marker. The helmet is missing. (See Figure 21 on page 71).

The second phase of the Civic Center Mall construction began in October of 1968. Designed by architects J.E. Stanton; W.E. Stockwell; Paul R. Williams; Adrian Wilson; and the firm of Austin, Field & Fry to provide an additional 591 parking spaces for the surrounding civic center facilities, it also included 96,000 square feet of storage area for county records and documents. Financed by the County Retirement Board at a cost of $6,196,000, it was built by the C.V. Holder Incorporation, who was the lowest bidder for the job.[64] The surface of the parking structure provided space for a series of promenades and a central plaza area with flags of Western Hemisphere nations on display. It took approximately 26 months to complete this project. The underground parking structure and plaza court area are undistinguishable in their design and execution. Except for the commemorative features on display, the property is not associated with any events that have made a significant contribution to the broad patterns of local, state, or the nation’s history or cultural heritage or is it associated with the lives of persons important in our past. It is neither an outstanding example of this property type nor a good representative of a particular architectural style, since it does not possess or embody any distinctive characteristics. Though designed by a group of highly prominent architects, this

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[64] *Los Angeles Times. “Low Bid Reported on 2nd Phase of Mall.” October 24, 1968, pg. E15.*

Photograph 1: Vietnam Memorial marker in the Court of Flags, looking west.

Figure 21

Photograph of Vietnam Memorial and Court of Flags

Source: PCR Services Corporation, 2005.

property is not a good representative of their work. Their work is better represented as a collective sum in the design and development of the overall Civic Center. Therefore, the Court of Flags does not appear eligible for individual listing in the National Register or the California Register due to its lack of exceptional historical and architectural significance. Because of its location, spatial relationship with the nearby civic buildings and adjacent open spaces, as well as its association with the overall Civic Center master plan, however, it does appear eligible for California Register designation as a contributor to a potential historic district comprised of civic facilities. On this basis and for the purposes of CEQA compliance, this property is considered a historical resource pursuant to the CEQA Guidelines Section 15064.5(a).

10. Clara Shortridge Foltz Criminal Justice Center

a. Architectural Description

A very straightforward building of 19 stories, built in concrete frame construction with a square massing. The light colored articulated frame seems to hide the dark colored glass paneled building beneath its covering. The exposed framework also aids in shading the windows from morning or afternoon sun. The weight of the building is carried down the framework to the sidewalk. The first floor is recessed from the framework structure thereby creating a covered arcade walkway. (See Figure 22 on page 73).

b. Significance

Located along the south side of Temple Street between Broadway and Spring Street, the building stands on the same plot of ground that held its predecessor, the red sandstone Courthouse, the early home of the Los Angeles Superior Court. The old courthouse opened its doors in 1891, when the county’s population reached 100,000, and it served as the county’s courthouse until 1933 when it was severely damaged by the Long Beach earthquake and later demolished. It took almost 40 years to open the Criminal Courts Building in October 1972.

Like many of the other buildings and structures in the Civic Center, the Criminal Courts Building was designed by a consortium of architects that included J.E. Stanton; W.E. Stockwell; Paul R. Williams; Adrian Wilson; and the firm of Austin, Field & Fry. Adrian Wilson was reportedly the principal designer. Initially planned as an annex to the old Hall of Justice, located across the street, it evolved into being the largest and most complex county facility of its time.[65] The building was the first county facility to provide separate prisoner circulation – and the first to design bullet resistant security screens in select courtrooms. It was rededicated as the Clara

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[65] *“Clara Shortridge Foltz Criminal Justice Center.” An article from the Los Angeles Public Library California Index, n.d.*

Photograph 1: Clara Shortridge Foltz Criminal Justice Center.

Figure 22
Clara Shortridge Foltz
Criminal Justice Center

Source: PCR Services Corporation, 2005.

Shortridge Foltz Criminal Justice Center on February 2002 in honor of the first female prosecutor in the Los Angeles District Attorney's Office. Foltz, who worked as a public defender in the old courthouse building prior to the 1933 Long Beach earthquake, battled to reform the parole system in California.

Construction of the Modern style building was awarded to Gust K. Newberg Construction Company of Illinois in October 1968. Built at a cost of approximately $32,787,000 (8.7 percent above the estimated cost by the architects), it took just over three years to complete. Designed with air-conditioning it included 60 courts and facilities for the sheriff, marshal, coroner, and county clerk. A cafeteria and a tunnel through which prisoners could be taken from the Hall of Justice were also features of the building's plan.

The Criminal Courts Building does not possess the exceptional qualities of architecture or historical associations necessary for individual designation at the federal, State, or local levels of significance due to its recent date of construction (1972). Sufficient time has not passed to place this property into proper perspective for evaluation of importance on its own merit. Therefore, it appears ineligible for individual listing in the National Register or the California Register (6Z). It does, however, appear eligible for California Register designation as a contributing property to a potential historic district comprised of civic buildings, structures, objects, and sites. Hence, the building is considered a historical resource pursuant to the CEQA Guidelines Section 15064.5(a).

11. Los Angeles City Hall

a. Architectural Description

Los Angeles City Hall is located between Spring Street and Main Street, to the west and east, respectively, and Temple Street and 1st Street, to the north and south, respectively. The building is an eclectic blend of Classical, Mediterranean, and Moderne styles that features low pitched tile roofs, large scale and simple detailed cornices below attic stories. The tower of the building, built upon a ten-story, rectangular massed base, is seen as a free interpretation of the Temple of Halicarassus (one of the Seven Wonders of the Ancient World), with the battered walls suggesting Egyptian influences. It is constructed of steel reinforced concrete, with the exterior walls clad for the first three floors by granite, and the rest of the wall surface by terra cotta tiles. The interior of the building reflects a predominately Romanesque influence.

b. Significance

Designed by the notable Los Angeles based architects John Parkinson, John C. Austin, and Albert C. Martin Sr., the building stood for many years as the tallest structure in the southland. When it was erected in 1928, there was a 150-foot limit (12-stories) on the height of buildings in Los Angeles. A referendum allowed an exemption for City Hall, which was built to three times that height. Upon its completion, the Los Angeles City Hall building was hailed by critics as a uniquely American masterpiece of architecture and design.[66] It has served as the central hub of the City's civic affairs for over seventy years; its location and visual prominence anchors the eastern end of the Civic Center. The building underwent a meticulous $300 million restoration and seismic renovation in the 1990s that was completed in 2001. The Los Angeles City Hall is one of the most recognizable buildings in America, and at one time served as the location for the Daily Planet in the "Superman" television series. Today, approximately 1,300 city employees call it home.[67]

The building has been previously evaluated and was formally determined as eligible for the National Register under Criteria A (historical associations) and C (architectural distinction and representation of prominent/master architects). Since it was formally determined eligible for the National Register, the building is also listed in the California Register. City Hall is a listed a City of Los Angeles Historic-Cultural Monument as well. For the purposes of CEQA, it is considered a historical resource according to Section 15064.5(a) of the CEQA Guidelines.

12. Parking Lot located between Broadway and Spring Streets

a. Architectural Description

This is an unimproved, asphalt paved lot used for street level parking.

b. Significance

This site was once developed with the stately Hall of Records building and the Plaza de la Justicia. A number of temporary structures, which were used as courtrooms before the new courthouse was built, were also located on this block just north of the old Hall of Records building. The Plaza de la Justicia was leveled for construction of a parking lot in June 1961. The Hall of Records building, built in 1909 and completed in 1911, remained in place while the Civic Center grew and expanded around it. Damaged from the 1933 Long Beach earthquake, and considered obsolete and in the way of the new Civic Center Mall, the multi-story Hall of Records was eventually demolished in 1973. Upon its removal, the site never truly materialized into the easterly extension of the grand Civic Center Mall city officials and planners had once envisioned. It did remain a wide open space, but was utilized as a surface parking lot.

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[66] *www.lacity.org/restore/rstpr1.htm (City of Los Angeles on-line website promoting the Project Restore program for the City Hall building).*

[67] *Ibid.*

In assessing its historical and architectural value, this property is not associated with events that have made a significant contribution to the broad patterns of local, State, or national history or cultural heritage. Additionally, it does not embody any distinctive characteristics to associate it with a particular architectural style and does not represent the work of any important individual, architect, builder, or contractor. Therefore, this parking lot does not appear individually eligible for listing in the National Register, the California Register, or as a City of Los Angeles Historic-Cultural Monument. It is also considered a non-contributor to the potential State and locally significant historic district that is associated with the history and development of the Civic Center. Because the property cannot be properly placed within the historic context developed for the survey study area and because it is not a physical manifestation of the community's history, the significance of it cannot be demonstrated. Hence, it is not eligible for federal or state designation. For the purposes of CEQA compliance this site is not a historic resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

13. Vacant lot with the foundation pad of old State Office Building

a. Architectural Description

The concrete foundation of the first floor and basement, of the State Office Building that was built circa 1928, is located on this parcel. The openings to the basement area have the ornamental, flat ironwork bars still attached to the exterior walls. (See Figure 23 on page 77).

b. Significance

The original multi-story State Office Building was located at this site; however, it was removed as part of the development of the Civic Center master plan. All that is left of the building is its foundation. Individually or collectively they do not adequately manifest, embody, or reflect any historical or architectural associations with the history or cultural heritage of the community, region, State, or nation. As a result, this site appears ineligible for individual listing in the National Register or the California Register applicable criteria. Further, it does not appear to be a contributor to the potential State and locally significant historic district identified with the overall Civic Center development. In accordance with Section 15064.5(a) of the CEQA Guidelines, it is not a historical resource for CEQA purposes.

14. Los Angeles County Law Library, Mildred E. Lillie Building

a. Architectural Description

The large, low, building is a rectangular massing with no windows so as to protect the books and documents held within. On the north and west elevations, there are exterior

Photograph 1: Foundation of demolished State Office Building.

Figure 23

Photograph of State Office Building Foundation

Source: PCR Services Corporation, 2005.

decorative elements consisting of large concrete relief forms applied in rows across the facade with a wide band of iridescent gold glass mosaic tiles placed above that seem to date from the 1960s. While on the east elevation, the decorative elements are more in the Art Moderne style with tall, narrow, recessed wall sections fit with inset louvered ventilation openings that are surrounded by blue terra cotta tile. The sole decorative element on the south elevation is a set of eight, cast concrete, government emblematic seals over the front entranceway. Black granite is used to clad the front steps and the area around the entrance. The rest of the building is covered in white concrete with rectangular panels incised for a decorative effect. Other interesting touches include the large, metal and glass, stand-alone light fixtures by the front entrance that have an Art Deco/International style to them. (See Figure 24, Photographs 1 and 2, on page 79).

b. Significance

Designed by the architectural firm of Austin, Field & Fry, construction of the Los Angeles County Law Library was completed in 1953. With the plans finalized in July 1951, the structure was erected at a cost of approximately $1,129,900 by the James I. Barnes Construction Company of San Francisco. Built as a four-story building, with 33,000 square feet of space the building is setback toward 1st Street in order to maintain the wide open space of the proposed Civic Center Mall to the north. As designed at the time, the building included 20 miles of bookshelves with a shelf capacity for 517,425 volumes.[68] It also included a number of librarian offices, a foreign and rare book reading room, a public stenographer’s room, lockers for patrons, an employee lunchroom, elevators and book lifts. The building has been slightly altered over the years. The most significant modification was an addition that occurred in 1970. The building was dedicated to Mildred E. Lillie in 2003. Ms. Lillie had been on the municipal, superior and appellate benches for over 55 years in California.

In assessing the building’s overall significance, historic associations with important events or persons were not evident to merit consideration as an individual landmark at the federal, state and local levels of significance. Further, the execution of the design and architectural styling of the structure, while reflective of the Corporate Modern idiom, does not rise to a level of National Register or California Register designation as an individual landmark. Its association with a prominent architectural firm is also noted; however, it does not appear to be a well representative example of their body of work for which they are known. Their work is better represented as a collective sum in the design and development of the overall Civic Center. For architectural merit the building does not appear eligible for individual designation at the federal or state levels of significance. Its consideration as part of a larger grouping of civic buildings in the downtown area of Los Angeles, however, is warranted. Therefore, it does appear eligible for California Register designation as a contributor to a potential historic district

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[68] *Los Angeles Times. “Large Law Library Scheduled for State.” July 6, 1952, pg. E1.*

Photograph 1: South elevation of Law Library, looking northeast.

Photograph 2: Law Library, east elevation.

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Figure 24

Photographs of the Mildred Lillie County of Los Angeles Law Library

Source: PCR Services Corporation, 2005.

associated with the development of the Civic Center master plan. For the purposes of CEQA, it is considered a historical resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

15. Los Angeles Superior Court/Stanley Mosk Courthouse/Los Angeles County Courthouse

a. Architectural Description

The Los Angeles Superior Court/Stanley Mosk Courthouse/Los Angeles County Courthouse was completed in 1958. The courthouse's International style designed by architects Jess E. Stanton, Paul R. Williams, Adrian Wilson and Austin, Field & Frey, represents a dramatic break from the past by lacking the classical elements that connect traditional courthouse design to the history, traditions, and authority of the law. The only overt decorations are the three heroic figures over the Grand Avenue entrance and the bas-relief figure of Justice over the Hill Street entrance. (See Figure 25, Photograph 2, on page 81).

The overall massing is rectangular with sharp clean lines and virtually no decorative features other than its use of negative and positive space to create tension on its surfaces. The nine-story building is monolithic, extending from Grand Avenue to Hill Street. Because it is so large, it is difficult to see that the building is symmetrical with the overall shape a long rectangular mass with a widening of its mass towards the west end, where as it widens it also steps down in height moving out to the street on 1st street. This building uses the pink granite cladding for almost two stories on the lower levels, making the main mass appear that it is sitting on a granite base. As seen on the Kenneth Hahn Hall of Administration, the wall skin is concrete that has been incised in equal sized squares. Ribbon windows of six to eight lights, in metal frames, are set deeply on the upper floor above the pink granite wall cladding. Long, built-in balconies and canopies are located along the north and south elevations. (See Figure 25, Photograph 1).

The entrances on Grand Avenue and Hill Street are very similar except for the imposing sculptures and bas relief located over the doorways. There are no windows on these elevations and the actual entrance area is slightly recessed from the façade. The walls and doors of the entrance are glass set within brass framework. The entrance on the south elevation (1st Street) is similar to the arcade design on the Kenneth Hahn Hall of Administration with tall rectangular pillars supporting the ceiling. The walls and pillars of the arcade are faced with pink granite and the height gives a feeling of the important decisions being arbitrated within. The building is surrounded by raised planters clad in pink granite. In some areas of the building, these planters are set low enough to be used for outdoor seating.

Photograph 1: Stanley Mosk Los Angeles County Courthouse, south elevation.

Photograph 2: County Courthouse, Grand Avenue entrance.

PCR

Figure 25
Photographs of the Stanley Mosk Los Angeles County Courthouse

Source: PCR Services Corporation, 2005.

Located within the planting area on the Grand Avenue elevation are three different art pieces. Two Egyptian lanterns, each about 8 foot tall, stand near the building to the north and south of the entrance doors. To the south of the entranceway is a bust of Abraham Lincoln. To the north of the entranceway is a life size statue of Joseph Scott mounted on a dark grey block of polished granite. On the east elevation, in the south corner is a large round fountain of dark grey polished granite, and two more Egyptian lanterns are placed on either side of the entranceway. (See Figure 26 on page 83).

The relief sculpture on the building was done by two separate artists. Justice was created in 1956, by Donal Hord (1902-1966) and commissioned by Jess Stanton, Architect. Justice is represented by the central female figure, dressed in judicial robes. A globe, the emblem of her universal reign, is held in her left hand and a sword, signifying her power is supported by her right hand. The scale, decorated at the top with an American eagle, is balanced on her head symbolizing impartiality. The kneeling males, “Truth” and “Law,” resemble the subservient figures portrayed in tomb paintings from ancient Egypt. The sculpture measures approximately 24 feet x 24 feet.

The art piece entitled “Foundations of the Law” was created in 1956, by Albert Stewart (1900-1965). The work represents Mosaic Law (Moses standing on a calf), the Magna Carta (a knight standing above a castle) and the Declaration of Independence (Thomas Jefferson standing over a ship). Gold colored copies of Mosaic Law and the Declaration of Independence are flanking the southern entrance to the Kenneth Hahn Hall of Administration.

Features associated with the building are:

i. Bust of Abraham Lincoln sculpture, by Robert Merrill Gage, 1961

A private commission by the Los Angeles County Bar Association. The bronze bust had been located in the courthouse until 1989, when it was moved out of the building to its present location at the corner of 1st and Grand Avenue. A statue of Stephen White had stood in this location and it was removed to Cabrillo Park in San Pedro. (See Figure 27, Photograph 1, on page 84).

ii. Statue of Joseph Scott, by Carl Romanelli/Cataldo Papaleo, 1967

Private/public sponsorship. Joseph Scott (1867-1958) was a Los Angeles attorney, writer, orator and prominent Catholic layman. He served many years on the Los Angeles Board of Education, and he was president of the Los Angeles Chamber of Commerce from 1910-1921. He was a stalwart champion of Americanism and militant foe of communism. (See Figure 27, Photograph 2).

Photograph 1: Egyptian Lantern at west end of the County Courthouse.

Figure 26

Photograph of Egyptian Lantern

Source: PCR Services Corporation, 2005.

Photograph 1: Bust of Abraham Lincoln.

Photograph 2: Statue of Joseph Scott.

Figure 27

Photographs of Lincoln Bust and Joseph Scott Statue

Source: PCR Services Corporation, 2005.

b. Significance

Built at a cost of approximately $20,000,000, the County Courthouse was declared the largest building in the downtown area at the time of its construction.[69] The structure was designed by the combined efforts of architects J.E. Stanton, Paul R. Williams, Adrian Wilson and the firm Austin, Field & Fry. The courthouse was built in response to the Long Beach earthquake that occurred in 1933. Because of extensive damage that was sustained to many of the public facilities, including the former courthouse, the County Board of Supervisors adopted a resolution calling for immediate construction of a new courthouse. It was, however, 20 years later when the Board of Supervisors approved the architectural plans for the building.

The first shovel of dirt occurred on March 26, 1954, when ground was officially broken for the project. It required nearly two years to cut into the side of Bunker Hill between Hill Street and Grand Avenue for preparation of the courthouse site. With an anticipated completion date set for 1957, work on the building was slightly delayed by a three month long sand and gravel strike that then cascaded into other delays. It was ultimately completed in 1958, with its operation as a courthouse starting the following year.

The new courthouse, with 110 courtrooms, was designed to centralize the courtroom facilities, which at the time were widely scattered throughout the downtown area. At the time of its construction, the building was described as monumental rather than modernistic. With some 650,000 square feet of floor space, it was designed with function, not style in mind. With symmetrically placed windows punctuating its exterior, it also included a “modern” air conditioning, escalator system, and a cafeteria with sundeck within. In its construction approximately 2,000,000 man-hours of work, 50,000 cubic yards of concrete, and 50 miles of pipe to carry electric wires were used to erect the structure. Besides entrances from Hill Street and Grand Avenue, the building also features an arcade promenade entrance that fronts on to the Civic Center Mall.

The Courthouse was renamed for the late Los Angeles Superior Court and California Supreme Court Justice Stanley Mosk in 2002. Mosk had joined the Los Angeles Superior Court in 1943 and served until he was appointed California State Attorney General in 1958. He held that position until 1964 when he was named to the California Supreme Court. He died in 2001.

The County Courthouse was previously evaluated for National Register eligibility in 2002 by Greenwood and Associates for Section 106 compliance. At that time, it was found to be ineligible to be listed in the National Register due to it being less than 50 years old. Under the current survey assessment for CEQA compliance, this individual property does not appear to

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[69] *Los Angeles Times, “New Courthouse Fast Taking Form.” April 15, 1957, pg. A2.*

satisfy the special requirements of National Register Criteria Consideration G, which is applied to properties less than 50 years of age. At this point, it cannot be adequately demonstrated that sufficient time has passed to fully understand its historical or architectural importance or obtain a scholarly perspective on its significance. Therefore, the property does not appear individually eligible for federal or State designation. Currently, its historical and architectural importance is better reflective as a contributing feature to a potential California Register eligible historic district comprised of public buildings, structures, sites, and objects that united together define the Civic Center. For the purposes of CEQA compliance, the building, therefore, is considered a historical resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

16. Parcels Q and W-1/W-2. Automobile parking facilities

a. Architectural Description

Parcels W-1/W-2 is a large open area paved with asphalt. Parcel Q contains a large metal parking structure with open framework. Cyclone fencing encloses each parcel.

b. Significance

There is nothing distinguishing to the design of the parking lot or the parking structure on Parcel Q. Further, no evidence was uncovered that associated the site with any events or persons that have made a significant contribution to the broad patterns of local, regional, or state-wide history. Therefore, Parcels Q and W-1/W-2 do not appear eligible for listing in the National Register, the California Register or for local landmark status due to lack of significance. Because of their lack of historical significance, Parcels Q and W-1/W-2 are not considered historical resources for the purposes of CEQA compliance.

17. Colburn School of Performing Arts

The Colburn School of Performing Arts moved into its current facility at 200 South Grand Avenue in downtown Los Angeles in 1998. The 65,000 square foot space was designed to support the various program areas of the School. The School broke ground on a second building on the east side of the current building in 2004. All programs will be integrated within the two buildings, which will connect on the Grand Avenue level with a plaza and on the lower level by an interior hallway.

a. Architectural Description

The first floor exterior consists of tan brick walls that are banded with bricks laid on edge, vertically and at an angle to create a texture and color variation to the flat wall surface.

The vertical walls are a stark contrast to the angular wall surfaces made of varying proportions of metal and glass with imbricate metal shingles forming the surface of both the roof and gable end. The large metal roof, with clerestory windows, of Zipper Hall is the most prominent feature on the Grand Avenue elevation and in the evening changes its appearance by application of specialty outdoor lighting. The flattened gable roof style is repeated in smaller scale on the building as it extends to the east. (See Figure 28 on page 88).

The 55,000 square-foot complex sits atop Grand Avenue. A landscaped plaza is built over an adjacent side street to connect the Colburn School and MOCA. The plaza provides an outdoor venue for performances and receptions and also continues an existing link to California Plaza's promenade. The main building contains Jascha Heifetz' studio that was rescued from his house, designed by Frank Lloyd Wright in 1946.

The addition that is under construction, an addition to the east elevation, is in the same design and materials as the existing building.

b. Significance

The school complex was designed by the architectural firm of Hugh Hardy/ Malcolm Holzman/ Norman Pfeiffer/ Associates. Completed in 1998, the school is located next to the Museum of Contemporary Art and near the Music Center along the "cultural corridor" of Grand Avenue. The school provides music, dance, and drama training to students from preschool to adult. The 65,000 square foot facility was designed to support the various program areas of the school. The Colburn School of Performing Arts building does not possess the exceptional qualities of architecture or historical associations necessary for individual designation at the federal, State, or local levels of significance due to its recent date of construction (1998). Sufficient time has not passed to place this property into proper perspective for evaluation of importance on its own merit. Therefore, it currently appears ineligible for individual listing in the National Register, the California Register or for local landmark status. Additionally, the property does not appear to be associated with any potential historic district as a contributing building. For the purposes of CEQA compliance it is not considered a historical resource pursuant to the CEQA Guidelines, Section 15064.5(a).

18. Museum of Contemporary Art (MOCA)

a. Architectural Description

The Grand Avenue main building (250 S. Grand Ave., Los Angeles) is a contemporary red sandstone structure set very close to the street. A break in the façade, under a large barrel roofed arcade forms the opening from the street to the interior of the museum campus. The

Photograph 1: Colburn School of Performing Arts on Grand Avenue.

Figure 28
Photograph of Colburn School of Performing Arts

Source: PCR Services Corporation, 2005.

public galleries are approached down a flight of stairs that lead into the south pavilion. From the street, these stairs are hardly apparent. The north structure contains offices and the museum shop. (See Figure 29 on page 90).

b. Significance

Construction of the Museum of Contemporary Art began in the early 1980s and was completed in 1986. It was designed by Arata Isozaki, an internationally acclaimed architect. Arata Isozaki, born in Japan, studied under Kenso Tange (a leading figure of Japanese modern architecture) at the University of Tokyo before becoming a member of Tange's design team. Besides the MOCA facility his portfolio of work includes The Museum of Modern Art in Japan (1971/1974), the Brooklyn Museum in New York (1986/1992), and the Kyoto Concert Hall in Japan (1991/1995).

It is one of three locations that comprise the Museum of Contemporary Art in Los Angeles. The other locations are the Geffen Contemporary at 152 North Central Avenue, and the Pacific Design Center at 8687 Melrose Avenue in West Hollywood.

As with the Colburn School of Performing Arts, sufficient time has not passed to place the Museum of Contemporary Art property into proper perspective for evaluation of importance on its own merit. The property does not possess the exceptional qualities of architecture or historical associations necessary for individual designation at the federal or State levels of significance due to its recent date of construction (1986) and lack of time to fully understand its historical significance and place it in proper context. Therefore, it currently appears ineligible for individual listing in the National Register and the California Register. Additionally, the property does not appear associated with any potential historic district as a contributing building. For CEQA purposes, the art museum is not considered a historical resource according to Section 15064.5(a) of the CEQA Guidelines.

19. Parcels M-2 and L. Surface Parking Lots

a. Architectural Description

Both Parcel M-2 and L are large lots paved with asphalt and used as parking lots. Cyclone fencing surrounds each parcel.

b. Significance

Parcel M-2 and L do not possess any distinguishing characteristics to associate them with any notable architect or architectural idiom. Further, no evidence was found to connect them with events that have made a significant contribution to the broad patterns of local, regional,

Photograph 1: Museum of Contemporary Art (MOCA), on Grand Avenue.

Figure 29

Photograph of Museum of Contemporary Art

Source: PCR Services Corporation, 2005.

State, or nation-wide history. Therefore, these sites do not appear eligible for listing in the National Register, the California Register or for local individual landmark status or as contributors to a potential historic district. Under CEQA, Parcels M-2 and L are not considered historical resources pursuant to Section 15064.5(a) of the CEQA Guidelines.

20. Southern California Edison Building (One Bunker Hill)

a. Architectural Description

Designed by architects James and David Allison of the firm Allison and Allison, the fourteen story Art Deco building possesses the hallmark signature features of the idiom. The lower three stories are of solid limestone with the setback upper stories and central tower faced with buff colored glazed terra cotta. On the façade, the spandrels contain a cubic Art Deco pattern, repeated in the central tower, lobby floor, and elevator ceilings. On the entry façade allegorical figures by sculptor Merrell Gage represent light, power, and hydroelectric energy. The two-story interior lobby space includes classical elements that are treated with an Art Deco flair, highly ornate coffered ceilings, and floors and walls composed of 17 different types of marble. At the end of the lobby is a mural by Hugo Ballin entitled “The Apotheosis of Power.” Ballin is probably best known for his mural work at the Griffith Observatory.

b. Significance

The Southern California Edison Building, also known as One Bunker Hill, was built in 1930. It served as the southern California headquarters of the Edison Company for a number of years. The property has been previously evaluated on a number of occasions, including Section 106 assessments. It has been formally determined be eligible for National Register listing under criteria associated with architecture (Criterion C). Additionally, the property is a designated City of Los Angeles Historic-Cultural Monument. For the purposes of CEQA, it is considered a historic resource pursuant to Section 15064.5(a) of the CEQA Guidelines.

A. THRESHOLDS OF SIGNIFICANCE AND CRITERIA FOR ADVERSE IMPACTS

1. CEQA Guidelines

Historic resources can be affected by land use changes, and by visual, noise or atmospheric intrusions beyond the project site. The CEQA Guidelines state that a project involves a "substantial adverse change" when one or more of the following occurs:

- Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[70]

- The significance of a historical resource is materially impaired when a project:[71]

  a. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

  b. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

  c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

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[70] *State CEQA Guidelines, 14 CCR Section 15064.5(b)(1).*

[71] *Ibid, Section 15064.5(b)(2).*

The CEQA Guidelines further require a finding of significant impact when the alteration of the immediate surroundings of a resource would occur such that the significance of a historical resource would be materially impaired. The Los Angeles CEQA Thresholds Guide requires a finding of significant impact on historical resources if the project involves construction that reduces the integrity or significance of important resources on the site or in the vicinity. Historic resources adjacent to a proposed project could be indirectly affected when it is isolated from its setting or the setting that contributes to the property's historical character or significance is altered.

A historic property may also be indirectly affected by a proposed project by the introduction of visual elements that are out of character with the property or alter its setting. The guidance that defines these impacts is provided in the Criteria of Effect and Adverse Effect established by the Advisory Council on Historic Preservation (CFR 1992: 800.9 (b-2, and b-3), under Section 106 of the National Historic Preservation Act. Though CEQA does not provide specific guidance for the evaluation of indirect impacts to historic resources, the Criteria of Effect and Adverse Effect were utilized to determine the significance of indirect impacts to historic resources.

2. Secretary of the Interior Standards for Rehabilitation

The Secretary of the Interior has promulgated Standards for the Rehabilitation of Historic Buildings (Standards).[72] These Standards may be used by the United States Department of the Interior, National Park Service (NPS) and other federal, state, and local agencies in reviewing and approving work to be performed on historic buildings. The Standards were written to "assist the long-term preservation of a property's significance through the preservation of historic materials and features. The Standards pertain to historic properties of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. They also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction."[73]

The Standards are designed to ensure that rehabilitation does not impair the significance of a historic property. In most circumstances, the Standards are relevant in assessing whether there is a substantial adverse change under CEQA. Section 15064.5b(3) of the CEQA Guidelines states in part that "... a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating,*

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[72] *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, U.S. Department of the Interior, National Park Service, Preservation Assistance Division, 1990. Also see 36 CFR § 67.7.*

[73] *Secretary of the Interior's Standards, page 5.*

Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historic resource."

The definition of "rehabilitation" assumes that at least some repair or alteration of a historic resource will be needed in order to provide for an efficient, contemporary use. However, these repairs and alterations must not damage or destroy materials, features, or finishes that are important in defining the property's historic character. The ten standards for rehabilitation are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of skilled craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The Guidelines for Rehabilitation were developed by the Department of the Interior's National Park Service (NPS) to assist property owners in applying the general Standards listed above. The Guidelines contain a specific hierarchy for decision-making in assessing the rehabilitation of any historic property. First, the significant materials and features of a property must be identified. Then a method for their retention and preservation must be found. If the physical condition of character-defining material warrants additional work, repair is recommended. If deterioration or damage precludes repair, then replacement can be considered.

The introduction to the Guidelines states that:

> Some exterior and interior alterations to a historic property are generally needed to assure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes.[74]

A technical brief which describes how to identify the character-defining features of a building notes:

> A complete understanding of any property may require documentary research about its style, construction, function, its furnishings or contents; and knowledge about the evolutionary history of the building. Even though buildings may be of historic, rather than architectural significance, it is their tangible elements that embody its significance for association with specific events or persons and it is those tangible elements both on the exterior and interior that should be preserved.[75]

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[74] *Secretary of the Interior's Standards for Rehabilitation.*

[75] *Lee Nelson. "Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character," Preservation Brief 17, U.S. Department of the Interior, Preservation Assistance Division, 1982, page 1.*

In addition to the rehabilitation of character-defining features, the Standards and Guidelines also address alterations and additions to historic properties, as well as retrofitting for health and safety requirements. Some interior and exterior alterations to a historic property may be needed to assure its continued use. These modifications should not, however, obscure the character-defining features of a property.

3. City of Los Angeles Thresholds of Significance

The following factors are set forth in the City of Los Angeles "L.A. CEQA Thresholds Guide," which states that a project would normally have a significant impact on historic resources if it would result in a substantial adverse change in the significance of a historic resource. A substantial adverse change in significance occurs if the project involves:

- Demolition of a significant resource;
- Relocation that does not maintain the integrity and (historical/architectural) significance of a significant resource;
- Conversion, rehabilitation, or alteration of a significant resource which does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or
- Construction that reduces the integrity or significance of important resources on the site or in the vicinity.

Based on these factors, a project would have a significant impact on historic resources, if:

- The project would demolish, destruct, relocate, or alter a historical resource such that the significance of the historical resource would be materially impaired; or
- The project would reduce the integrity or significance of important resources on the site or in the vicinity.

B. PROPOSED PROJECT

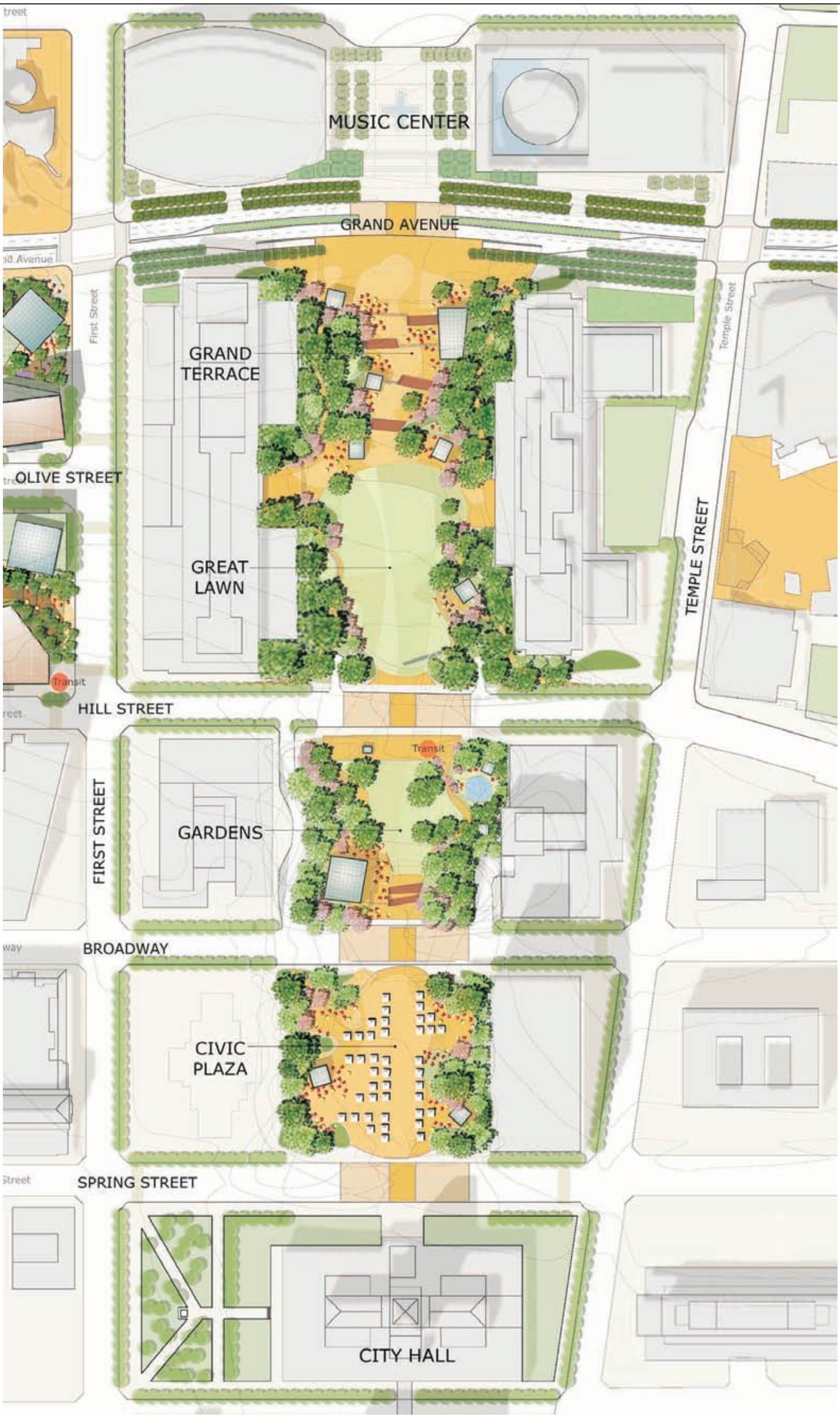
The proposed Project site includes the Civic Center Mall between Los Angeles' City Hall and Grand Avenue; the streetscape along Grand Avenue between Fifth Street and Cesar Chavez Avenue; and five parcels located within the CRA/LA's Bunker Hill Redevelopment Project area.

The Project consists of the following three components: (1) the creation of a 16-acre Civic Park that would result from the renovation and expansion of the existing Civic Center Mall, and would connect City Hall to Grand Avenue; (2) streetscape improvements along Grand Avenue between 5th Street and Cesar Chavez Avenue to attract and accommodate more pedestrian traffic; and (3) development of five parcels, four of which are located within the Grand Avenue Project, with the fifth parcel to be separately acquired by the Related Companies, who is the Project applicant. The four parcels that are located within the Development Plan are referred to as Parcels Q, W-2, L and M-2. The fifth parcel is referred to as Parcel W-1. The total Project site, including the location of the five parcels, is shown in Figure 2 on page 3.

A Conceptual Plan for the Project, as shown in Figure 3 on page 5, has been formulated to represent a potential development scenario that depicts the basic intent of the Project. While the precise mix and location of uses have not been definitively determined, the Conceptual Plan represents the most current development scenario under evaluation and consideration. Provided in the following paragraphs are descriptions of the Project's three components.

The proposed Civic Park would be revitalized and activated through a new design that would be functional and accessible to the public. The current Conceptual Plan for the Civic Park, as show in Figure 30 on page 98, maintains and expands upon the existing organization of space as three major areas: Grand Avenue to Hill Street; Hill Street to Broadway; and Broadway to Spring Street. Under the Conceptual Plan, the westernmost, approximately 8-acre section is proposed to be utilized for cultural and entertainment uses. The middle, approximately 4-acre section is proposed to be used as a garden space for smaller scale uses and the easternmost, approximately 4-acre section is proposed to be used for civic and community activities. Surface parking on the easternmost area of the park would be removed and parking would be re-established on the lower levels of the structures.

As previously stated, the Grand Avenue Streetscape Program, as shown in Figure 31 on page 99, extends from Cesar Chavez Avenue to 5th Street. Under the proposed Project, the Grand Avenue Streetscape Program would redefine Grand Avenue as a great Los Angeles street. The goal of the Grand Avenue street improvements will be to create an urban thoroughfare through a key area of downtown Los Angeles. These improvements are intended to foster an active pedestrian environment without compromise to the functional requirements of vehicular circulation. Toward this end, sidewalks will be widened wherever feasible from Fifth Street north to Cesar Chavez Avenue, and planting beds will be maximized in order to promote the growth of healthy and mature street trees. These improvements are intended to facilitate and improve pedestrian movement and create a positive environment for sidewalk cafes, special events, and building entrances. Other suggested improvements may include the installation of landscaping and landscape irrigation systems for new street trees, paving systems for sidewalks and adjoining plazas, streets, and curbs; banners, graphics, signage, etc; introduction of special improvements such as public art, water features, pavilions for private and public use, and kiosks; benches, chairs, and other seating systems; trash receptacles; drinking fountains; and water



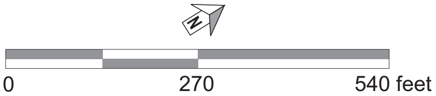


Figure 30
Conceptual Plan for Civic Park

Source: Grand Avenue The Related Companies, 2005.

The goal of the Grand Avenue street improvements will be to create an urban thoroughfare through a key area of downtown Los Angeles. These improvements are intended to foster an active pedestrian environment without compromise to the functional requirements of vehicular circulation.

Toward this end, sidewalks will be widened wherever feasible from Fifth Street north to Cesar Chavez Avenue, and planting beds will be maximized in order to promote the growth of healthy and mature street trees. The existing mid-street openings along Grand Avenue will be examined with the intent of either replacing these spaces with planted medians, or providing additional roadway to compensate for widened sidewalks. Such improvements are not intended to decrease existing vehicular capacity, and existing on-street parking will be maintained wherever feasible.

A varied landscape will be implemented. The landscape will be comprised of trees providing extensive shade and seasonal color for the street, as well as flower beds and other plantings.

Contemporary benches and lights will be introduced. These furnishings will provide and consistent and modern identity for the street, and will elevate the quality of the street environment.

PCR

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0 160 320 Feet

Scale in approximate feet

Source: Grand Avenue The Related Companies, 2005

Figure 31

Conceptual Plan for

Grand Avenue Streetscape Program

fountains. The existing mid-street openings along Grand Avenue will be examined with the intent of either replacing these spaces with planted medians, or providing additional roadway to compensate for widened sidewalks. The proposed streetscape improvements are not intended to decrease existing vehicular capacity, and existing on-street parking will be maintained wherever feasible.

The current Conceptual Parcel Development Plan, as shown in Figure 32 on page 101, envisions development on all five Parcels. Under the Parcel Conceptual Plan, Parcel Q would be developed concurrently with the creation of the Civic Park and the implementation of landscaping and streetscape improvements on Grand Avenue between Temple and First Streets. The development would be designed across multi-levels, incorporating a central plaza space, outdoor terraces, large amounts of landscaping and outdoor pools and terraces for hotel, restaurant, and residential uses.

The Conceptual Plan envisions varying building heights on Parcel Q, with the highest reaching up to 750 feet above Grand Avenue. The hotel/residential tower planned for Parcel Q would have entrances off Grand Avenue and Second Street. This high-rise tower would be an icon or centerpiece for the block and the design is anticipated to be marquis architecture. The retail component of Parcel Q would be developed as a collection of shops, restaurants, entertainment, and food uses. This parcel would also have its own signature outdoor public open space, which would emphasize pedestrian connections to Grand Avenue and First Street. The outdoor public space would be integrated into the streetscape improvements anticipated to occur on these streets.

The Conceptual Plan for Parcels W-1/W-2 includes a bridge across Olive Street to connect Parcel Q’s public space to public open space on Parcels W-1/W-2. This bridge would integrate Parcel Q’s open space and, by extension, connect Parcels W-1/W-2 with Grand Avenue. The public space of Parcels Q and W-1/W-2 would provide linkages between both blocks to the surrounding streets and adjoining uses. Parcels W-1/W-2 would be designed to include trees, landscaping, paving systems, benches, trash receptacles, street graphics, and lighting.

Also under the Conceptual Plan, Parcels L and M-2 would include the provision for greater street-front retail. Hope and Second Streets, as they adjoin Parcels L and M-2 would be designed with pedestrian friendly street edges that are enhanced with entrances to residential buildings and streetscape amenities, including trees; landscaping; paving systems; benches; trash receptacles; street graphics; and lighting.

As proposed, the Project has the potential to impact directly or indirectly a number of historic resources. The following is a detailed impact analysis of the Project components as they relate to each of the properties assessed for historical significance.

Source: Grand Avenue The Related Companies, 2005

Figure 32
Conceptual Parcel Development Plan

1. Potential Los Angeles Civic Center Historic District

The grouping of buildings, structures, objects, and sites that comprise the Civic Center appears eligible for California Register designation as a potential historic district. For the purposes of CEQA, this collective entity is considered a historic resource pursuant to the CEQA Guidelines.[76]

Under the proposed Project, none of the contributing civic buildings would be directly impacted. Indirect impacts are not anticipated to occur if the final plans for the Civic Park and the Grand Avenue streetscape program are implemented in a manner that would be substantially consistent with the Conceptual Plan for these Project components. However, indirect impacts may occur for those contributing properties that interface with either the Grand Avenue streetscape program or the redesign of the Civic Park if the final designs for these two Project components are not in substantial compliance with the Project's Conceptual Plan or the Secretary of the Interior's Standards for Rehabilitation. The streetscape improvements called for under the Project's Conceptual Plan would not physically impact or visually obscure those qualities or characteristics that are important in identifying or associating these properties as contributing elements to the potential Los Angeles Civic Center historic district comprised of governmental and cultural buildings united by plan and function within the Civic Center area of downtown Los Angeles.

The Project would, however, directly impact one contributing property, the Civic Center Mall (El Paseo de los Pobladores de Los Angeles). The existing Civic Center Mall would be renovated and expanded under the proposed Project. Much of the landscape and hardscape features would be removed or reconfigured to make the park a vital, active public space for the downtown community.

The Civic Center Mall is historically important to the potential district because of it being the Civic Center's primary public gathering space and governmental center. It is a key component in downtown Los Angeles' larger urban framework and open space network. It was designed and developed to be surrounded by public buildings. Its monumental size, shape, location, function and purpose, association, physical characteristics (hardscapes, landscaping, and east-west axis set between public buildings), and its ownership were all key aspects of its integration as a formally designed landscaped park into the larger scheme of the master plan for the Civic Center area.

As discussed in the detailed analysis of the park below, the extent of impacts to the park is going to be determined ultimately by the final design. However, regardless of the final park

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[76] *Ibid.*

design its basic size, shape, location, purpose and function would remain unaffected. Additionally, the Park's spatial relationships with the public buildings surrounding would remain unchanged. Overall, those physical qualities and historic characteristics that identify the Civic Center Mall as a contributor to the potential Los Angeles Civic Center historic district would be retained and would not be adversely changed or altered by the implementation of the proposed Project. In fact, those qualities that define it as a public park and focal point of the Civic Center would be enhanced by the Project; making the interrelationship of contributing resources both historically and visually even stronger. As significant impacts would not occur to the identified potential historic district mitigation measures would not be required.

2. Walt Disney Concert Hall

The Walt Disney Concert Hall appears eligible for listing in the National Register and the California Register. For the purposes of CEQA, the Walt Disney Concert Hall is considered a historic resource pursuant to the CEQA Guidelines.[77]

Under the proposed Project the Walt Disney Concert Hall would not be directly or indirectly impacted. No streetscape improvements are called for within the section of Grand Avenue that is located in front of the Walt Disney Concert Hall (i.e., west side of Grand Avenue). The landscaping proposed for Parcels L, M-2 and Q would not physically, aesthetically, or visually impact the historic and cultural qualities of the Walt Disney Concert Hall that make it historically significant. Therefore, no mitigation measures are required for this resource to implement the proposed Project.

3. Music Center

The Music Center appears eligible for individual listing in the National Register and the California Register. It is also eligible for designation as a contributor to a potential State and local historic district associated with the history of the Civic Center. For the purposes of CEQA, the Music Center is considered a historic resource pursuant to the CEQA Guidelines.[78]

Under the proposed Project's Conceptual Plan, the Music Center would not be directly or indirectly impacted. The exterior and interior of the Music Center campus would not be physically altered. The existing landscaping at street level consists of original and replaced elements. Project related streetscape improvements under the Conceptual Plan for the eastern perimeter of the Music Center, along the west side of Grand Avenue, would not physically harm those characteristics that justify the campus as eligible for federal or State designation. Grand

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[77] *Ibid.*

[78] *Ibid.*

Avenue and portions of the immediate adjacent sidewalk do not constitute a significant resource and therefore, no direct impact would occur to the Music Center campus. The streetscape proposed under the Conceptual Plan for Grand Avenue would not result in any indirect adverse impacts to the contributing elements of the Music Center since the existing trees would be replaced at similar intervals to the existing trees in a manner that would retain (and enhance) the sight line from the Music Center Plaza through the Civic Center Mall to City Hall. Thus, the removal of historic fabric would not be required to implement the streetscape. While less than significant impacts would result if the Conceptual Plan for the Grand Avenue streetscape program is implemented, potentially significant impacts could result if the final design for the streetscape program was to disrupt directly or indirectly those attributes of the Music Center upon which its eligibility determination is made. As the potential exists that the final streetscape design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

4. Music Center Annex Building

The Music Center Annex Building located at 601 West Temple Street (northwest corner of Grand Avenue and Temple Street) does not appear to be eligible for listing in the National Register or California Register. For the purposes of CEQA, this building is not considered a historic resource pursuant to the CEQA Guidelines.[79] Mitigation measures for this building are not required.

5. Cathedral of Our Lady of the Angels

The Cathedral of Our Lady of the Angels appears eligible for listing in the National Register, California Register, and for local City of Los Angeles Historic-Cultural Monument designation. For the purposes of CEQA, the Cathedral of Our Lady of the Angels is considered a historic resource pursuant to the CEQA Guidelines.[80]

As with the Music Center, the Cathedral of Our Lady of the Angels would not be directly impacted under the proposed Project's Conceptual Plan as no work to the exterior or interior of the building is anticipated. The streetscape improvements called for under the Conceptual Plan along the western perimeter line of the church, along Grand Avenue, would not visually obscure the building or those features of the building that deem it historically significant from the public right-of-way. Thus, implementation of the streetscape improvements per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the streetscape program was to disrupt directly or indirectly those

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[79] *Ibid.*

[80] *Ibid.*

attributes of the building upon which its eligibility determination is made. As the potential exists that the final streetscape design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

6. Kenneth Hahn Hall of Administration

The Kenneth Hahn Hall of Administration building does not appear to be eligible for individual listing in the National Register or California Register. Because of its physical manifestation as part of the overall Civic Center master plan, the Kenneth Hahn Hall of Administration building is considered a contributing property to a potential State eligible historic district. For the purposes of CEQA, therefore, the building is considered a historic resource pursuant to the CEQA Guidelines.[81]

Under the proposed Project's Conceptual Plan, the Kenneth Hahn Hall of Administration building would not be directly or indirectly impacted as no work would occur to the exterior or interior of the building. Further, the landscaping called for south of the building within the proposed Civic Park, under the Conceptual Plan, would not physically or visually impact those features of the building that qualify it as a contributor to a potential Civic Center Historic District.

The streetscape planned along Grand Avenue, under the Conceptual Plan, would not adversely impact those characteristics that help convey the building's historical significance as a contributing property to a potential historic district. Thus, implementation of the Civic Park and the streetscape improvements per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the Civic Park and the streetscape program was to disrupt directly or indirectly those attributes of the building upon which its eligibility determination is made. As the potential exists that the final Civic Park and streetscape design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

7. Civic Center Mall (El Paseo de los Pobladores de Los Angeles)

The Civic Center Mall (dedicated as El Paseo de los Pobladores de Los Angeles) though ineligible for individual listing in the National Register, is eligible for individual listing in the California Register because it physically displays exceptional mid-century Modern precepts in its design, style, materials, workmanship, circulation systems, hardscape and softscape features, and spatial relationships. As previously discussed, it is also considered a contributing property to a potentially eligible California Register historic district comprised of a collective grouping of

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[81] *Ibid.*

buildings, structures, sites, and objects united by plan and function within the Civic Center area. For the purposes of CEQA, the Civic Center Mall is considered a historic resource pursuant to the CEQA Guidelines.[82] Those features that convey the park's historical significance include its overall size and scale, location, function and purpose, materials, design, landscaping, workmanship, and east-west axis set between public buildings on either side. Architecturally specifically, the mid-century Modern style water features (fountain and adjoining pools), concrete benches, pink granite clad planter boxes, pink granite retaining walls, pedestrian circulation system (concrete walkways and open spaces), pole type light fixtures, pole type outdoor "hi-fi" system, enclosed elevator shaft structures in the center of the park, the circular shaped vehicular ramps leading to the underground parking garage from Hill Street, and the granite faced stairs and spiral shaped parking lot ramps off Grand Avenue are all features that contribute to the modernistic design of the Civic Center Mall and reflect the design philosophy and trends of the Modern era.

The Project according to the Conceptual Plan includes a Great Lawn and a Grand Terrace in the westernmost section of the proposed Civic Mall. Under the Conceptual Plan, most of the existing trees and shrubs would be removed or relocated for the construction of a new lawn, garden, and plaza spaces. New restrooms would be constructed, and under the Conceptual Plan, pavilions would also be constructed. The proposed design would also provide new stepped terraces from the Grand Avenue plaza down (east) to the current level of the garage escalators. Also under the Conceptual Plan, new enclosures for the existing escalators, which connect the park to the garage below, would be erected and the existing escalators kept in operation as continuously as possible during Project-related construction work. While the mid-century Modern style fountain, under the Conceptual Plan, may be relocated within the Civic Park, the concrete pools below it could not be retained and relocated since they were cast in-place. However, there is a potential that the pools may be recreated at the location where the fountain would be relocated. While the fountain may be relocated and the pools recreated, using the recommended approaches outlined in the Secretary of the Interior's Standards for Rehabilitation, thereby precluding a significant impact, the existing spiral entry and exit ramps that lead to the underground parking structure from both Grand Avenue and Hill Street would be redesigned under the Conceptual Plan. In addition, the final park design may or may not include the retention or relocation of the balance of the character-defining features that are currently located within the Civic Center Mall. Also under the Conceptual Plan the existing commemorative monuments and statues would be retained, relocated, and incorporated into the new park space. While an important physical component of the Civic Center Mall, all of the public art contained therein lacks historical importance as it was all installed since the initial development of the Civic Center and were not planned or installed as part of the overall mid-century Modern style layout of the park. The parking structure below this area, under the Conceptual Plan, would be

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[82] *Ibid.*

retained and would remain open, to the extent feasible, during construction of the new Civic Park.

In developing the final design for the Civic Park the disposition of the Civic Center Mall's character-defining features would need to be considered and planned. Depending on the final park design, a range of potential direct and/or indirect impacts to these features may result. The level of impact would depend on the importance of the feature being affected and how it is being affected. Based on the level of detail available within the Conceptual Plan, the only character-defining feature that would be removed are the circular shaped parking garage ramps along Grand Avenue and Hill Street. No decisions have been made at this time as to whether any of the Civic Center Mall's other character-defining features are to be retained in place, removed, or relocated in the park. Regardless of which option is selected, the final park design would be reviewed for consistency with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

As currently proposed, the removal of the circular shaped parking garage ramps at the east and west ends of the park would not pose a significant adverse change in the significance of this historic resource. Enough of the physical characteristics of the resource that convey collectively its historical significance as a mid-century Modern designed public space would still be retained even with the ramps removed.

For a substantial adverse change to occur the majority of the park's character-defining features would need to be removed or substantially altered physically. Significant impacts would result if the following occurs to any of the four key features listed : (1) the water feature (both the fountain and pools) no longer serves as a focal point for the park; (2) many of the pink granite clad planters, pink granite clad retaining walls, and concrete benches are not retained and reused in-place or within the reconfigured park preferably near the water feature and adjacent to the civic buildings; (3) the existing elevator shaft structures are removed in their totality, or (4) many of the light poles with saucer-like canopies and the "hi-fi" speaker poles with saucer-like canopies are not retained in-place or relocated adjacent to or integrated along with the water feature, benches, retaining walls, and planter boxes. Additionally, the Standards should be utilized to ensure that rehabilitation work to the park does not impair those qualities and historic characteristics of these four key character-defining features that convey the property's significance and qualify it for California Register listing. If the character-defining features noted above were retained and reused in a manner consistent with the Standards and as stipulated in this analysis, then potential impacts to this resource would not occur and mitigation measures would not be required.

Along with the removal of the parking lot ramps off Grand Avenue and Hill Street, the following character-defining features may be removed since their removal would not diminish the integrity of the resource in terms of its eligibility as an individual resource: (1) the mature landscaping (since the new park design would also include notable and compatible landscaped areas), (2) the existing walkways (since the new park would also include walkways to facilitate movement through the park), and (3) the granite stairs off Grand Avenue).

The demolition and recordation of historic resources under CEQA are not considered acceptable treatment approaches as recordation does not address the adverse change resulting from the demolition of the physical characteristics that justify the inclusion of the resource in the California Register, National Register, and local register. However, mitigation measures for such actions are still required though they would not reduce the impact to a less than significant level.

As for the relocation of a historic resource, the State Historical Resources Commission encourages the retention of historical resources in place. However, it is recognized that moving a historic building, structure, or object is sometimes necessary to prevent its destruction. Therefore, a moved building, structure, or object that is otherwise eligible for State designation may be listed in the California Register if it is moved to prevent its demolition at its former location and if the new location is compatible with the original character and use of the historic resource. A historic resource should retain its historic features and compatibility in orientation, setting, and general environment upon relocation. As such, potential impacts would be reduced to a less than significant level with the implementation of the required mitigation measures.

In summary and to provide the most conservative of conclusions, implementation of the Civic Park would result in the removal of many of the Civic Center Mall’s character-defining features. The removal of those four key features outlined above would materially alter those physical characteristics of the site that convey its historical significance as a well designed mid-century Modern public park and account for its inclusion in the California Register as an individual resource. As significant impacts would occur, mitigation measures would be required, though they would not reduce the impact to a less than significant level. However, should the final design include selective retention and reuse of all four of those character-defining features, as identified herein, in a manner consistent with the Standards, then significant impacts would not occur, and mitigation measures would not be required.

8. Hall of Records

The Hall of Records building appears ineligible for individual listing in the National Register, due to a lack of exceptional significance. It does, however, appear individually eligible for California Register listing because of its architectural significance. The Hall of Records building also appears eligible for the California Register as a contributing property to a potential historic district associated with the development of the Civic Center. For the purposes of CEQA, the Hall of Records is considered a historic resource pursuant to the CEQA Guidelines.[83]

Under the proposed Project, the Hall of Records building would not be directly impacted. No work is called for with regard to either the exterior or interior of the building. However, the plaza area just south of the Hall of Records, called the Court of Flags, may be developed into a new garden-oriented space. Implementation of the Conceptual Plan for this section of the new Civic Park would require the demolition of most of the existing surface features. The stairs to Broadway would be rebuilt, and various elements of the existing Civic Center Mall including the flagpoles and plaques would be relocated elsewhere within the area. The existing vehicular access to the garage would be maintained, as would the elevators. The central area of this section of the Civic Park would be landscaped with trees and shrubs flanking the green space to the north and south. According to the Conceptual Plan, small, multi-use pavilions would also be incorporated into this area, along with smaller pavilions that could host food and drink concessions. As such, the work proposed would not materially or visually impair those qualities that make the Hall of Records building historically significant and eligible for state designation as an individual landmark and contributor to a potential historic district. Hence, if the Conceptual Plan for the Civic Park is implemented, mitigation measures for this structure are not required. Thus, implementation of the Civic Park per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the Civic Park was to disrupt directly or indirectly those attributes of the building upon which its eligibility determination is made. As the potential exists that the final Civic Park design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

9. Court of Flags

The Court of Flags area does not appear to be eligible for National Register and California Register listing as an individual landmark. Its historical associations, location, and spatial relationship with the adjacent public buildings and Civic Center Mall to the west helps to define it as a contributing property to the potential Civic Center Historic District eligible for California Register designation. For the purposes of CEQA, the Court of Flags is considered a historic resource pursuant to the CEQA Guidelines.[84]

Based on the Conceptual Plan for the Civic Park, the Court of Flags would be used as a new garden-oriented space. The preliminary Conceptual Plan for this area would maintain the Metro Red Line plaza and entrances, currently located on the west end of the Court of Flags, in

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[83] *Ibid.*

[84] *Ibid.*

their existing locations. Possible changes to the transit plaza would be implemented without disruption to operations. Implementation of the Conceptual Plan for this section of the Civic Park would require the demolition of most of the existing surface features. The subterranean parking garage would be repaired and remain in place, and a new multi-use pavilion that could be located in the southeast corner of this section of the park would contain elevators to the restored subterranean parking garage. Smaller pavilions could also be incorporated in the area that could host food and drink concessions. The stairs to Broadway would be rebuilt, and various elements of the existing Civic Center Mall including the flagpoles and plaques would be relocated elsewhere within the area. The existing vehicular access to the garage would be maintained, as would the elevators. The existing Court of Flags spatial relationship with the surrounding civic buildings and Civic Center Mall to the west, as well as its physical location, and historic association with the overall development of the Civic Center would not be adversely affected by the implementation of the proposed Project. Those historic qualities would be retained, if not enhanced, with the work called for under the Project. Therefore, mitigation measures for this site are not required. Thus, implementation of the Civic Park per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the Civic Park was to disrupt indirectly or directly those attributes of the Court of Flags upon which its eligibility determination as a contributing element to a potential historic district is made. As the potential exists that the final Civic Park design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

10. Clara Shortridge Foltz Criminal Justice Center

The Criminal Justice Center is not eligible for National Register or California Register designation as an individual landmark. It is, however, considered a contributor to a potential California Register eligible historic district comprised of civic buildings, structures, objects, and sites associated with the development of the Civic Center. For the purposes of CEQA, this property is considered a historic resource pursuant to the CEQA Guidelines.[85]

Under the proposed Project's Conceptual Plan, the open space south of the Criminal Justice Center would be used for civic and community activities. Development of this area would require the removal and relocation of the existing surface parking lot for the construction of a large paved plaza with landscaping at its north and south sides. The Conceptual Plan for this section of the Civic Park would also incorporate small, multi-use pavilions into the proposed facilities for use by festivals and civic event programming.

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[85] *Ibid.*

No work is proposed for the Criminal Justice Center building. Thus, the building would not be directly or indirectly impacted by the implementation of the Project's Conceptual Plan within the adjacent plaza area. Those qualities that contribute to the building's inclusion in a potential Civic Center Historic District would not be materially or physically altered. Therefore, mitigation measures for this building are not required to implement the proposed Project's Conceptual Plan. Thus, implementation of the Civic Park per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the Civic Park was to disrupt directly or indirectly those attributes of the building upon which its eligibility determination is made. As the potential exists that the final Civic Park design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

11. Los Angeles City Hall

The Los Angeles City Hall is eligible for listing on the National Register by formal determination and is therefore listed on the California Register. It is also a designated local City of Los Angeles Historic-Cultural Monument. For the purposes of CEQA, the Los Angeles City Hall is considered a historic resource pursuant to the CEQA Guidelines.[86]

Under the proposed Project, City Hall would not be directly or indirectly impacted as no alterations or modifications to the building are anticipated under the proposed Project's Conceptual Plan. As the easternmost section of the Civic Park is located along the west side of Spring Street, across the street from City Hall, Project improvements would be implemented that could potentially impact City Hall. Notwithstanding, the landscaping proposed for the easternmost section of the Civic Park under the Conceptual Plan would not physically, aesthetically, or visually impact any of those qualities or characteristics that make the building historically significant. Therefore, no mitigation measures are required for this property to implement the proposed Project's Conceptual Plan. Thus, implementation of the Civic Park per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the Civic Park was to disrupt directly or indirectly those attributes of the building upon which its eligibility determination is made. As the potential exists that the final Civic Park design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

12. Parking Lot, 227 North Spring Street (APN 5161-005-BRK, Lot 9)

The parking lot located at 227 North Spring Street does not appear to be eligible for listing in the National Register or the California Register. For the purposes of CEQA, this site is

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[86] *Ibid.*

not considered a historic resource pursuant to the CEQA Guidelines.[87] Therefore, mitigation measures for this property are not required.

13. Vacant Lot, 217 West 1st Street (APN 5161-005-BRK, Lot 10)

The vacant lot located at 217 West 1st Street does not appear to be eligible for listing in the National Register or California Register. For the purposes of CEQA, this site is not considered a historic resource pursuant to the CEQA Guidelines.[88] Therefore, mitigation measures for this property are not required.

14. Los Angeles County Law Library

The Los Angeles County Law Library does not appear eligible for individual listing in the National Register or California Register due to its lack of sufficient historical and architectural importance. As discussed earlier, it does appear eligible for California Register designation as a contributing property to a potential historic district associated with the overall physical and architectural development of the Civic Center area. For the purposes of CEQA, therefore, the Law Library building is considered a historic resource pursuant to the CEQA Guidelines.[89]

As with the Hall of Records, the area just north of the County Law Library, called the Court of Flags, under the Conceptual Plan would be remodeled and used as a new garden-oriented space. Implementation of the Conceptual Plan for this section of the Civic Park would require the demolition of most of the existing surface features. Under the Conceptual Plan, the stairs to Broadway would be rebuilt, and various elements of the existing Civic Center Mall including the flagpoles and plaques would be relocated elsewhere within the area. The existing vehicular access to the garage would be maintained, as would the elevators. Under the proposed Project, no work is called for with regard to the Law Library building.

Under the Conceptual Plan, the work called for in the park’s open space area would not directly or indirectly impact those character-defining features of the Law Library that account for its inclusion as a contributing property in a potential California Register eligible historic district comprised of governmental and cultural buildings. Thus, mitigation measures are not required for this property with implementation of the Civic Park per the Conceptual Plan and a less than significant impact would result. However, potentially significant impacts could result if the final design for the Civic Park was to disrupt indirectly or directly those attributes of the building

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[87] *Ibid.*

[88] *Ibid.*

[89] *Ibid.*

upon which its eligibility determination is made. As the potential exists that the final Civic Park design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

15. Los Angeles County/Stanley Mosk Courthouse

The Los Angeles County Courthouse does not appear eligible for individual listing in the National Register or the California Register. It has, however, been identified as a contributing property to a potential California Register eligible historic district composed of government and cultural facilities united together by plan and function. For the purposes of CEQA, the County Courthouse building is considered a historic resource pursuant to the CEQA Guidelines.[90]

As with the Hall of Administration, the County Courthouse building under the Project's Conceptual Plan would not be directly or indirectly impacted by the Project. The Courthouse would not be removed or modified as part of the Project. The design of the new Civic Park landscape and hardscape features, under the Conceptual Plan, along the north elevation of the Courthouse building as well as the proposed landscaping along Grand Avenue would not materially or visually alter those characteristic qualities that define the property as part of a potential Civic Center Historic District. Additionally, the proposed development of Parcels Q and W-1/W-2 would not directly or indirectly impact the historic significance of the potential Civic Center historic district or the County Courthouse building, which is a contributor to this district.

Since impacts to this building would not occur with the implementation of the Conceptual Plan for the Project, mitigation measures are not required. Thus, implementation of the Civic Park and the streetscape improvements per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the Civic Park and the streetscape program was to disrupt indirectly or directly those attributes of the building upon which its eligibility determination is made. As the potential exists that the final Civic Park and streetscape design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

Currently the north elevation is landscaped, as part of the existing El Paseo de los Pobladores de Los Angeles park, with a variety of trees and shrubs that stagger in height and width. The assortment of mature plantings in this area does not obscure the building's modern architecture, but rather breaks up the solid massing of its form. The new landscape and hardscape features along the building's north elevation should be such that it visually accents and

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[90] *Ibid.*

balances with the building's spare and functional façade. Since possible indirect impacts may occur to the property, mitigation measures are required.

16. Parking Facilities (Parcels Q, W-1 and W-2)

The parking facilities located within Parcels Q, W-1, and W-2 do not appear eligible for listing in the National Register and California Register. For the purposes of CEQA, these sites are not considered historic resources pursuant to the CEQA Guidelines.[91] Therefore, mitigation measures are not required for these properties.

17. Colburn School of Performing Arts

As discussed earlier, the Colburn School of Performing Arts building does not appear to be eligible for federal, state, or local designation. For the purposes of CEQA, this property is not considered a historic resource pursuant to the CEQA Guidelines.[92] Therefore, mitigation measures for this building are not required.

18. Museum of Contemporary Art (MOCA)

Currently, the Museum of Contemporary Art does not appear to be eligible for federal, State, or local designation. For the purposes of CEQA, this property is not considered a historic resource pursuant to the CEQA Guidelines.[93] Therefore, mitigation measures for this building are not required.

19. Parking Lots (Parcels L and M-2)

The parking lots located on Parcels L and M-2 do not appear to be eligible for listing in the National Register, California Register, and for local City of Los Angeles Historic-Cultural Monument designation. For the purposes of CEQA, these sites are not considered historic resources pursuant to the CEQA Guidelines.[94] Therefore, mitigation measures for the parking facilities that are currently located on these parcels are not required.

20. Southern California Edison Building (One Bunker Hill)

The Art Deco designed Southern California Edison building has been formally assessed for historical significance on a number of occasions. The property is eligible for National

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[91] *Ibid.*

[92] *Ibid.*

[93] *Ibid.*

[94] *Ibid.*

Register and California Register listing. It is a designated City of Los Angeles Historic-Cultural Monument. For the purposes of CEQA, this property is considered a historic resource pursuant to the CEQA Guidelines.[95]

Under the Project's Conceptual Plan, the Edison building would not be directly or indirectly impacted by the implementation of the Grand Avenue Streetscape Program. With the varying height, width, and density of the proposed landscaping along the building's east elevation along Grand Avenue the property would not be visually obscured from the public rights-of-way either from Grand Avenue or 5th Street. Those qualities that contribute to the historic character and significance of the building would be retained and unaffected. Since there will be no direct or indirect impacts to this property mitigation measures are not required. Thus, implementation of the streetscape improvements per the Conceptual Plan would result in a less than significant impact. However, potentially significant impacts could result if the final design for the streetscape program was to disrupt directly or indirectly those attributes of the building upon which its eligibility determination is made. As the potential exists that the final streetscape design could result in a significant impact, a mitigation measure is recommended that would reduce this impact to a less than significant level.

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[95] *Ibid.*

V. MITIGATION MEASURES

A. CEQA MITIGATION APPROACHES

According to CEQA, mitigation may include:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing or providing substitute resources or environments;[96] and
- Utilizing the Secretary of the Interior's Standards of Rehabilitation and Guidelines for Rehabilitating Historic Buildings.[97]

B. CONSIDERATION OF MITIGATION MEASURES

CEQA requires the Lead Agency to examine and impose mitigation measures or feasible project alternatives that would avoid or minimize any impacts or potential impacts to historic resources.

When important historic resources are involved, avoidance or preservation in place is the preferable course of action. When total avoidance or preservation in place is not possible, a hierarchy of treatment approaches should be examined and assessed for feasibility. Such treatment approaches may also include relocation, partial retention, or reconstruction.

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[96] *CEQA Guidelines, Section 15370.*

[97] *Ibid, Section 15064.5(b)(3).*

C. RECOMMENDED MITIGATION MEASURES

The following mitigation measures are required to ensure that many of those potential adverse impacts identified with historic resources would be reduced to a level of less than significant. Mitigation measures are also required for resources proposed for demolition they would not eliminate the significant impact associated with the loss of a historic resource.

1. Potential Los Angeles Civic Center Historic District

Mitigation Measure 1: Prior to the start of each construction phase, the responsible parties for implementation of the Streetscape Program under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the potential Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following measures:

Grand Avenue Streetscape Program Design Features. If the Streetscape Program is implemented in substantial conformance to that set forth in the Project's Conceptual Plan, then the following mitigation measure is not required since such Plan is consistent with the Secretary of Interior's Standards for rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Grand Avenue streetscape improvements not be implemented in substantial conformance with the Project's Conceptual Plan, then the landscape and hardscape features proposed as part of the Grand Avenue Streetscape Program shall respect the linear qualities of the street and sidewalks in respect to the adjacent historic resource. Such landscape treatments shall be unified and planted in a manner as to not obscure the sight lines to the facades of those properties identified as contributors to the potential Los Angeles Civic Center Historic District from the public right-of-ways. The design of the Project's streetscape improvements shall consider their height, width, and spatial placement and include a program of selective pruning of trees to retain sight lines on a regular basis.

2. Walt Disney Concert Hall

Mitigation measures regarding this property are not required since it would not be directly or indirectly impacted by the proposed Project.

3. Music Center

Mitigation Measure 2: No mitigation measures are required if the Grand Avenue streetscape improvements are implemented in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Grand Avenue streetscape improvements not be implemented in substantial conformance with the Project's Conceptual Plan, then prior to the start of each construction phase, the entity responsible for implementing the Project's streetscape program under the applicable agreements shall submit plans to the Authority for review and approval to ensure that impacts to the potential eligibility of the Music Center are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Grand Avenue streetscape improvements shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the final design for the streetscape improvements does not materially alter the Music Center's potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

4. Music Center Annex Building

No mitigation measures regarding this property are required to implement the proposed Project, since it is not considered a historic resource pursuant to the CEQA Guidelines Section 15064.5(a).

5. Cathedral of Our Lady of the Angels

Mitigation Measure 3: No mitigation measures are required if the Grand Avenue streetscape improvements are implemented in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Grand Avenue streetscape improvements not be implemented in substantial conformance with the Project's Conceptual Plan, then prior to the start of each construction phase, the entity responsible for implementing the Project's streetscape program under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the Cathedral of Our Lady of the Angels church are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Grand Avenue streetscape improvements shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the final design for the streetscape improvements does not materially alter the Cathedral of Our Lady of the Angels' potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

6. Kenneth Hahn Hall of Administration

Mitigation Measure 4: No mitigation measures are required if the final design for the Civic Park and the Grand Avenue streetscape improvements are in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Civic Park and the streetscape improvements not be implemented in substantial conformance with the Project's Conceptual Plan, prior to the start of each construction phase, the responsible parties for implementation of the Civic Park and Streetscape Program, under the applicable agreements, shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the Kenneth Hahn Hall of Administration as a contributing property to the potentially eligible Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Civic Park and the Grand Avenue streetscape improvements shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the final designs for the Civic Park and streetscape improvements do not materially alter the Kenneth Hahn Hall of Administration's potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

7. Civic Center Mall (El Paseo de los Pobladores de Los Angeles)

Mitigation Measure 5: Prior to the start of each construction phase, the responsible parties for implementation of the Civic Park under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the Civic Center Mall for listing in the California Register is reduced to the maximum extent practicable. However, in the event that any one or more of the following occurs: (1) the water feature (both the fountain and pools) no longer serves as a focal point for the park;

(2) many of the pink granite clad planters, pink granite clad retaining walls, and concrete benches are not retained and reused in-place or within the reconfigured park preferably near the water feature and adjacent to the civic buildings; (3) the existing elevator shaft structures are removed in their totality, or (4) many of the light poles with saucer-like canopies and the "hi-fi" speaker poles with saucer-like canopies are not retained in-place or relocated adjacent to or integrated along with the water feature, benches, retaining walls, and planter boxes, then the Standards shall be utilized to ensure that rehabilitation work to the four character-defining features of the park referenced in this Mitigation Measure D-5 does not impair the historic characteristics that convey the Civic Center Mall's historical significance as an individual resource and as a contributing property to the potentially eligible Los Angeles Civic Center Historic District. If such compliance with such Standards cannot be achieved, then the following measures shall apply to the applicable character-defining features identified in this Measure:

Recordation. Prior to the issuance of a demolition permit for the Civic Center Mall and its associated features, a Historic American Building Survey (HABS) Level II-like recordation document shall be prepared for the Civic Center Mall. This document shall be prepared by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History. The HABS-like document shall record the existing landscape and hardscape features of the Civic Center Mall, including the four character-defining features identified in this measure. The report shall also document the history and architectural significance of the property and its contextual relationship with the surrounding civic buildings and environment. Its physical composition and condition, both historic and current, should also be noted in the document through the use of site plans, historic maps and photographs, and large-format photographs, newspaper articles, and written text. A sufficient number of large-format photographs shall be taken of the resource to visually capture its historical and architectural significance through general views and detail shots. Field photographs (35mm or digital format) may also be included in the recordation package. All document components and photographs should be completed in accordance with the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation. Archival copies of the report, including the original photographs, shall be submitted to the California Office of Historic Preservation and the Huntington Library. Non-archival copies of the report and photographs shall be submitted to the County of Los Angeles, the City of Los Angeles Planning Division, the Los Angeles Public Library (Main Branch), and the Los Angeles Conservancy Modern Committee.

Salvage and Reuse of Key Park Features. Prior to the removal of the four character-defining features identified in this Measure, an inventory of significant landscape and hardscape elements shall be made by a qualified preservation consultant and landscape architect. Where feasible, these materials and elements shall be itemized, mapped, photographed, salvaged, and incorporated into the new design of the park, wherever possible. To the extent salvageable materials cannot be reused on-site, they shall be disposed of in accordance with applicable county surplus procedures.

8. Hall of Records

Mitigation Measure 6: No mitigation measures are required if the final design for the Civic Park is in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Civic Park not be implemented in substantial conformance with the Project's Conceptual Plan, prior to the start of each construction phase, the responsible parties for implementation of the Civic Park under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the Hall of Records building as a contributing property to the potentially eligible Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Civic Park shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the proposed Civic Park design does not materially alter the Hall of Records' potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

9. Court of Flags

Mitigation Measure 7: No mitigation measures are required if the final design for the Civic Park is in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Civic Park not be implemented in substantial conformance with the Project's Conceptual Plan, prior to the start of each construction phase, the responsible parties for implementation of the Civic Park under the applicable agreements shall submit plans to the Authority for review and approval to ensure that impacts to the potential eligibility of the Court of Flags as a contributing property to the potentially eligible Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Civic Park shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the proposed Civic Park design does not materially alter the Court of Flags' potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

10. Clara Shortridge Foltz Criminal Justice Center

Mitigation Measure 8: No mitigation measures are required if the final design for the Civic Park is in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Civic Park not be implemented in substantial conformance with the Project's Conceptual Plan, prior to the start of each construction phase, the responsible parties for implementation of the Civic Park under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the Clara Shortridge Foltz Criminal Justice Center as a contributing property to the potentially eligible Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Civic Park shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the proposed Civic Park design does not materially alter the Clara Shortridge Foltz Criminal Justice Center's potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

11. Los Angeles City Hall

Mitigation Measure 9: No mitigation measures are required if the final design for the Civic Park is in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic

Buildings (“Standards”). However, should the final design for the Civic Park not be implemented in substantial conformance with the Project’s Conceptual Plan, prior to the start of each construction phase, the responsible parties for implementation of the Civic Park under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to those historic characteristics that make the Los Angeles City Hall building historically significant as a designated resource and as a contributing property to the potentially eligible Los Angeles Civic Center Historic District, are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Civic Park shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior’s Professional Qualification Standards for History or Architectural History to assure that the proposed Civic Park design does not materially alter the historic significance of the Los Angeles City Hall. This evaluation shall be conducted in accordance with the Secretary of the Interior’s Standards for the Rehabilitation of Historic Buildings.

12. Parking Lot, 227 North Spring Street (APN 5161-005-BRK, Lot 9)

No mitigation measures regarding this property are required to implement the proposed Project, since it is not considered a historic resource pursuant to the CEQA Guidelines Section 15064.5(a).

13. Vacant Lot, 217 West 1st Street (APN 5161-005-BRK, Lot 10)

No mitigation measures regarding this property are required to implement the proposed Project, since it is not considered a historic resource pursuant to the CEQA Guidelines Section 15064.5(a).

14. Los Angeles County Law Library

Mitigation Measure 10: No mitigation measures are required if the final design for the Civic Park is in substantial conformance to that set forth in the Project’s Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior’s Standards of Rehabilitation of Historic Buildings (“Standards”). However, should the final design for the Civic Park not be implemented in substantial conformance with the Project’s Conceptual Plan, prior to the start of each construction phase, the responsible parties for implementation of the Civic Park under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the potentially eligible Los Angeles County Law Library as a contributing property to the Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Civic Park shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the proposed Civic Park design does not materially alter the Los Angeles County Law Library's potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

15. Los Angeles County Courthouse

Mitigation Measure 11: No mitigation measures are required if the final design for the Civic Park and the Grand Avenue streetscape improvements are in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Civic Park and the streetscape improvements not be implemented in substantial conformance with the Project's Conceptual Plan prior to the start of each construction phase, the responsible parties for implementation of the Civic Park and the Streetscape Program under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the potential eligibility of the Los Angeles County Courthouse as a contributing property to the potentially eligible Los Angeles Civic Center Historic District are reduced to the maximum extent practicable through implementation of the following mitigation measure is required:

Prior to implementation, the final design plans for the Civic Park and the Grand Avenue streetscape improvements shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the proposed final designs for the Civic Park and streetscape improvements do not materially alter the Los Angeles County Courthouse's potential historic significance. This evaluation shall be conducted in accordance with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

16. Parking Facilities (Parcels Q, W-1, and W-2)

No mitigation measures regarding this portion of the Project site are required since the existing parking facilities within these Parcels are not considered a historic resource pursuant to the CEQA Guidelines Section 15064.5(a).

17. Colburn School of Performing Arts

No mitigation measures regarding this property are required to implement the proposed Project, since it is not considered a historic resource pursuant to the CEQA Guidelines Section 15064.5(a).

18. Museum of Contemporary Art (MOCA)

Mitigation measures regarding this property are not required since it is not considered a historic resource pursuant to CEQA Guidelines Section 15064.5(a).

19. Parking Lots (Parcels L and M-2)

No mitigation measures regarding this property are required to implement the proposed Project, since it is not considered a historic resource pursuant to CEQA Guidelines Section 15064.5(a).

20. Southern California Edison (One Bunker Hill)

Mitigation Measure 12: No mitigation measures are required if the Grand Avenue streetscape improvements are implemented in substantial conformance to that set forth in the Project's Conceptual Plan, as determined by the Authority, since such Plan is consistent with the Secretary of Interior's Standards of Rehabilitation of Historic Buildings ("Standards"). However, should the final design for the Grand Avenue streetscape improvements are not implemented in substantial conformance with the Project's Conceptual Plan, the responsible parties for implementation of the Streetscape Program under the applicable agreements shall submit plans to the Authority, for review and approval to ensure that impacts to the historic characteristics that convey the Southern California Edison building's (One Bunker Hill) significance are reduced to the maximum extent practicable through implementation of the following mitigation measure:

Prior to implementation, the final design plans for the Grand Avenue streetscape improvements shall be reviewed by a qualified architectural historian or historic preservation consultant who satisfies the Secretary of the Interior's Professional Qualification Standards for History or Architectural History to assure that the final design for the proposed streetscape improvements does not materially alter the Southern California Edison (One Bunker Hill) building's historic significance. This evaluation shall be conducted in accordance with Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

VI. ADVERSE EFFECTS

Under CEQA, implementation of the recommended mitigation measures proposed would reduce all of the identified significant impacts associated with historic resources to a less than significant level, with the exception of one that is connected directly with the Civic Center Mall. The actual extent of the significant impacts to the park itself is dependent upon the Civic Park's final design. Significant impacts to the park would result if one or more the following occurs: (1) the water feature (both the fountain and pools) no longer serves as a focal point for the park; (2) many of the pink granite clad planters, pink granite clad retaining walls, and concrete benches are not retained and reused in-place or within the reconfigured park preferably near the water feature and adjacent to the civic buildings; (3) the existing elevator shaft structures are removed in their totality, or (4) many of the light poles with saucer-like canopies and the "hi-fi" speaker poles with saucer-like canopies are not retained in-place or relocated adjacent to or integrated along with the water feature, benches, retaining walls, and planter boxes. Additionally, the Standards should be utilized to ensure that the rehabilitation work to the park does not impair those qualities and historic characteristics of these four key character-defining features that convey the park's significance and qualify it for potential California Register listing. If the character-defining features noted above were retained and reused in a manner consistent with the Standards and as stipulated in this document then potential impacts to this resource would not occur and mitigation measures would not be required.

However, if the current Civic Park Conceptual Plan is fully implemented in a way that does not retain and reuse the character-defining features noted above in a manner consistent with the Standards, the recommended mitigation measures are required though they would not reduce the impact to this resource to a less than significant level. Nonetheless, such mitigation measures are important to ensure that important information regarding this resource's contribution to the history of the City of Los Angeles, County of Los Angeles, and the southern California region are retained.

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VIII. PREPARERS AND PERSONS CONSULTED

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APPENDIX A: DIRECTORY OF PROPERTIES

APPENDIX B: CALIFORNIA HISTORICAL RESOURCE STATUS CODES

APPENDIX C: RESUMES OF REPORT PREPARERS UPDATED RESUME TO BE PROVIDED IN APPENDIX

APPENDIX D: Air Quality Calculation Worksheets

Grand Avenue – Draft Environmental Impact Report

Air Quality Assessment Files

Provided by PCR Services Corporation

June 2006

Appendix D-1

- Construction Emissions Inventory
    - Construction Phasing Schedule
        - Normal Schedule
        - Accelerated Schedule
    - Construction Emissions
        - Normal Schedule
        - Accelerated Schedule

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	Year Month	2007 1	2007 2	2007 3	2007 4	2007 5	2007 6	2007 7	2007 8	2007 9	2007 10	2007 11	2007 12	2008 1	2008 2	2008 3	2008 4
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73			4	4														
		Crane	4	190	0.43			1	1														
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62			4	4														
		Rubber Tired Dozers	8	352	0.59			3	3														
		Tractors/Loaders/Backhoes	8	79	0.465			3	3														
		Concrete/Aggregate/Haul Trucks (Offsite)				30		64	64														
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75				2	2	2	2	2										
		Crane	4	190	0.43				1	1	1	1	1										
		Excavator	8	180	0.58				3	3	3	3	3										
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62				3	3	3	3	3										
		Rubber Tired Loader	8	165	0.465				2	2	2	2	2										
		Tractors/Loaders/Backhoes	8	79	0.465				3	3	3	3	3										
		Water Trucks				5			3	3	3	3	3										
		Concrete/Aggregate/Haul Trucks (Offsite)				30			170	170	170	170	170										
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								2	2									
		Concrete Pump	8	190	0.62								3	3									
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								3	3									
		Forklift	8	94	0.475								2	2									
		Tractors/Loaders/Backhoes	8	79	0.465								2	2									
		Water Trucks				5							3	3									
		Concrete/Aggregate/Haul Trucks (Offsite)				15							50	50									
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43									1	3	3	3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62										2	2	2	2	2	2	2	2	2
		Concrete Pump	8	190	0.62										3	3	3	3	3	3	3	3	3
		Forklift	8	94	0.475										2	2	2	2	2	2	2	2	2
		Tractors/Loaders/Backhoes	8	79	0.465										3	3	3	3	3	3	3	3	3
		Water Trucks				15								3	3	3	3	3	3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				20								50	50	50	50	50	50	50	50	50	50
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73												2	2	2	2	2	2	2
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62												4	4	4	4	4	4	4
		Forklifts	8	94	0.475												1	1	1	1	1	1	1
		Skid Steer Loader	8	62	0.515												1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15											3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20											5	5	5	5	5	5	5
		Trash Trucks (Offsite)				20											2	2	2	2	1	1	1
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20		19	40	22	22	22	37	2	17	30	52	52	52	52	52	52	52
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal							1	1	1	1	1										
		Fugitive Dust (square footage per month) - Demo						1012	1012														
		Fugitive Dust (yd3 per day) - Normal							2713	2713	2713	2713	2713										

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**Month**	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (ml.)**	**Month**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43											1	1	1	1	1	1	1	1
		Cement and Mortar Mixers	8	190	0.62											1	1	1	1	1	1	1	1
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62											2	2	2	2	2	2	2	2
		Paving Equipment	8	111	0.53											1	1	1	1	1	1	1	1
		Rollers	8	114	0.43											1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465											2	2	2	2	2	2	2	2
		Water Trucks				5										1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				20										2	2	2	2	2	2	2	2
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2008 5	2008 6	2008 7	2008 8	2008 9	2008 10	2008 11	2008 12	2009 1	2009 2	2009 3	2009 4	2009 5	2009 6	2009 7	2009 8	2009 9
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73		2	2	2	2	2	2	2	2	2	2							
		Cranes	4	190	0.43			3	3	3	3	3	3	3	3	3							
		Concrete Pump	8	190	0.62			2	2	2	2	2	2	2	2	2							
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4	4	4	4							
		Forklifts	8	94	0.475		1	3	3	3	3	3	3	3	3	3							
		Skid Steer Loader	8	62	0.515		1	1	1	1	1	1	1	1	1	1							
		Tractors/Loaders/Backhoes	8	79	0.465			2	2	2	2	2	2	2	2	2							
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3	3	3	3	3	3	3	3							
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5	5	5	5							
		Trash Trucks (Offsite)				20	1	1	1	1	1	1	1	1	1	1							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73								2	2	2	2	2	2	2	2	2	2	1
		Cranes	4	190	0.43								1	1	1	1	3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62								1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								4	4	4	4	4	4	4	4	4	4	4
		Paving Equipment	8	111	0.53														1	1	1	1	1
		Rollers	8	114	0.43														1	1	1	1	1
		Forklifts	8	94	0.475												2	2	2	2	2	2	2
		Delivery Trucks (Offsite)				20							1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15							3	3	3	3	3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20							5	5	5	5	5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	36	36	36	36	36	36	36	36	144	144	144	144	144	144	144	144	88
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																	110	110	110	110	110
		Architectural Coatings - Residential Square Footage per month																	35508	35508	35508	35508	35508
	Asphalt	Asphalt (acres per month)																	1	1	1	1	1
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2008 5	2008 6	2008 7	2008 8	2008 9	2008 10	2008 11	2008 12	2009 1	2009 2	2009 3	2009 4	2009 5	2009 6	2009 7	2009 8	2009 9
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2008	2008	2008	2008	2008	2008	2008	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2008	2008	2008	2008	2008	2008	2008	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Rollers	8	114	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		Water Trucks				5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Concrete/Aggregate/Haul Trucks (Offsite)				20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73		1	1	1														
		Cranes	4	190	0.43		3	3	3														
		Cement and Mortar Mixers	8	190	0.62		1	1	1														
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4														
		Paving Equipment	8	111	0.53		1	1	1														
		Rollers	8	114	0.43		1	1	1														
		Forklifts	8	94	0.475		2	2	2														
		Delivery Trucks (Offsite)				20	1	1	1														
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3														
		Flatbed Delivery Trucks (Offsite)				20	5	5	5														
	Worker Trips	Worker Trips - Calculated Total				20	88	88	88														
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month					110	110	110														
		Architectural Coatings - Residential Square Footage per month					35508	35508	35508														
	Asphalt	Asphalt (acres per month)					1	1	1														
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62					1													
		Rubber Tired Dozers	8	352	0.59					1													
		Tractors/Loaders/Backhoes	8	79	0.465					1													
		Concrete/Aggregate/Haul Trucks (Offsite)				30				9													
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75					2	2	2	2										
		Crane	4	190	0.43					1	1	1	1										
		Excavator	8	180	0.58					3	3	3	3										
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62					3	3	3	3										
		Rubber Tired Loader	8	165	0.465					2	2	2	2										
		Tractors/Loaders/Backhoes	8	79	0.465					3	3	3	3										
		Water Trucks				5				3	3	3	3										
		Concrete/Aggregate/Haul Trucks (Offsite)				30				167	167	167	167										
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								2	2									
		Concrete Pump	8	190	0.62								3	3									
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62									3									
		Forklift	8	94	0.475								2	2									
		Tractors/Loaders/Backhoes	8	79	0.465								2	2									
		Water Trucks				5							3	3									
		Concrete/Aggregate/Haul Trucks (Offsite)				15							50	50									
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43										3	3	3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62									2	2	2	2	2	2	2	2	2	2
		Concrete Pump	8	190	0.62										3	3	3	3	3	3	3	3	3
		Forklift	8	94	0.475										2	2	2	2	2	2	2	2	2
		Tractors/Loaders/Backhoes	8	79	0.465										3	3	3	3	3	3	3	3	3
		Water Trucks				5								3	3	3	3	3	3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				15								50	50	50	50	50	50	50	50	50	50
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73														2	2	2	2	2
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62														4	4	4	4	4
		Forklifts	8	94	0.475														1	1	1	1	1
		Skid Steer Loader	8	62	0.515														1	1	1	1	1
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5													3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				15													2	2	2	2	2
		Flatbed Delivery Trucks (Offsite)				20													5	5	5	5	5
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20				25	22	37	37	18	17	17	17	17	37	37	37	37	37
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal								1	1	1	1										
		Fugitive Dust (square footage per month) - Demo								106													
		Fugitive Dust (yd3 per day) - Normal								2658	2658	2658	2658										

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62					1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62					1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Paving Equipment	8	111	0.53					1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Rollers	8	114	0.43					1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465					1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Water Trucks				5				1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15				2	2	2	2	2	2	2	2	2	2	2	2	2	2
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73		2	2	2	2	2	2	2	2	2	2	2	2					
		Cranes	4	190	0.43		3	3	3	3	3	3	3	3	3	3	3	3					
		Concrete Pump	8	190	0.62		2	2	2	2	2	2	2	2	2	2	2	2					
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4	4	4	4	4	4					
		Forklifts	8	94	0.475		3	3	3	3	3	3	3	3	3	3	3	3					
		Skid Steer Loader	8	62	0.515		1	1	1	1	1	1	1	1	1	1	1	1					
		Tractors/Loaders/Backhoes	8	79	0.465		2	2	2	2	2	2	2	2	2	2	2	2					
		Delivery Trucks (Offsite)				5	3	3	3	3	3	3	3	3	3	3	3	3					
		Concrete/Aggregate/Haul Trucks (Offsite)				15	2	2	2	2	2	2	2	2	2	2	2	2					
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5	5	5	5	5	5					
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73										2	2	2	2	2	2	2	2	2
		Cranes	4	190	0.43														3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62										1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62														4	4	4	4	4
		Paving Equipment	8	111	0.53																1	1	1
		Rollers	8	114	0.43																1	1	1
		Forklifts	8	94	0.475										2	2	2	2	2	2	2	2	2
		Delivery Trucks (Offsite)				20									1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15									3	3	3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20									5	5	5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	20	20	20	20	20	20	20	20	20	20	80	80	80	80	80	80	80
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																			12628	12628	12628
		Architectural Coatings - Residential Square Footage per month																			110	110	110
	Asphalt	Asphalt (acres per month)																			2	2	2
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Rollers	8	114	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Water Trucks				5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2012 8	2012 9	2012 10	2012 11	2012 12	2013 1	2013 2	2013 3	2013 4	2013 5	2013 6	2013 7	2013 8	2013 9	2013 10	2013 11	2013 12
Parcels L & M-2	Phase 1	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
	Demolition	Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2	Drill Rig	8	218	0.75																		
	Site Preparation / Grading	Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3	Crane	4	190	0.43																		
	Footing/Foundation Placement	Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4	Crane	4	190	0.43																		
	Garage / Parking Area	Cement and Mortar Mixers	8	190	0.62																		
	and Podium Level	Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5	Concrete/Industrial Saws	8	84	0.73																		
	Superstructure Construction	Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6	Concrete/Industrial Saws	8	84	0.73		2	1	1	1	1												
	Closing Shell and Finishing	Cranes	4	190	0.43		3	3	3	3	3												
		Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1												
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4												
		Paving Equipment	8	111	0.53		1	1	1	1	1												
		Rollers	8	114	0.43		1	1	1	1	1												
		Forklifts	8	94	0.475		2	2	2	2	2												
		Delivery Trucks (Offsite)				20	1	1	1	1	1												
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3	3	3												
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5												
	Worker Trips	Worker Trips - Calculated Total				20	80	80	80	80	80												
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month					12628	12628	12628	12628	12628												
		Architectural Coatings - Residential Square Footage per month					110	110	110	110	110												
	Asphalt	Asphalt (acres per month)					2	2	2	2	2												
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2012 8	2012 9	2012 10	2012 11	2012 12	2013 1	2013 2	2013 3	2013 4	2013 5	2013 6	2013 7	2013 8	2013 9	2013 10	2013 11	2013 12
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							1											
		Rubber Tired Dozers	8	352	0.59							1											
		Tractors/Loaders/Backhoes	8	79	0.465							1											
		Concrete/Aggregate/Haul Trucks (Offsite)				30						7											
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75							2	2	2	2	2							
		Crane	4	190	0.43							1	1	1	1	1							
		Excavator	8	180	0.58							3	3	3	3	3							
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							3	3	3	3	3							
		Rubber Tired Loader	8	165	0.465							2	2	2	2	2							
		Tractors/Loaders/Backhoes	8	79	0.465							3	3	3	3	3							
		Water Trucks				5						3	3	3	3	3							
		Concrete/Aggregate/Haul Trucks (Offsite)				30						124	124	124	124	124							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43											1	2						
		Concrete Pump	8	190	0.62											3	3						
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62												3						
		Forklift	8	94	0.475											2	2						
		Tractors/Loaders/Backhoes	8	79	0.465												2						
		Water Trucks				5										3	3						
		Concrete/Aggregate/Haul Trucks (Offsite)				15										50	50						
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43												1	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62												2	2	2	2	2	2	2
		Concrete Pump	8	190	0.62													3	3	3	3	3	3
		Forklift	8	94	0.475													2	2	2	2	2	2
		Tractors/Loaders/Backhoes	8	79	0.465												1	3	3	3	3	3	3
		Water Trucks				5											3	3	3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				15											50	50	50	50	50	50	50
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																2	2	2
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																4	4	4
		Forklifts	8	94	0.475																1	1	1
		Skid Steer Loader	8	62	0.515																1	1	1
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20															3	3	3
		Flatbed Delivery Trucks (Offsite)				20															5	5	5
		Trash Trucks (Offsite)				20															2	2	2
	Phase 6 Closing Sheil and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20						25	29	37	22	22	5	17	17	17	47	47	47
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal										1	1	1	1	1							
		Fugitive Dust (square footage per month) - Demo										73											
		Fugitive Dust (yd3 per day) - Normal										1980	1980	1980	1980	1980							

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1												
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		1	1	1	1	1												
		Paving Equipment	8	111	0.53		1	1	1	1	1												
		Rollers	8	114	0.43		1	1	1	1	1												
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465		1	1	1	1	1												
		Water Trucks				5	1	1	1	1	1												
		Concrete/Aggregate/Haul Trucks (Offsite)				15	2	2	2	2	2												
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62							1	1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							2	2	2	2	2	2	2	2	2	2	2	2
		Paving Equipment	8	111	0.53							1	1	1	1	1	1	1	1	1	1	1	1
		Rollers	8	114	0.43							1	1	1	1	1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465							1	1	1	1	1	1	1	1	1	1	1	1
		Water Trucks				5						1	1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15						2	2	2	2	2	2	2	2	2	2	2	2

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43		3	3	3														
		Cement and Mortar Mixers	8	190	0.62		2	2	2														
		Concrete Pump	8	190	0.62		3	3	3														
		Forklift	8	94	0.475		2	2	2														
		Tractors/Loaders/Backhoes	8	79	0.465		3	3	3														
		Water Trucks				5	3	3	3														
		Concrete/Aggregate/Haul Trucks (Offsite)				15	50	50	50														
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73		2	2	2	2	2	2	2	2	2	2	2	2	2	2			
		Cranes	4	190	0.43				3	3	3	3	3	3	3	3	3	3	3	3			
		Concrete Pump	8	190	0.62				2	2	2	2	2	2	2	2	2	2	2	2			
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4	4	4	4	4	4	4	4			
		Forklifts	8	94	0.475		1	1	1	1	1	3	3	3	3	3	3	3	3	3			
		Skid Steer Loader	8	62	0.515		1	1	1	1	1	1	1	1	1	1	1	1	1	1			
		Tractors/Loaders/Backhoes	8	79	0.465				2	2	2	2	2	2	2	2	2	2	2	2			
		Delivery Trucks (Offsite)				20	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5	5	5	5	5	5	5	5			
		Trash Trucks (Offsite)				20	2	1	1	1	1	1	1	1	1	1	1	1	1	1			
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73												2	2	2	2	2	2	2
		Cranes	4	190	0.43												1	1	1	1	3	3	3
		Cement and Mortar Mixers	8	190	0.62												1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																4	4	4
		Paving Equipment	8	111	0.53																		1
		Rollers	8	114	0.43																		1
		Forklifts	8	94	0.475																2	2	2
		Delivery Trucks (Offsite)				20											1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15											3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20											5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	47	47	47	30	30	30	30	30	30	30	30	30	120	120	120	120	120
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					89254
		Architectural Coatings - Residential Square Footage per month																					110
	Asphalt	Asphalt (acres per month)																					1
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

						Trip	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015 6	2015 7	2015 8	2015 9	2015 10	2015 11	2015 12
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73								
		Crane	4	190	0.43								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Dozers	8	352	0.59								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75								
		Crane	4	190	0.43								
		Excavator	8	180	0.58								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Loader	8	165	0.465								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Concrete Pump	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				15							
		Concrete/Aggregate/Haul Trucks (Offsite)				20							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklifts	8	94	0.475								
		Skid Steer Loader	8	62	0.515								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
		Trash Trucks (Offsite)				20							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Forklifts	8	94	0.475								
		Delivery Trucks (Offsite)				20							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
	Worker Trips	Worker Trips - Calculated Total				20							
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month											
		Architectural Coatings - Residential Square Footage per month											
	Asphalt	Asphalt (acres per month)											
	Fugitive Dust	Fugitive Dust (acres per day) - Normal											
		Fugitive Dust (square footage per month) - Demo											
		Fugitive Dust (yd3 per day) - Normal											

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015 6	2015 7	2015 8	2015 9	2015 10	2015 11	2015 12
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Dozers	8	352	0.59								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75								
		Crane	4	190	0.43								
		Excavator	8	180	0.58								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Loader	8	165	0.465								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Concrete Pump	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklifts	8	94	0.475								
		Skid Steer Loader	8	62	0.515								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Delivery Trucks (Offsite)				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Forklifts	8	94	0.475								
		Delivery Trucks (Offsite)				20							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
	Worker Trips	Worker Trips - Calculated Total				20							
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month											
		Architectural Coatings - Residential Square Footage per month											
	Asphalt	Asphalt (acres per month)											
	Fugitive Dust	Fugitive Dust (acres per day) - Normal											
		Fugitive Dust (square footage per month) - Demo											
		Fugitive Dust (yd3 per day) - Normal											

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015	2015	2015	2015	2015	2015	2015
							6	7	8	9	10	11	12
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Dozers	8	352	0.59								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75								
		Crane	4	190	0.43								
		Excavator	8	180	0.58								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Loader	8	165	0.465								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Concrete Pump	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklifts	8	94	0.475								
		Skid Steer Loader	8	62	0.515								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Delivery Trucks (Offsite)				20							
		Flatbed Delivery Trucks (Offsite)				20							
		Trash Trucks (Offsite)				20							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73		2	2	2	1	1	1	1
		Cranes	4	190	0.43		3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1
		Rollers	8	114	0.43		1	1	1	1	1	1	1
		Forklifts	8	94	0.475		2	2	2	2	2	2	2
		Delivery Trucks (Offsite)				20	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	120	120	120	120	120	120	120
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month					89254	89254	89254	89254	89254	89254	89254
		Architectural Coatings - Residential Square Footage per month					110	110	110	110	110	110	110
	Asphalt	Asphalt (acres per month)					1	1	1	1	1	1	1
	Fugitive Dust	Fugitive Dust (acres per day) - Normal											
		Fugitive Dust (square footage per month) - Demo											
		Fugitive Dust (yd3 per day) - Normal											

Grand Avenue
Construction Schedule
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015 6	2015 7	2015 8	2015 9	2015 10	2015 11	2015 12
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				20							
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
							Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73			4	4														
		Crane	4	190	0.43			1	1														
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62			4	4														
		Rubber Tired Dozers	8	352	0.59			3	3														
		Tractors/Loaders/Backhoes	8	79	0.465			3	3														
		Concrete/Aggregate/Haul Trucks (Offsite)				30		64	64														
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75				2	2	2	2	2										
		Crane	4	190	0.43				1	1	1	1	1										
		Excavator	8	180	0.58				3	3	3	3	3										
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62				3	3	3	3	3										
		Rubber Tired Loader	8	165	0.465				2	2	2	2	2										
		Tractors/Loaders/Backhoes	8	79	0.465				3	3	3	3	3										
		Water Trucks				5			3	3	3	3	3										
		Concrete/Aggregate/Haul Trucks (Offsite)				30			170	170	170	170	170										
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								2	2									
		Concrete Pump	8	190	0.62								3	3									
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								3	3									
		Forklift	8	94	0.475								2	2									
		Tractors/Loaders/Backhoes	8	79	0.465								2	2									
		Water Trucks				5							3	3									
		Concrete/Aggregate/Haul Trucks (Offsite)				15							50	50									
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43									1	3	3	3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62										2	2	2	2	2	2	2	2	2
		Concrete Pump	8	190	0.62										3	3	3	3	3	3	3	3	3
		Forklift	8	94	0.475										2	2	2	2	2	2	2	2	2
		Tractors/Loaders/Backhoes	8	79	0.465										3	3	3	3	3	3	3	3	3
		Water Trucks				15								3	3	3	3	3	3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				20								50	50	50	50	50	50	50	50	50	50
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73												2	2	2	2	2	2	2
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62												4	4	4	4	4	4	4
		Forklifts	8	94	0.475												1	1	1	1	1	1	1
		Skid Steer Loader	8	62	0.515												1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15											3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20											5	5	5	5	5	5	5
		Trash Trucks (Offsite)				20											2	2	2	2	1	1	1
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20		19	40	22	22	22	37	2	17	30	52	52	52	52	52	52	52
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal							1	1	1	1	1										
		Fugitive Dust (square footage per month) - Demo						1012	1012														
		Fugitive Dust (yd3 per day) - Normal							2713	2713	2713	2713	2713										

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
							Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62															1			
		Rubber Tired Dozers	8	352	0.59															1			
		Tractors/Loaders/Backhoes	8	79	0.465															1			
		Concrete/Aggregate/Haul Trucks (Offsite)				30														9			
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75															2	2	2	2
		Crane	4	190	0.43															1	1	1	1
		Excavator	8	180	0.58															3	3	3	3
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62															3	3	3	3
		Rubber Tired Loader	8	165	0.465															2	2	2	2
		Tractors/Loaders/Backhoes	8	79	0.465															3	3	3	3
		Water Trucks				5														3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				30														167	167	167	167
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		2
		Concrete Pump	8	190	0.62																		3
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		2
		Tractors/Loaders/Backhoes	8	79	0.465																		2
		Water Trucks				5																	3
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	50
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20														25	22	37	37
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																		1	1	1	1
		Fugitive Dust (square footage per month) - Demo																		106			
		Fugitive Dust (yd3 per day) - Normal																		2658	2658	2658	2658

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**Month**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43											1	1	1	1	1	1	1	1
		Cement and Mortar Mixers	8	190	0.62											1	1	1	1	1	1	1	1
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62											2	2	2	2	2	2	2	2
		Paving Equipment	8	111	0.53											1	1	1	1	1	1	1	1
		Rollers	8	114	0.43											1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465											2	2	2	2	2	2	2	2
		Water Trucks				5										1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				20										2	2	2	2	2	2	2	2
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62															1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62															1	1	1	1
		Paving Equipment	8	111	0.53															1	1	1	1
		Rollers	8	114	0.43															1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465															1	1	1	1
		Water Trucks				5														1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15														2	2	2	2
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2008	2008	2008	2008	2008	2008	2008	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73		2	2	2	2	2	2	2	2	2	2							
		Cranes	4	190	0.43			3	3	3	3	3	3	3	3	3							
		Concrete Pump	8	190	0.62			2	2	2	2	2	2	2	2	2							
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4	4	4	4							
		Forklifts	8	94	0.475		1	3	3	3	3	3	3	3	3	3							
		Skid Steer Loader	8	62	0.515		1	1	1	1	1	1	1	1	1	1							
		Tractors/Loaders/Backhoes	8	79	0.465			2	2	2	2	2	2	2	2	2							
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3	3	3	3	3	3	3	3							
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5	5	5	5							
		Trash Trucks (Offsite)				20	1	1	1	1	1	1	1	1	1	1							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73								2	2	2	2	2	2	2	2	2	2	1
		Cranes	4	190	0.43								1	1	1	1	3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62								1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								4	4	4	4	4	4	4	4	4	4	4
		Paving Equipment	8	111	0.53														1	1	1	1	1
		Rollers	8	114	0.43														1	1	1	1	1
		Forklifts	8	94	0.475												2	2	2	2	2	2	2
		Delivery Trucks (Offsite)				20							1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15							3	3	3	3	3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20							5	5	5	5	5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	36	36	36	36	36	36	36	36	144	144	144	144	144	144	144	144	88
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																	110	110	110	110	110
		Architectural Coatings - Residential Square Footage per month																	35508	35508	35508	35508	35508
	Asphalt	Asphalt (acres per month)																	1	1	1	1	1
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2008	2008	2008	2008	2008	2008	2008	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009
							5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43		2																
		Concrete Pump	8	190	0.62		3																
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		3																
		Forklift	8	94	0.475		2																
		Tractors/Loaders/Backhoes	8	79	0.465		2																
		Water Trucks				5	3																
		Concrete/Aggregate/Haul Trucks (Offsite)				15	50																
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43			3	3	3	3	3	3	3	3	3							
		Cement and Mortar Mixers	8	190	0.62		2	2	2	2	2	2	2	2	2	2							
		Concrete Pump	8	190	0.62			3	3	3	3	3	3	3	3	3							
		Forklift	8	94	0.475			2	2	2	2	2	2	2	2	2							
		Tractors/Loaders/Backhoes	8	79	0.465			3	3	3	3	3	3	3	3	3							
		Water Trucks				5	3	3	3	3	3	3	3	3	3	3							
		Concrete/Aggregate/Haul Trucks (Offsite)				15	50	50	50	50	50	50	50	50	50	50							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73							2	2	2	2	2	2	2	2	2	2	2	2
		Cranes	4	190	0.43												3	3	3	3	3	3	3
		Concrete Pump	8	190	0.62												2	2	2	2	2	2	2
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							4	4	4	4	4	4	4	4	4	4	4	4
		Forklifts	8	94	0.475							1	1	1	1	1	3	3	3	3	3	3	3
		Skid Steer Loader	8	62	0.515							1	1	1	1	1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes	8	79	0.465												2	2	2	2	2	2	2
		Delivery Trucks (Offsite)				5						3	3	3	3	3	3	3	3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				15						2	2	2	2	2	2	2	2	2	2	2	2
		Flatbed Delivery Trucks (Offsite)				20						5	5	5	5	5	5	5	5	5	5	5	5
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20	18	17	17	17	17	37	37	37	37	37	20	20	20	20	20	20	20
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2008 5	2008 6	2008 7	2008 8	2008 9	2008 10	2008 11	2008 12	2009 1	2009 2	2009 3	2009 4	2009 5	2009 6	2009 7	2009 8	2009 9
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2008	2008	2008	2008	2008	2008	2008	2008	2009	2009	2009	2009	2009	2009	2009	2009	2009
							5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Rollers	8	114	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
		Water Trucks				5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		Concrete/Aggregate/Haul Trucks (Offsite)				20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Rollers	8	114	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Water Trucks				5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
							10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73		1	1	1														
		Cranes	4	190	0.43		3	3	3														
		Cement and Mortar Mixers	8	190	0.62		1	1	1														
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4														
		Paving Equipment	8	111	0.53		1	1	1														
		Rollers	8	114	0.43		1	1	1														
		Forklifts	8	94	0.475		2	2	2														
		Delivery Trucks (Offsite)				20	1	1	1														
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3														
		Flatbed Delivery Trucks (Offsite)				20	5	5	5														
	Worker Trips	Worker Trips - Calculated Total				20	88	88	88														
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month					110	110	110														
		Architectural Coatings - Residential Square Footage per month					35508	35508	35508														
	Asphalt	Asphalt (acres per month)					1	1	1														
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
							10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73		2	2	2	2	2												
		Cranes	4	190	0.43		3	3	3	3	3												
		Concrete Pump	8	190	0.62		2	2	2	2	2												
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4												
		Forklifts	8	94	0.475		3	3	3	3	3												
		Skid Steer Loader	8	62	0.515		1	1	1	1	1												
		Tractors/Loaders/Backhoes	8	79	0.465		2	2	2	2	2												
		Delivery Trucks (Offsite)				5	3	3	3	3	3												
		Concrete/Aggregate/Haul Trucks (Offsite)				15	2	2	2	2	2												
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5												
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73			2	2	2	2	2	2	2	2	2	2	1	1	1	1		
		Cranes	4	190	0.43							3	3	3	3	3	3	3	3	3	3		
		Cement and Mortar Mixers	8	190	0.62			1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							4	4	4	4	4	4	4	4	4	4		
		Paving Equipment	8	111	0.53									1	1	1	1	1	1	1	1		
		Rollers	8	114	0.43									1	1	1	1	1	1	1	1		
		Forklifts	8	94	0.475			2	2	2	2	2	2	2	2	2	2	2	2	2	2		
		Delivery Trucks (Offsite)				20		1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Concrete/Aggregate/Haul Trucks (Offsite)				15		3	3	3	3	3	3	3	3	3	3	3	3	3	3		
		Flatbed Delivery Trucks (Offsite)				20		5	5	5	5	5	5	5	5	5	5	5	5	5	5		
	Worker Trips	Worker Trips - Calculated Total				20	20	20	20	80	80	80	80	80	80	80	80	80	80	80	80		
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month												12628	12628	12628	12628	12628	12628	12628	12628		
		Architectural Coatings - Residential Square Footage per month												110	110	110	110	110	110	110	110		
	Asphalt	Asphalt (acres per month)												2	2	2	2	2	2	2	2		
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Rollers	8	114	0.43		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Water Trucks				5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
		Concrete/Aggregate/Haul Trucks (Offsite)				15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2011 3	2011 4	2011 5	2011 6	2011 7	2011 8	2011 9	2011 10	2011 11	2011 12	2012 1	2012 2	2012 3	2012 4	2012 5	2012 6	2012 7
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012
Project	**Phase**	**EquipmentName**	**Hours**	**HP**	**Load**	**Length (mi.)**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2012 8	2012 9	2012 10	2012 11	2012 12	2013 1	2013 2	2013 3	2013 4	2013 5	2013 6	2013 7	2013 8	2013 9	2013 10	2013 11	2013 12
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							1											
		Rubber Tired Dozers	8	352	0.59							1											
		Tractors/Loaders/Backhoes	8	79	0.465							1											
		Concrete/Aggregate/Haul Trucks (Offsite)				30						7											
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75							2	2	2	2	2							
		Crane	4	190	0.43							1	1	1	1	1							
		Excavator	8	180	0.58							3	3	3	3	3							
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							3	3	3	3	3							
		Rubber Tired Loader	8	165	0.465							2	2	2	2	2							
		Tractors/Loaders/Backhoes	8	79	0.465							3	3	3	3	3							
		Water Trucks				5						3	3	3	3	3							
		Concrete/Aggregate/Haul Trucks (Offsite)				30						124	124	124	124	124							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43											1	2						
		Concrete Pump	8	190	0.62											3	3						
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62												3						
		Forklift	8	94	0.475											2	2						
		Tractors/Loaders/Backhoes	8	79	0.465												2						
		Water Trucks				5										3	3						
		Concrete/Aggregate/Haul Trucks (Offsite)				15										50	50						
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43												1	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62												2	2	2	2	2	2	2
		Concrete Pump	8	190	0.62													3	3	3	3	3	3
		Forklift	8	94	0.475													2	2	2	2	2	2
		Tractors/Loaders/Backhoes	8	79	0.465												1	3	3	3	3	3	3
		Water Trucks				5											3	3	3	3	3	3	3
		Concrete/Aggregate/Haul Trucks (Offsite)				15											50	50	50	50	50	50	50
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																2	2	2
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																4	4	4
		Forklifts	8	94	0.475																1	1	1
		Skid Steer Loader	8	62	0.515																1	1	1
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				20															3	3	3
		Flatbed Delivery Trucks (Offsite)				20															5	5	5
		Trash Trucks (Offsite)				20															2	2	2
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20						25	29	37	22	22	5	17	17	17	47	47	47
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal										1	1	1	1	1							
		Fugitive Dust (square footage per month) - Demo										73											
		Fugitive Dust (yd3 per day) - Normal										1980	1980	1980	1980	1980							

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2012	2012	2012	2012	2012	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
							8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62							1	1	1	1	1	1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62							2	2	2	2	2	2	2	2	2	2	2	2
		Paving Equipment	8	111	0.53							1	1	1	1	1	1	1	1	1	1	1	1
		Rollers	8	114	0.43							1	1	1	1	1	1	1	1	1	1	1	1
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465							1	1	1	1	1	1	1	1	1	1	1	1
		Water Trucks				5						1	1	1	1	1	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15						2	2	2	2	2	2	2	2	2	2	2	2

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName				Trip	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015
			Hours	HP	Load	Length (mi.)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73																		
		Crane	4	190	0.43																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				15																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
		Trash Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2014 1	2014 2	2014 3	2014 4	2014 5	2014 6	2014 7	2014 8	2014 9	2014 10	2014 11	2014 12	2015 1	2015 2	2015 3	2015 4	2015 5
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Concrete Pump	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklifts	8	94	0.475																		
		Skid Steer Loader	8	62	0.515																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Delivery Trucks (Offsite)				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73																		
		Cranes	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Forklifts	8	94	0.475																		
		Delivery Trucks (Offsite)				20																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
		Flatbed Delivery Trucks (Offsite)				20																	
	Worker Trips	Worker Trips - Calculated Total				20																	
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					
		Architectural Coatings - Residential Square Footage per month																					
	Asphalt	Asphalt (acres per month)																					
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2015	2015	2015	2015	2015
							1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Dozers	8	352	0.59																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75																		
		Crane	4	190	0.43																		
		Excavator	8	180	0.58																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Rubber Tired Loader	8	165	0.465																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				30																	
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43																		
		Concrete Pump	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Forklift	8	94	0.475																		
		Tractors/Loaders/Backhoes	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43		3	3	3														
		Cement and Mortar Mixers	8	190	0.62		2	2	2														
		Concrete Pump	8	190	0.62		3	3	3														
		Forklift	8	94	0.475		2	2	2														
		Tractors/Loaders/Backhoes	8	79	0.465		3	3	3														
		Water Trucks				5	3	3	3														
		Concrete/Aggregate/Haul Trucks (Offsite)				15	50	50	50														
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73		2	2	2	2	2	2	2	2	2	2	2	2	2	2			
		Cranes	4	190	0.43				3	3	3	3	3	3	3	3	3	3	3	3			
		Concrete Pump	8	190	0.62				2	2	2	2	2	2	2	2	2	2	2	2			
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4	4	4	4	4	4	4	4			
		Forklifts	8	94	0.475		1	1	1	1	1	3	3	3	3	3	3	3	3	3			
		Skid Steer Loader	8	62	0.515		1	1	1	1	1	1	1	1	1	1	1	1	1	1			
		Tractors/Loaders/Backhoes	8	79	0.465				2	2	2	2	2	2	2	2	2	2	2	2			
		Delivery Trucks (Offsite)				20	3	3	3	3	3	3	3	3	3	3	3	3	3	3			
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5	5	5	5	5	5	5	5			
		Trash Trucks (Offsite)				20	2	1	1	1	1	1	1	1	1	1	1	1	1	1			
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73												2	2	2	2	2	2	2
		Cranes	4	190	0.43												1	1	1	1	3	3	3
		Cement and Mortar Mixers	8	190	0.62												1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																4	4	4
		Paving Equipment	8	111	0.53																		1
		Rollers	8	114	0.43																		1
		Forklifts	8	94	0.475																2	2	2
		Delivery Trucks (Offsite)				20											1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15											3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20											5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	47	47	47	30	30	30	30	30	30	30	30	30	120	120	120	120	120
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month																					89254
		Architectural Coatings - Residential Square Footage per month																					110
	Asphalt	Asphalt (acres per month)																					1
	Fugitive Dust	Fugitive Dust (acres per day) - Normal																					
		Fugitive Dust (square footage per month) - Demo																					
		Fugitive Dust (yd3 per day) - Normal																					

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2014 1	2014 2	2014 3	2014 4	2014 5	2014 6	2014 7	2014 8	2014 9	2014 10	2014 11	2014 12	2015 1	2015 2	2015 3	2015 4	2015 5
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43																		
		Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				20																	
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62																		
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62																		
		Paving Equipment	8	111	0.53																		
		Rollers	8	114	0.43																		
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465																		
		Water Trucks				5																	
		Concrete/Aggregate/Haul Trucks (Offsite)				15																	

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015 6	2015 7	2015 8	2015 9	2015 10	2015 11	2015 12
Parcel Q	Phase 1 Demolition	Concrete/Industrial Saws	8	84	0.73								
		Crane	4	190	0.43								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Dozers	8	352	0.59								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75								
		Crane	4	190	0.43								
		Excavator	8	180	0.58								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Loader	8	165	0.465								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Concrete Pump	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				15							
		Concrete/Aggregate/Haul Trucks (Offsite)				20							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklifts	8	94	0.475								
		Skid Steer Loader	8	62	0.515								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
		Trash Trucks (Offsite)				20							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Forklifts	8	94	0.475								
		Delivery Trucks (Offsite)				20							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
	Worker Trips	Worker Trips - Calculated Total				20							
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month											
		Architectural Coatings - Residential Square Footage per month											
	Asphalt	Asphalt (acres per month)											
	Fugitive Dust	Fugitive Dust (acres per day) - Normal											
		Fugitive Dust (square footage per month) - Demo											
		Fugitive Dust (yd3 per day) - Normal											

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015 6	2015 7	2015 8	2015 9	2015 10	2015 11	2015 12
Parcels L & M-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Dozers	8	352	0.59								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75								
		Crane	4	190	0.43								
		Excavator	8	180	0.58								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Loader	8	165	0.465								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Concrete Pump	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklifts	8	94	0.475								
		Skid Steer Loader	8	62	0.515								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Delivery Trucks (Offsite)				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Forklifts	8	94	0.475								
		Delivery Trucks (Offsite)				20							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
		Flatbed Delivery Trucks (Offsite)				20							
	Worker Trips	Worker Trips - Calculated Total				20							
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month											
		Architectural Coatings - Residential Square Footage per month											
	Asphalt	Asphalt (acres per month)											
	Fugitive Dust	Fugitive Dust (acres per day) - Normal											
		Fugitive Dust (square footage per month) - Demo											
		Fugitive Dust (yd3 per day) - Normal											

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

Project	Phase	EquipmentName	Hours	HP	Load	Trip Length (mi.)	2015 6	2015 7	2015 8	2015 9	2015 10	2015 11	2015 12
Parcels W-1/W-2	Phase 1 Demolition	Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Dozers	8	352	0.59								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 2 Site Preparation / Grading	Drill Rig	8	218	0.75								
		Crane	4	190	0.43								
		Excavator	8	180	0.58								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Rubber Tired Loader	8	165	0.465								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				30							
	Phase 3 Footing/Foundation Placement	Crane	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 4 Garage / Parking Area and Podium Level	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Concrete Pump	8	190	0.62								
		Forklift	8	94	0.475								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
	Phase 5 Superstructure Construction	Concrete/Industrial Saws	8	84	0.73								
		Cranes	4	190	0.43								
		Concrete Pump	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Forklifts	8	94	0.475								
		Skid Steer Loader	8	62	0.515								
		Tractors/Loaders/Backhoes	8	79	0.465								
		Delivery Trucks (Offsite)				20							
		Flatbed Delivery Trucks (Offsite)				20							
		Trash Trucks (Offsite)				20							
	Phase 6 Closing Shell and Finishing	Concrete/Industrial Saws	8	84	0.73		2	2	2	1	1	1	1
		Cranes	4	190	0.43		3	3	3	3	3	3	3
		Cement and Mortar Mixers	8	190	0.62		1	1	1	1	1	1	1
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62		4	4	4	4	4	4	4
		Paving Equipment	8	111	0.53		1	1	1	1	1	1	1
		Rollers	8	114	0.43		1	1	1	1	1	1	1
		Forklifts	8	94	0.475		2	2	2	2	2	2	2
		Delivery Trucks (Offsite)				20	1	1	1	1	1	1	1
		Concrete/Aggregate/Haul Trucks (Offsite)				15	3	3	3	3	3	3	3
		Flatbed Delivery Trucks (Offsite)				20	5	5	5	5	5	5	5
	Worker Trips	Worker Trips - Calculated Total				20	120	120	120	120	120	120	120
	Architectural Coatings	Architectural Coatings - Commercial Square Footage per month					89254	89254	89254	89254	89254	89254	89254
		Architectural Coatings - Residential Square Footage per month					110	110	110	110	110	110	110
	Asphalt	Asphalt (acres per month)					1	1	1	1	1	1	1
	Fugitive Dust	Fugitive Dust (acres per day) - Normal											
		Fugitive Dust (square footage per month) - Demo											
		Fugitive Dust (yd3 per day) - Normal											

Grand Avenue
Construction Schedule - Accelerated
(Pieces of Equipment per Day)

						Trip	2015	2015	2015	2015	2015	2015	2015
Project	Phase	EquipmentName	Hours	HP	Load	Length (mi.)	6	7	8	9	10	11	12
Parcel Q	Phase 7 Civic Park and Streetscape	Crane	4	190	0.43								
		Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors/Jackhammer, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				20							
Parcels L & M-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							
Parcels W-1/W-2	Phase 7 Streetscape	Cement and Mortar Mixers	8	190	0.62								
		Misc Equipment (Compressors, Generators, etc.)	8	190	0.62								
		Paving Equipment	8	111	0.53								
		Rollers	8	114	0.43								
		Tractors/Loaders/Backhoes/Cherry Picker	8	79	0.465								
		Water Trucks				5							
		Concrete/Aggregate/Haul Trucks (Offsite)				15							

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
Project	**Phase**	**Pollutant**	**Month**	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO		216.5	216.5																						
		NOx		336.3	336.3																						
		PM10		6.9	6.9																						
		ROG		31.0	31.0																						
		SOx		0.2	0.2																						
	Phase 2 - Site Preparation / Grading	CO			242.4	242.4	242.4	242.4	242.4																		
		NOx			512.5	512.5	512.5	512.5	512.5																		
		PM10			9.2	9.2	9.2	9.2	9.2																		
		ROG			35.5	35.5	35.5	35.5	35.5																		
		SOx			0.5	0.5	0.5	0.5	0.5																		
	Phase 3 - Footing/Foundation Placement	CO							136.3	136.3																	
		NOx							177.3	177.3																	
		PM10							3.6	3.6																	
		ROG							18.7	18.7																	
		SOx							0.1	0.1																	
	Phase 4 - Garage / Parking Area and Podium Level	CO								18.7	135.6	135.6	135.6	135.6	135.6	138.0	138.0	138.0	138.0								
		NOx								77.9	190.0	190.0	190.0	190.0	190.0	178.4	178.4	178.4	178.4								
		PM10								1.4	3.8	3.8	3.8	3.8	3.8	3.5	3.5	3.5	3.5								
		ROG								3.4	18.8	18.8	18.8	18.8	18.8	18.6	18.6	18.6	18.6								
		SOx								0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1								
	Phase 5 - Superstructure Construction	CO											91.0	91.0	91.0	93.7	93.5	93.5	93.5	93.5	167.1	167.1	167.1	167.1	167.1	167.1	167.1
		NOx											101.0	101.0	101.0	95.9	94.6	94.6	94.6	94.6	156.1	156.1	156.1	156.1	156.1	156.1	156.1
		PM10											2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1
		ROG											12.3	12.3	12.3	12.2	12.2	12.2	12.2	12.2	21.4	21.4	21.4	21.4	21.4	21.4	21.4
		SOx											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Phase 6 - Closing Shell and Finishing	CO																								104.5	104.5
		NOx																								105.7	105.7
		PM10																								2.2	2.2
		ROG																								13.7	13.7
		SOx																								0.0	0.0
	Worker Trips	CO		9.7	20.5	11.3	11.3	11.3	19.0	1.0	8.7	15.4	26.7	26.7	26.7	24.5	24.5	24.5	24.5	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
		NOx		1.0	2.2	1.2	1.2	1.2	2.0	0.1	0.9	1.6	2.8	2.8	2.8	2.6	2.6	2.6	2.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		PM10		0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		ROG		1.1	2.2	1.2	1.2	1.2	2.0	0.1	0.9	1.7	2.9	2.9	2.9	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10		0.2	162.8	162.6	162.6	162.6	162.6																		
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO		171.4	171.4																						
		NOx		148.8	148.8																						
		PM10		2.9	2.9																						
		ROG		21.4	21.4																						
		SOx		0.0	0.0																						
	Phase 6 - Closing Shell and Finishing	CO		107.9	107.9	133.5	133.5	149.1	149.1	149.1	149.1	140.5	140.5	140.5	140.5												
		NOx		99.9	99.9	117.4	117.4	129.6	129.6	129.6	129.6	122.1	122.1	122.1	122.1												
		PM10		2.1	2.1	2.3	2.3	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4												
		ROG		13.7	13.7	16.7	16.7	18.6	18.6	18.6	18.6	17.5	17.5	17.5	17.5												
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	Worker Trips	CO		62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	38.2	38.2	38.2	38.2												
		NOx		6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	4.0	4.0	4.0	4.0												
		PM10		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3												
		ROG		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	4.2	4.2	4.2	4.2												
		SOx		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0												
	Architectural Coatings	ROG						80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8												
	Asphalt	ROG						2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6												
	Fugitive Dust	PM10																									
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO														54.9											
		NOx														55.5											
		PM10														1.1											
		ROG														6.9											
		SOx														0.0											
	Phase 2 - Site Preparation / Grading	CO														236.1	236.1	236.1	236.1								
		NOx														397.7	397.7	397.7	397.7								
		PM10														7.3	7.3	7.3	7.3								
		ROG														32.5	32.5	32.5	32.5								
		SOx														0.5	0.5	0.5	0.5								
	Phase 3 - Footing/Foundation Placement	CO																	94.4	145.7							
		NOx																	105.8	146.4							
		PM10																	2.0	2.8							
		ROG																	12.0	18.3							
		SOx																	0.1	0.1							
	Phase 4 - Garage / Parking Area and Podium Level	CO																		41.1	140.0	140.0	140.0	140.0	140.0	140.0	140.0
		NOx																		66.3	141.2	141.2	141.2	141.2	141.2	141.2	141.2
		PM10																		1.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7
		ROG																		5.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
		SOx																		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Phase 5 - Superstructure Construction	CO																							99.1	99.1	99.1
		NOx																							83.3	83.3	83.3
		PM10																							1.6	1.6	1.6
		ROG																							12.1	12.1	12.1
		SOx																							0.0	0.0	0.0
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO														10.0	8.8	14.7	14.7	7.2	6.8	6.8	6.8	6.8	14.7	14.7	14.7
		NOx														1.0	0.9	1.5	1.5	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5
		PM10														0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		ROG														1.1	1.0	1.6	1.6	0.8	0.7	0.7	0.7	0.7	1.6	1.6	1.6
		SOx														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10														159.3	159.3	159.3	159.3								

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO		139.6	139.6																						
		NOx		135.6	135.6																						
		PM10		2.6	2.6																						
		ROG		17.5	17.5																						
		SOx		0.1	0.1																						
	Phase 5 - Superstructure Construction	CO		99.0	99.0	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.6	175.5	175.5										
		NOx		82.3	82.3	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	138.7	138.7										
		PM10		1.6	1.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6										
		ROG		12.1	12.1	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3										
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
	Phase 6 - Closing Shell and Finishing	CO												49.9	49.9	49.8	49.8	136.5	136.5	152.3	152.3	152.3	152.3	143.5	143.5	143.5	143.5
		NOx												43.8	43.8	43.0	43.0	109.6	109.6	121.4	121.4	121.4	121.4	114.3	114.3	114.3	114.3
		PM10												0.8	0.8	0.8	0.8	2.1	2.1	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.1
		ROG												6.2	6.2	6.1	6.1	16.6	16.6	18.5	18.5	18.5	18.5	17.4	17.4	17.4	17.4
		SOx												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Worker Trips	CO		13.7	13.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
		NOx		1.4	1.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
		PM10		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		ROG		1.5	1.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																		21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
	Asphalt	ROG																		5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	Fugitive Dust	PM10																									

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
Project	**Phase**	**Pollutant**	**Month**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	Max
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	(lbs/day)
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO														216.5
		NOx														336.3
		PM10														6.9
		ROG														31.0
		SOx														0.2
	Phase 2 - Site Preparation / Grading	CO														242.4
		NOx														512.5
		PM10														9.2
		ROG														35.5
		SOx														0.5
	Phase 3 - Footing/Foundation Placement	CO														136.3
		NOx														177.3
		PM10														3.6
		ROG														18.7
		SOx														0.1
	Phase 4 - Garage / Parking Area and Podium Level	CO														138.0
		NOx														190.0
		PM10														3.8
		ROG														18.8
		SOx														0.1
	Phase 5 - Superstructure Construction	CO														171.4
		NOx														156.1
		PM10														3.1
		ROG														21.4
		SOx														0.0
	Phase 6 - Closing Shell and Finishing	CO														149.1
		NOx														129.6
		PM10														2.5
		ROG														18.6
		SOx														0.0
	Worker Trips	CO														62.5
		NOx														6.6
		PM10														0.5
		ROG														6.8
		SOx														0.1
	Architectural Coatings	ROG														80.8
	Asphalt	ROG														2.6
	Fugitive Dust	PM10														162.8
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO														54.9
		NOx														55.5
		PM10														1.1
		ROG														6.9
		SOx														0.0
	Phase 2 - Site Preparation / Grading	CO														236.1
		NOx														397.7
		PM10														7.3
		ROG														32.5
		SOx														0.5
	Phase 3 - Footing/Foundation Placement	CO														145.7
		NOx														146.4
		PM10														2.8
		ROG														18.3
		SOx														0.1
	Phase 4 - Garage / Parking Area and Podium Level	CO														140.0
		NOx														141.2
		PM10														2.7
		ROG														17.6
		SOx														0.1
	Phase 5 - Superstructure Construction	CO														175.6
		NOx														139.4
		PM10														2.6
		ROG														21.3
		SOx														0.0
	Phase 6 - Closing Shell and Finishing	CO														152.3
		NOx														121.4
		PM10														2.3
		ROG														18.5
		SOx														0.0
	Worker Trips	CO														27.2
		NOx														2.8
		PM10														0.3
		ROG														3.0
		SOx														0.0
	Architectural Coatings	ROG														21.5
	Asphalt	ROG														5.2
	Fugitive Dust	PM10														159.3

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO										77.5	77.5	77.5	77.5	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
		NOx										77.9	77.9	77.9	77.9	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
		PM10										1.7	1.7	1.7	1.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		ROG										10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
		SOx										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 2 (Parcels L & M-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 3 (Parcels W-1/W-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Grand Total		CO Sum		226.3	479.5	253.7	253.7	253.7	397.7	156.0	144.3	228.5	330.8	330.8	330.8	336.0	335.8	335.8	335.8	190.2	263.8	263.8	263.8	263.8	263.8	368.3	368.3
		NOx Sum		337.3	851.0	513.7	513.7	513.7	691.8	255.2	190.9	269.6	371.8	371.8	371.8	351.2	349.9	349.9	349.9	170.7	232.2	232.2	232.2	232.2	232.2	337.9	337.9
		PM10 Sum		7.1	179.0	171.8	171.8	171.8	175.5	5.0	3.9	5.6	7.8	7.8	7.8	7.1	7.1	7.1	7.1	3.6	4.7	4.7	4.7	4.7	4.7	6.9	6.9
		ROG Sum		32.1	68.7	36.7	36.7	36.7	56.2	22.2	19.7	30.7	44.2	44.2	44.2	43.7	43.7	43.7	43.7	24.3	33.5	33.5	33.5	33.5	33.5	47.2	47.2
		SOx Sum		0.2	0.7	0.5	0.5	0.5	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO		82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1																
		NOx		70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7																
		PM10		1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4																
		ROG		10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3																
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																
Phase 2 (Parcels L & M-2)	Streetscape	CO														55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8
		NOx														44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
		PM10														0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		ROG														6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
		SOx														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Grand Total		CO Sum		423.9	423.9	278.1	278.1	293.7	293.7	293.7	293.7	178.7	178.7	178.7	178.7	356.7	300.7	306.6	401.0	249.6	202.5	202.5	202.5	202.5	309.6	309.6	309.6
		NOx Sum		326.0	326.0	194.7	194.7	206.8	206.8	206.8	206.8	126.1	126.1	126.1	126.1	499.0	443.4	444.0	549.8	258.2	186.7	186.7	186.7	186.7	270.9	270.9	270.9
		PM10 Sum		6.8	6.8	4.2	4.2	4.4	4.4	4.4	4.4	2.6	2.6	2.6	2.6	168.7	167.6	167.6	169.6	5.0	3.6	3.6	3.6	3.6	5.3	5.3	5.3
		ROG Sum		52.1	52.1	33.7	33.7	119.1	119.1	119.1	119.1	105.1	105.1	105.1	105.1	47.2	40.2	40.9	52.9	31.5	25.1	25.1	25.1	25.1	38.1	38.1	38.1
		SOx Sum		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 2 - Site Preparation / Grading	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 3 - Footing/Foundation Placement	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 4 - Garage / Parking Area and Podium Level	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 5 - Superstructure Construction	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 6 - Closing Shell and Finishing	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Worker Trips	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Architectural Coatings	ROG													
	Asphalt	ROG													
	Fugitive Dust	PM10													
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO													
		NOx													
		PM10													
		ROG													
		SOx													
Phase 2 (Parcels L & M-2)	Streetscape	CO		55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
		NOx		44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5
		PM10		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		ROG		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO													
		NOx													
		PM10													
		ROG													
		SOx													
Grand Total		CO Sum		308.0	308.0	238.7	238.7	238.7	238.7	238.7	238.7	238.7	238.7	288.6	288.6
		NOx Sum		263.9	263.9	184.7	184.7	184.7	184.7	184.7	184.7	184.7	184.7	228.6	228.6
		PM10 Sum		5.2	5.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.4	4.4
		ROG Sum		37.9	37.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	35.0	35.0
		SOx Sum		0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

			Year	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 2 - Site Preparation / Grading	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 3 - Footing/Foundation Placement	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 4 - Garage / Parking Area and Podium Level	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 5 - Superstructure Construction	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Phase 6 - Closing Shell and Finishing	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Worker Trips	CO													
		NOx													
		PM10													
		ROG													
		SOx													
	Architectural Coatings	ROG													
	Asphalt	ROG													
	Fugitive Dust	PM10													
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO													
		NOx													
		PM10													
		ROG													
		SOx													
Phase 2 (Parcels L & M-2)	Streetscape	CO		55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
		NOx		44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
		PM10		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		ROG		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO													
		NOx													
		PM10													
		ROG													
		SOx													
Grand Total		CO Sum		308.2	308.2	219.4	219.4	235.3	235.3	235.3	235.3	226.4	226.4	226.4	226.4
		NOx Sum		228.8	228.8	156.7	156.7	168.5	168.5	168.5	168.5	161.5	161.5	161.5	161.5
		PM10 Sum		4.5	4.5	3.2	3.2	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3
		ROG Sum		37.2	37.2	26.4	26.4	55.0	55.0	55.0	55.0	53.9	53.9	53.9	53.9
		SOx Sum		0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO		54.0																							
		NOx		48.8																							
		PM10		1.0																							
		ROG		6.7																							
		SOx		0.0																							
	Phase 2 - Site Preparation / Grading	CO		219.0	219.0	219.0	219.0	219.0																			
		NOx		265.9	265.9	265.9	265.9	265.9																			
		PM10		5.3	5.3	5.3	5.3	5.3																			
		ROG		28.5	28.5	28.5	28.5	28.5																			
		SOx		0.3	0.3	0.3	0.3	0.3																			
	Phase 3 - Footing/Foundation Placement	CO						76.4	144.4																		
		NOx						79.9	133.1																		
		PM10						1.6	2.7																		
		ROG						9.7	18.0																		
		SOx						0.1	0.1																		
	Phase 4 - Garage / Parking Area and Podium Level	CO							51.2	138.8	138.8	138.8	138.8	138.8	138.8	138.5	138.5	138.5									
		NOx							61.4	127.9	127.9	127.9	127.9	127.9	127.9	125.0	125.0	125.0									
		PM10							1.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5									
		ROG							6.7	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2									
		SOx							0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1									
	Phase 5 - Superstructure Construction	CO											99.8	99.8	99.8	99.6	99.5	162.7	162.7	162.7	176.1	176.1	176.1	176.1	176.1	176.1	176.1
		NOx											82.4	82.4	82.4	81.7	81.1	129.1	129.1	129.1	138.3	138.3	138.3	138.3	138.3	138.3	138.3
		PM10											1.6	1.6	1.6	1.6	1.6	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6
		ROG											12.3	12.3	12.3	12.2	12.2	19.8	19.8	19.8	21.4	21.4	21.4	21.4	21.4	21.4	21.4
		SOx											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Phase 6 - Closing Shell and Finishing	CO																								42.3	42.3
		NOx																								36.7	36.7
		PM10																								0.7	0.7
		ROG																								5.2	5.2
		SOx																								0.0	0.0
	Worker Trips	CO		7.8	9.1	11.6	6.9	6.9	1.6	5.3	5.3	5.3	14.7	14.7	14.7	13.5	13.5	13.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
		NOx		0.8	0.9	1.2	0.7	0.7	0.2	0.5	0.5	0.5	1.5	1.5	1.5	1.4	1.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		PM10		0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		ROG		0.9	1.0	1.3	0.8	0.8	0.2	0.6	0.6	0.6	1.6	1.6	1.6	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10		119.3	119.3	119.3	119.3	119.3																			
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 2 (Parcels L & M-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 3 (Parcels W-1/W-2)	Streetscape	CO		72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8												
		NOx		57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7												
		PM10		1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1												
		ROG		8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8												
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
Grand Total		CO Sum		353.6	300.9	303.4	298.7	375.0	269.9	216.8	216.8	216.8	326.0	326.0	326.0	251.6	251.5	314.6	171.3	171.3	184.7	184.7	184.7	184.7	184.7	227.0	227.0
		NOx Sum		373.2	324.5	324.8	324.3	404.2	252.4	186.2	186.2	186.2	269.6	269.6	269.6	208.1	207.5	255.5	130.0	130.0	139.1	139.1	139.1	139.1	139.1	175.8	175.8
		PM10 Sum		126.8	125.8	125.9	125.8	127.4	5.1	3.7	3.7	3.7	5.4	5.4	5.4	4.3	4.2	5.1	2.6	2.6	2.7	2.7	2.7	2.7	2.7	3.4	3.4
		ROG Sum		44.9	38.4	38.7	38.1	47.8	33.7	26.7	26.7	26.7	40.0	40.0	40.0	30.9	30.9	38.5	20.8	20.8	22.4	22.4	22.4	22.4	22.4	27.6	27.6
		SOx Sum		0.4	0.4	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Grand Avenue
Detailed Construction Emissions (lbs/day)

			Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	Max
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	(lbs/day)
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO														54.0
		NOx														48.8
		PM10														1.0
		ROG														6.7
		SOx														0.0
	Phase 2 - Site Preparation / Grading	CO														219.0
		NOx														265.9
		PM10														5.3
		ROG														28.5
		SOx														0.3
	Phase 3 - Footing/Foundation Placement	CO														144.4
		NOx														133.1
		PM10														2.7
		ROG														18.0
		SOx														0.1
	Phase 4 - Garage / Parking Area and Podium Level	CO														138.8
		NOx														127.9
		PM10														2.5
		ROG														17.2
		SOx														0.1
	Phase 5 - Superstructure Construction	CO		175.9	175.9											176.1
		NOx		137.7	137.7											138.3
		PM10		2.6	2.6											2.6
		ROG		21.4	21.4											21.4
		SOx		0.0	0.0											0.0
	Phase 6 - Closing Shell and Finishing	CO		42.3	42.3	136.2	136.2	152.1	152.1	152.1	152.1	143.2	143.2	143.2	143.2	152.1
		NOx		36.1	36.1	107.7	107.7	119.5	119.5	119.5	119.5	112.5	112.5	112.5	112.5	119.5
		PM10		0.7	0.7	2.0	2.0	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.1	2.3
		ROG		5.2	5.2	16.5	16.5	18.4	18.4	18.4	18.4	17.4	17.4	17.4	17.4	18.4
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Worker Trips	CO		31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
		NOx		3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		PM10		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		ROG		3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG						150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4
	Asphalt	ROG						2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	Fugitive Dust	PM10														119.3
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO														82.1
		NOx														77.9
		PM10														1.7
		ROG														10.3
		SOx														0.0
Phase 2 (Parcels L & M-2)	Streetscape	CO														55.8
		NOx														44.8
		PM10														0.9
		ROG														6.8
		SOx														0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO														72.8
		NOx														57.7
		PM10														1.1
		ROG														8.8
		SOx														0.0
Grand Total		CO Sum		249.9	249.9	167.9	167.9	183.8	183.8	183.8	183.8	174.9	174.9	174.9	174.9	479.5
		NOx Sum		177.0	177.0	110.9	110.9	122.7	122.7	122.7	122.7	115.6	115.6	115.6	115.6	851.0
		PM10 Sum		3.7	3.7	2.4	2.4	2.7	2.7	2.7	2.7	2.5	2.5	2.5	2.5	179.0
		ROG Sum		30.2	30.2	20.2	20.2	175.1	175.1	175.1	175.1	174.0	174.0	174.0	174.0	175.1
		SOx Sum		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO		216.5	216.5																						
		NOx		336.3	336.3																						
		PM10		6.9	6.9																						
		ROG		31.0	31.0																						
		SOx		0.2	0.2																						
	Phase 2 - Site Preparation / Grading	CO			242.4	242.4	242.4	242.4	242.4																		
		NOx			512.5	512.5	512.5	512.5	512.5																		
		PM10			9.2	9.2	9.2	9.2	9.2																		
		ROG			35.5	35.5	35.5	35.5	35.5																		
		SOx			0.5	0.5	0.5	0.5	0.5																		
	Phase 3 - Footing/Foundation Placement	CO							136.3	136.3																	
		NOx							177.3	177.3																	
		PM10							3.6	3.6																	
		ROG							18.7	18.7																	
		SOx							0.1	0.1																	
	Phase 4 - Garage / Parking Area and Podium Level	CO								18.7	135.6	135.6	135.6	135.6	135.6	138.0	138.0	138.0	138.0								
		NOx								77.9	190.0	190.0	190.0	190.0	190.0	178.4	178.4	178.4	178.4								
		PM10								1.4	3.8	3.8	3.8	3.8	3.8	3.5	3.5	3.5	3.5								
		ROG								3.4	18.8	18.8	18.8	18.8	18.8	18.6	18.6	18.6	18.6								
		SOx								0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1								
	Phase 5 - Superstructure Construction	CO											91.0	91.0	91.0	93.7	93.5	93.5	93.5	93.5	167.1	167.1	167.1	167.1	167.1	167.1	167.1
		NOx											101.0	101.0	101.0	95.9	94.6	94.6	94.6	94.6	156.1	156.1	156.1	156.1	156.1	156.1	156.1
		PM10											2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1
		ROG											12.3	12.3	12.3	12.2	12.2	12.2	12.2	12.2	21.4	21.4	21.4	21.4	21.4	21.4	21.4
		SOx											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Phase 6 - Closing Shell and Finishing	CO																								104.5	104.5
		NOx																								105.7	105.7
		PM10																								2.2	2.2
		ROG																								13.7	13.7
		SOx																								0.0	0.0
	Worker Trips	CO		9.7	20.5	11.3	11.3	11.3	19.0	1.0	8.7	15.4	26.7	26.7	26.7	24.5	24.5	24.5	24.5	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
		NOx		1.0	2.2	1.2	1.2	1.2	2.0	0.1	0.9	1.6	2.8	2.8	2.8	2.6	2.6	2.6	2.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		PM10		0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		ROG		1.1	2.2	1.2	1.2	1.2	2.0	0.1	0.9	1.7	2.9	2.9	2.9	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10		0.2	162.8	162.6	162.6	162.6	162.6																		
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO														51.8											
		NOx														63.9											
		PM10														1.3											
		ROG														7.0											
		SOx														0.0											
	Phase 2 - Site Preparation / Grading	CO														239.6	239.6	239.6	239.6								
		NOx														470.6	470.6	470.6	470.6								
		PM10														8.5	8.5	8.5	8.5								
		ROG														34.3	34.3	34.3	34.3								
		SOx														0.5	0.5	0.5	0.5								
	Phase 3 - Footing/Foundation Placement	CO																	139.3	139.3							
		NOx																	166.9	166.9							
		PM10																	3.3	3.3							
		ROG																	18.6	18.6							
		SOx																	0.1	0.1							
	Phase 4 - Garage / Parking Area and Podium Level	CO																		40.0	134.5	134.5	134.5	134.5	134.5	134.5	134.5
		NOx																		79.5	160.8	160.8	160.8	160.8	160.8	160.8	160.8
		PM10																		1.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		ROG																		5.9	17.8	17.8	17.8	17.8	17.8	17.8	17.8
		SOx																		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Phase 5 - Superstructure Construction	CO																							93.6	93.6	93.6
		NOx																							93.0	93.0	93.0
		PM10																							1.9	1.9	1.9
		ROG																							12.2	12.2	12.2
		SOx																							0.0	0.0	0.0
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO														11.8	10.4	17.5	17.5	8.5	8.0	8.0	8.0	8.0	17.5	17.5	17.5
		NOx														1.2	1.1	1.8	1.8	0.9	0.8	0.8	0.8	0.8	1.8	1.8	1.8
		PM10														0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		ROG														1.3	1.1	1.9	1.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	1.9
		SOx														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10														159.3	159.3	159.3	159.3								

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO		171.4	171.4																						
		NOx		148.8	148.8																						
		PM10		2.9	2.9																						
		ROG		21.4	21.4																						
		SOx		0.0	0.0																						
	Phase 6 - Closing Shell and Finishing	CO		107.9	107.9	133.5	133.5	149.1	149.1	149.1	149.1	140.5	140.5	140.5	140.5												
		NOx		99.9	99.9	117.4	117.4	129.6	129.6	129.6	129.6	122.1	122.1	122.1	122.1												
		PM10		2.1	2.1	2.3	2.3	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4												
		ROG		13.7	13.7	16.7	16.7	18.6	18.6	18.6	18.6	17.5	17.5	17.5	17.5												
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
	Worker Trips	CO		62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	38.2	38.2	38.2	38.2												
		NOx		6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	4.0	4.0	4.0	4.0												
		PM10		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3												
		ROG		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	4.2	4.2	4.2	4.2												
		SOx		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0												
	Architectural Coatings	ROG						80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8												
	Asphalt	ROG						2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6												
	Fugitive Dust	PM10																									
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO		137.3	137.3																						
		NOx		151.3	151.3																						
		PM10		2.9	2.9																						
		ROG		17.7	17.7																						
		SOx		0.1	0.1																						
	Phase 5 - Superstructure Construction	CO		96.4	96.4	171.5	171.5	171.5	171.5	171.5	171.5	171.5	171.5	171.5	171.5	175.7	175.7										
		NOx		88.2	88.2	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	140.5	140.5										
		PM10		1.8	1.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.6	2.6										
		ROG		12.2	12.2	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.3	21.3										
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										
	Phase 6 - Closing Shell and Finishing	CO												49.1	49.1	50.0	50.0	136.7	136.7	152.6	152.6	152.6	152.6	143.7	143.7	143.7	143.7
		NOx												47.7	47.7	45.0	45.0	111.6	111.6	123.4	123.4	123.4	123.4	116.4	116.4	116.4	116.4
		PM10												0.9	0.9	0.8	0.8	2.1	2.1	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2
		ROG												6.2	6.2	6.2	6.2	16.6	16.6	18.6	18.6	18.6	18.6	17.5	17.5	17.5	17.5
		SOx												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Worker Trips	CO		16.1	16.1	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9
		NOx		1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
		PM10		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		ROG		1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																		21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
	Asphalt	ROG																		5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	Fugitive Dust	PM10																									

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 2 - Site Preparation / Grading	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 3 - Footing/Foundation Placement	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 4 - Garage / Parking Area and Podium Level	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 5 - Superstructure Construction	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 6 - Closing Shell and Finishing	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Worker Trips	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Architectural Coatings	ROG																								
	Asphalt	ROG																								
	Fugitive Dust	PM10																								
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 2 - Site Preparation / Grading	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 3 - Footing/Foundation Placement	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 4 - Garage / Parking Area and Podium Level	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 5 - Superstructure Construction	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Phase 6 - Closing Shell and Finishing	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Worker Trips	CO																								
		NOx																								
		PM10																								
		ROG																								
		SOx																								
	Architectural Coatings	ROG																								
	Asphalt	ROG																								
	Fugitive Dust	PM10																								

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	Max
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	(lbs/day)
Phase 1 (Parcel Q)	Phase 1 - Demolition	CO														216.5
		NOx														336.3
		PM10														6.9
		ROG														31.0
		SOx														0.2
	Phase 2 - Site Preparation / Grading	CO														242.4
		NOx														512.5
		PM10														9.2
		ROG														35.5
		SOx														0.5
	Phase 3 - Footing/Foundation Placement	CO														136.3
		NOx														177.3
		PM10														3.6
		ROG														18.7
		SOx														0.1
	Phase 4 - Garage / Parking Area and Podium Level	CO														138.0
		NOx														190.0
		PM10														3.8
		ROG														18.8
		SOx														0.1
	Phase 5 - Superstructure Construction	CO														171.4
		NOx														156.1
		PM10														3.1
		ROG														21.4
		SOx														0.0
	Phase 6 - Closing Shell and Finishing	CO														149.1
		NOx														129.6
		PM10														2.5
		ROG														18.6
		SOx														0.0
	Worker Trips	CO														62.5
		NOx														6.6
		PM10														0.5
		ROG														6.8
		SOx														0.1
	Architectural Coatings	ROG														80.8
	Asphalt	ROG														2.6
	Fugitive Dust	PM10														162.8
Phase 2 (Parcels L & M-2)	Phase 1 - Demolition	CO														51.8
		NOx														63.9
		PM10														1.3
		ROG														7.0
		SOx														0.0
	Phase 2 - Site Preparation / Grading	CO														239.6
		NOx														470.6
		PM10														8.5
		ROG														34.3
		SOx														0.5
	Phase 3 - Footing/Foundation Placement	CO														139.3
		NOx														166.9
		PM10														3.3
		ROG														18.6
		SOx														0.1
	Phase 4 - Garage / Parking Area and Podium Level	CO														137.3
		NOx														160.8
		PM10														3.2
		ROG														17.8
		SOx														0.1
	Phase 5 - Superstructure Construction	CO														175.7
		NOx														147.4
		PM10														2.9
		ROG														21.4
		SOx														0.0
	Phase 6 - Closing Shell and Finishing	CO														152.6
		NOx														123.4
		PM10														2.3
		ROG														18.6
		SOx														0.0
	Worker Trips	CO														31.9
		NOx														3.3
		PM10														0.3
		ROG														3.5
		SOx														0.0
	Architectural Coatings	ROG														21.5
	Asphalt	ROG														5.2
	Fugitive Dust	PM10														159.3

Grand Avenue

Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO										77.5	77.5	77.5	77.5	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
		NOx										77.9	77.9	77.9	77.9	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
		PM10										1.7	1.7	1.7	1.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		ROG										10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
		SOx										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 2 (Parcels L & M-2)	Streetscape	CO														52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
		NOx														49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
		PM10														1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		ROG														6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
		SOx														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Grand Total		CO Sum		226.3	479.5	253.7	253.7	253.7	397.7	156.0	144.3	228.5	330.8	330.8	330.8	691.7	638.4	645.4	784.8	430.7	458.9	458.9	458.9	458.9	562.0	666.5	666.5
		NOx Sum		337.3	851.0	513.7	513.7	513.7	691.8	255.2	190.9	269.6	371.8	371.8	371.8	936.5	871.2	871.9	1038.9	467.6	443.4	443.4	443.4	443.4	537.4	643.2	643.2
		PM10 Sum		7.1	179.0	171.8	171.8	171.8	175.5	5.0	3.9	5.6	7.8	7.8	7.8	177.3	176.0	176.0	179.3	9.5	9.0	9.0	9.0	9.0	10.9	13.1	13.1
		ROG Sum		32.1	68.7	36.7	36.7	36.7	56.2	22.2	19.7	30.7	44.2	44.2	44.2	93.1	85.9	86.7	105.2	56.5	59.0	59.0	59.0	59.0	72.2	85.9	85.9
		SOx Sum		0.2	0.7	0.5	0.5	0.5	0.6	0.2	0.1	0.1	0.1	0.1	0.1	0.6	0.6	0.6	0.7	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Grand Avenue

Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO		82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1																
		NOx		70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7																
		PM10		1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4																
		ROG		10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3																
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																
Phase 2 (Parcels L & M-2)	Streetscape	CO		54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8
		NOx		47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
		PM10		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		ROG		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Grand Total		CO Sum		727.9	727.9	512.5	512.5	528.1	528.1	528.1	528.1	413.1	413.1	462.1	462.1	313.3	313.3	224.3	224.3	240.2	240.2	240.2	240.2	231.3	231.3	231.3	231.3
		NOx Sum		614.4	614.4	390.1	390.1	402.3	402.3	402.3	402.3	321.6	321.6	369.3	369.3	233.6	233.6	159.7	159.7	171.5	171.5	171.5	171.5	164.5	164.5	164.5	164.5
		PM10 Sum		12.6	12.6	8.1	8.1	8.3	8.3	8.3	8.3	6.5	6.5	7.5	7.5	4.6	4.6	3.2	3.2	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3
		ROG Sum		90.5	90.5	62.8	62.8	148.1	148.1	148.1	148.1	134.2	134.2	140.4	140.4	37.8	37.8	26.9	26.9	55.5	55.5	55.5	55.5	54.5	54.5	54.5	54.5
		SOx Sum		0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 2 - Site Preparation / Grading	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 3 - Footing/Foundation Placement	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 4 - Garage / Parking Area and Podium Level	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 5 - Superstructure Construction	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Phase 6 - Closing Shell and Finishing	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Worker Trips	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10																									
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 2 (Parcels L & M-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 3 (Parcels W-1/W-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Grand Total		CO Sum																									
		NOx Sum																									
		PM10 Sum																									
		ROG Sum																									
		SOx Sum																									

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

Project	Phase	Pollutant	Year	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014	2014
			Month	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO		54.0																							
		NOx		48.8																							
		PM10		1.0																							
		ROG		6.7																							
		SOx		0.0																							
	Phase 2 - Site Preparation / Grading	CO		219.0	219.0	219.0	219.0	219.0																			
		NOx		265.9	265.9	265.9	265.9	265.9																			
		PM10		5.3	5.3	5.3	5.3	5.3																			
		ROG		28.5	28.5	28.5	28.5	28.5																			
		SOx		0.3	0.3	0.3	0.3	0.3																			
	Phase 3 - Footing/Foundation Placement	CO						76.4	144.4																		
		NOx						79.9	133.1																		
		PM10						1.6	2.7																		
		ROG						9.7	18.0																		
		SOx						0.1	0.1																		
	Phase 4 - Garage / Parking Area and Podium Level	CO							51.2	138.8	138.8	138.8	138.8	138.8	138.8	138.5	138.5	138.5									
		NOx							61.4	127.9	127.9	127.9	127.9	127.9	127.9	125.0	125.0	125.0									
		PM10							1.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5									
		ROG							6.7	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2									
		SOx							0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1									
	Phase 5 - Superstructure Construction	CO											99.8	99.8	99.8	99.6	99.5	162.7	162.7	162.7	176.1	176.1	176.1	176.1	176.1	176.1	176.1
		NOx											82.4	82.4	82.4	81.7	81.1	129.1	129.1	129.1	138.3	138.3	138.3	138.3	138.3	138.3	138.3
		PM10											1.6	1.6	1.6	1.6	1.6	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6
		ROG											12.3	12.3	12.3	12.2	12.2	19.8	19.8	19.8	21.4	21.4	21.4	21.4	21.4	21.4	21.4
		SOx											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Phase 6 - Closing Shell and Finishing	CO																								42.3	42.3
		NOx																								36.7	36.7
		PM10																								0.7	0.7
		ROG																								5.2	5.2
		SOx																								0.0	0.0
	Worker Trips	CO		7.8	9.1	11.6	6.9	6.9	1.6	5.3	5.3	5.3	14.7	14.7	14.7	13.5	13.5	13.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
		NOx		0.8	0.9	1.2	0.7	0.7	0.2	0.5	0.5	0.5	1.5	1.5	1.5	1.4	1.4	1.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		PM10		0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
		ROG		0.9	1.0	1.3	0.8	0.8	0.2	0.6	0.6	0.6	1.6	1.6	1.6	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG																									
	Asphalt	ROG																									
	Fugitive Dust	PM10		119.3	119.3	119.3	119.3	119.3																			
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 2 (Parcels L & M-2)	Streetscape	CO																									
		NOx																									
		PM10																									
		ROG																									
		SOx																									
Phase 3 (Parcels W-1/W-2)	Streetscape	CO		72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8												
		NOx		57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7												
		PM10		1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1												
		ROG		8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8												
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
Grand Total		CO Sum		353.6	300.9	303.4	298.7	375.0	269.9	216.8	216.8	216.8	326.0	326.0	326.0	251.6	251.5	314.6	171.3	171.3	184.7	184.7	184.7	184.7	184.7	227.0	227.0
		NOx Sum		373.2	324.5	324.8	324.3	404.2	252.4	186.2	186.2	186.2	269.6	269.6	269.6	208.1	207.5	255.5	130.0	130.0	139.1	139.1	139.1	139.1	139.1	175.8	175.8
		PM10 Sum		126.8	125.8	125.9	125.8	127.4	5.1	3.7	3.7	3.7	5.4	5.4	5.4	4.3	4.2	5.1	2.6	2.6	2.7	2.7	2.7	2.7	2.7	3.4	3.4
		ROG Sum		44.9	38.4	38.7	38.1	47.8	33.7	26.7	26.7	26.7	40.0	40.0	40.0	30.9	30.9	38.5	20.8	20.8	22.4	22.4	22.4	22.4	22.4	27.6	27.6
		SOx Sum		0.4	0.4	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Grand Avenue
Detailed Construction Emissions - Accelerated Schedule (lbs/day)

			Year	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	2015	Max
Project	Phase	Pollutant	Month	1	2	3	4	5	6	7	8	9	10	11	12	(lbs/day)
Phase 3 (Parcels W-1/W-2)	Phase 1 - Demolition	CO														54.0
		NOx														48.8
		PM10														1.0
		ROG														6.7
		SOx														0.0
	Phase 2 - Site Preparation / Grading	CO														219.0
		NOx														265.9
		PM10														5.3
		ROG														28.5
		SOx														0.3
	Phase 3 - Footing/Foundation Placement	CO														144.4
		NOx														133.1
		PM10														2.7
		ROG														18.0
		SOx														0.1
	Phase 4 - Garage / Parking Area and Podium Level	CO														138.8
		NOx														127.9
		PM10														2.5
		ROG														17.2
		SOx														0.1
	Phase 5 - Superstructure Construction	CO		175.9	175.9											176.1
		NOx		137.7	137.7											138.3
		PM10		2.6	2.6											2.6
		ROG		21.4	21.4											21.4
		SOx		0.0	0.0											0.0
	Phase 6 - Closing Shell and Finishing	CO		42.3	42.3	136.2	136.2	152.1	152.1	152.1	152.1	143.2	143.2	143.2	143.2	152.1
		NOx		36.1	36.1	107.7	107.7	119.5	119.5	119.5	119.5	112.5	112.5	112.5	112.5	119.5
		PM10		0.7	0.7	2.0	2.0	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.1	2.3
		ROG		5.2	5.2	16.5	16.5	18.4	18.4	18.4	18.4	17.4	17.4	17.4	17.4	18.4
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Worker Trips	CO		31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
		NOx		3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
		PM10		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		ROG		3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
		SOx		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Architectural Coatings	ROG						150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4
	Asphalt	ROG						2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	Fugitive Dust	PM10														119.3
Phase 1 (Parcel Q)	Civic Park and Streetscape	CO														82.1
		NOx														77.9
		PM10														1.7
		ROG														10.3
		SOx														0.0
Phase 2 (Parcels L & M-2)	Streetscape	CO														55.8
		NOx														49.6
		PM10														1.0
		ROG														6.8
		SOx														0.0
Phase 3 (Parcels W-1/W-2)	Streetscape	CO														72.8
		NOx														57.7
		PM10														1.1
		ROG														8.8
		SOx														0.0
Grand Total		CO Sum		249.9	249.9	167.9	167.9	183.8	183.8	183.8	183.8	174.9	174.9	174.9	174.9	784.8
		NOx Sum		177.0	177.0	110.9	110.9	122.7	122.7	122.7	122.7	115.6	115.6	115.6	115.6	1038.9
		PM10 Sum		3.7	3.7	2.4	2.4	2.7	2.7	2.7	2.7	2.5	2.5	2.5	2.5	179.3
		ROG Sum		30.2	30.2	20.2	20.2	175.1	175.1	175.1	175.1	174.0	174.0	174.0	174.0	175.1
		SOx Sum		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7

Appendix D-2

- SCAQMD Rule 403 (Fugitive Dust) Control Requirements

(Adopted May 7, 1976) (Amended November 6, 1992)
(Amended July 9, 1993) (Amended February 14, 1997)
(Amended December 11, 1998)(Amended April 2, 2004)
(Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

(1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.

(2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.

(3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.

(4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.

(5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

(6) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.

(7) CEMENT MANUFACTURING FACILITY is any facility that has a cement kiln at the facility.

(8) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

(9) COMMERCIAL POULTRY RANCH means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.

(10) CONFINED ANIMAL FACILITY means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.

(11) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

(12) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.

(13) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

(14) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:

(A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

(B) been paved or otherwise covered by a permanent structure; or

(C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.

(15) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(16) EARTH-MOVING ACTIVITIES means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.

(17) DUST CONTROL SUPERVISOR means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.

(18) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.

(19) HIGH WIND CONDITIONS means that instantaneous wind speeds exceed 25 miles per hour.

(20) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.

(21) LARGE OPERATIONS means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

meters (5,000 cubic yards) or more three times during the most recent 365-day period.

(22) OPEN STORAGE PILE is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.

(23) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.

(24) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.

(25) PM_{10} means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.

(26) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

(27) RULE 403 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.

(28) SERVICE ROADS are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.

(29) SIMULTANEOUS SAMPLING means the operation of two PM_{10} samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.

(30) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

(31) STABILIZED SURFACE means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.

(32) TRACK-OUT means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

(33) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.

(34) UNPAVED ROADS means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.

(35) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

(36) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.

(37) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) Requirements

(1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

(A) the dust remains visible in the atmosphere beyond the property line of the emission source; or

(B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.

(2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.

(3) No person shall cause or allow PM_{10} levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM_{10} monitoring. If sampling is conducted, samplers shall be:

(A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM_{10}.

(B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

(4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.

(5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.

(A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
- (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).

(6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.

(e) Additional Requirements for Large Operations

(1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:

- (A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;
- (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
- (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

(D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;

(E) identify a dust control supervisor that:

(i) is employed by or contracted with the property owner or developer;

(ii) is on the site or available on-site within 30 minutes during working hours;

(iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;

(iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and

(F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).

(2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).

(f) Compliance Schedule

The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

(1) The provisions of this Rule shall not apply to:

(A) Dairy farms.

(B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.

(C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.

(D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:

(i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;

(ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and

(iii) makes the completed self-monitoring form available to the Executive Officer upon request.

(E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:

(i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and

(ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and

(iii) makes the completed self-monitoring form available to the Executive Officer upon request.

(F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.

(G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.

(H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.

(I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.

(J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:

(i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and

(ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.

(K) sandblasting operations.

(2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:

(A) When wind gusts exceed 25 miles per hour, provided that:

(i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;

(ii) records are maintained in accordance with subparagraph (e)(1)(C).

(B) To unpaved roads, provided such roads:

(i) are used solely for the maintenance of wind-generating equipment; or

(ii) are unpaved public alleys as defined in Rule 1186; or

(iii) are service roads that meet all of the following criteria:

(a) are less than 50 feet in width at all points along the road;

(b) are within 25 feet of the property line; and

(c) have a traffic volume less than 20 vehicle-trips per day.

(C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.

(3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.

(4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:

(A) Blasting operations which have been permitted by the California Division of Industrial Safety; and

(B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.

(5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

(6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.

(7) The provisions of subdivision (e) shall not apply to:

(A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.

(B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.

(C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.

(8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM_{10} pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	✓ Mix backfill soil with water prior to moving ✓ Dedicate water truck or high capacity hose to backfilling equipment ✓ Empty loader bucket slowly so that no dust plumes are generated ✓ Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	✓ Maintain live perennial vegetation where possible ✓ Apply water in sufficient quantity to prevent generation of dust plumes
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	✓ Follow permit conditions for crushing equipment ✓ Pre-water material prior to loading into crusher ✓ Monitor crusher emissions opacity ✓ Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration ✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and 07-2 Stabilize disturbed soil between structures	✓ Limit vehicular traffic and disturbances on soils where possible ✓ If interior block walls are planned, install as early as possible ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	✓ Grade each project phase separately, timed to coincide with construction phase ✓ Upwind fencing can prevent material movement on site ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	**Control Measure**	**Guidance**
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	✓ Use tarps or other suitable enclosures on haul trucks ✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage ✓ Comply with track-out prevention/mitigation requirements ✓ Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	✓ Apply water to materials to stabilize ✓ Maintain materials in a crusted condition ✓ Maintain effective cover over materials ✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes ✓ Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs ✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	✓ Dedicate water truck or high capacity hose to screening operation ✓ Drop material through the screen slowly and minimize drop height ✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	✓ Limit size of staging area ✓ Limit vehicle speeds to 15 miles per hour ✓ Limit number and size of staging area entrances/exists
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	✓ Add or remove material from the downwind portion of the storage pile ✓ Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas ✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching ✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	✓ Empty loader bucket such that no visible dust plumes are created ✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	✓ Haul waste material immediately off-site

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY		**CONTROL ACTIONS**
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	(1a-1)	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS	
Earth-moving: Construction cut areas and mining operations:	(1c)	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c)	Apply chemical stabilizers within five working days of grading completion; OR
	(2d)	Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a)	Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR
	(3b)	Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR
	(3c)	Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR
	(3d)	Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a)	Apply chemical stabilizers; OR
	(5b)	Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	(5c)	Install temporary coverings; OR
	(5d)	Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	(6a)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling **(Only applicable to Commercial Poultry Ranches)**	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

Appendix D-3

- Operation Emissions Inventory
    - Regional Operation Emissions (Full Buildout – Year 2015)
        - Regional Emission Summary Sheet
        - Stationary Source Emissions
        - URBEMIS2002 Output Files
    - Regional Operation Emissions (Concurrent Construction/Operations – Year 2013)
        - Regional Emission Summary Sheet
        - Stationary Source Emissions
        - URBEMIS2002 Output Files
    - Local Operation Emissions
        - One-hour CO Summary Sheet
        - Eight-hour CO Summary Sheet
        - CALINE4 Output Files
        - EMFAC2002 Emission Rates

Grand Avenue (County Building Option - Year 2015)

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Parcel Q					
Area	12	12	<1	39	<1
Mobile	431	52	94	45	<1
Parcel L/M-2					
Area	6	12	<1	57	<1
Mobile	238	28	51	27	<1
Parcel W-1/W-2					
Area	10	14	<1	58	<1
Mobile	288	35	63	35	<1
Total Stationary (Electricity)	18	102	4	<1	11
Total Project	**316**	**151**	**67**	**94**	**11**
Net Project					
Net Stationary	45	141	5	155	11
Net Mobile	958	115	209	107	1
Total Net	1,004	257	214	263	12
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**454**	**202**	**64**	**208**	**(138)**
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	**No**

Grand Avenue (County Building Option - Year 2015)

Electricity Usage

Electricity Usage

		Electricity			Emission Factors (lbs/MWh) [b]				
		Usage Rate [a]	Total Electricity Usage		CO	ROC	NOx	PM10	SOx
Land Use	1,000 Sqft	(kWh\sq.ft\yr)	(KWh\year)	(MWh\Day)	0.2	0.01	1.15	0.04	0.12
Project									
Office	681.0	12.95	8,818,950	24.162	4.832	0.242	27.786	0.966	2.899
Retail	225.3	13.55	3,052,138	8.362	1.672	0.084	9.616	0.334	1.003
Hotel/Motel	230.0	9.95	2,288,500	6.270	1.254	0.063	7.210	0.251	0.752
Restaurant	67.0	47.45	3,179,150	8.710	1.742	0.087	10.017	0.348	1.045
Food Store	53.0	53.3	2,824,900	7.739	1.548	0.077	8.900	0.310	0.929
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	74.0	10.5	777,000	2.129	0.426	0.021	2.448	0.085	0.255
Residential (DU)	2060.0	5,627	11,590,590	31.755	6.351	0.318	36.518	1.270	3.811
	Total Project		**32,531,228**	**89.127**	**17.83**	**0.89**	**102.50**	**3.56**	**10.69**
	Net Emissions From Electricity Usage				**17.83**	**0.89**	**102.50**	**3.56**	**10.69**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Project Emissions (lbs/day)	17.83	0.89	102.50	3.56	10.69
Total Net Emissions (lbs/day)	**17.83**	**0.89**	**102.50**	**3.56**	**10.69**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

Grand Avenue (Residential Option - Year 2015)

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Parcel Q					
Area	12	12	<1	39	<1
Mobile	431	52	94	45	<1
Parcel L/M-2					
Area	6	12	<1	57	<1
Mobile	238	28	51	27	<1
Parcel W-1/W-2					
Area	8	18	<1	87	<1
Mobile	263	31	57	33	<1
Total Stationary (Electricity)	15	85	3	<1	9
Total Project	**285**	**134**	**60**	**121**	**9**
Net Project					
Net Stationary	25	42	1	184	<1
Net Mobile	932	112	202	105	1
Total Net	958	154	204	289	2
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**408**	**99**	**54**	**234**	**(148)**
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	**No**

Grand Avenue (Residential Option - Year 2015)

Electricity Usage

Electricity Usage

		Electricity			Emission Factors (lbs/MWh) [b]				
		Usage Rate [a]	Total Electricity Usage		CO	ROC	NOx	PM10	SOx
Land Use	**1,000 Sqft**	**(kWh\sq.ft\yr)**	**(KWh\year)**	**(MWh\Day)**	**0.2**	**0.01**	**1.15**	**0.04**	**0.12**
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	225.3	13.55	3,052,138	8.362	1.672	0.084	9.616	0.334	1.003
Hotel/Motel	230.0	9.95	2,288,500	6.270	1.254	0.063	7.210	0.251	0.752
Restaurant	67.0	47.45	3,179,150	8.710	1.742	0.087	10.017	0.348	1.045
Food Store	53.0	53.3	2,824,900	7.739	1.548	0.077	8.900	0.310	0.929
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	74.0	10.5	777,000	2.129	0.426	0.021	2.448	0.085	0.255
Residential (DU)	2660.0	5,627	14,966,490	41.004	8.201	0.410	47.155	1.640	4.920
	Total Project		**27,088,178**	**74.214**	**14.84**	**0.74**	**85.35**	**2.97**	**8.90**
	Net Emissions From Electricity Usage				**14.84**	**0.74**	**85.35**	**2.97**	**8.90**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Project Emissions (lbs/day)	14.84	0.74	85.35	2.97	8.90
Total Net Emissions (lbs/day)	**14.84**	**0.74**	**85.35**	**2.97**	**8.90**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel Q.urb
Project Name:                   Grand Avenue (Operations) - Parcel Q
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                          ROG       NOx        CO       SO2      PM10
 Natural Gas                       0.72      9.65      6.54         0      0.02
 Hearth                            0.16      2.76      1.18      0.02      0.22
 Landscaping - No winter emissions
 Consumer Prdcts                  24.46         -         -         -         -
 Architectural Coatings           13.37         -         -         -         -
 TOTALS(lbs/day,unmitigated)      38.71     12.41      7.72      0.02      0.24

                 UNMITIGATED OPERATIONAL EMISSIONS

                                  ROG       NOx        CO       SO2      PM10
Apartments high rise             1.15      1.51     11.19      0.01      2.39
Condo/townhouse high rise        6.19      8.44     62.42      0.07     13.33
Cinema/Event                     1.55      1.90     13.44      0.02      2.94
Health club                      2.03      3.16     22.31      0.03      4.89
Quality resturant                6.37     10.18     72.05      0.08     15.82
Hotel                            5.35      7.96     56.28      0.06     12.33
Strip mall                      10.01     15.86    111.99      0.13     24.48
Supermarket                      7.28     11.58     81.79      0.09     17.88

TOTAL EMISSIONS (lbs/day)       39.94     60.60    431.47      0.49     94.05

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:
                                                                  No.      Total
Unit Type                  Acreage   Trip Rate                   Units     Trips
Apartments high rise          1.61    2.36 trips/dwelling unit    100.00   236.00
Condo/townhouse high rise     6.25    3.29 trips/dwelling unit    400.00 1,316.00
Cinema/Event                          1.36 trips/Seats            250.00   339.00
Health club                          11.26 trips/1000 sq. ft.      50.00   563.00
Quality resturant                    42.31 trips/1000 sq. ft.      42.00 1,777.00
Hotel                                 5.16 trips/rooms            275.00 1,420.00
Strip mall                           29.59 trips/1000 sq. ft.      97.75 2,892.00
Supermarket                          39.85 trips/1000 sq. ft.      53.00 2,112.00

                                                 Sum of Total Trips     10,655.00
                                       Total Vehicle Miles Traveled     62,170.19
Vehicle Assumptions:

Fleet Mix:

Vehicle Type             Percent Type    Non-Catalyst     Catalyst          Diesel
Light Auto                   54.40           0.40            99.40            0.20
Light Truck < 3,750   lbs    15.30           0.70            98.00            1.30
Light Truck  3,751- 5,750    16.40           0.60            98.80            0.60
Med Truck    5,751- 8,500     7.30           0.00            98.60            1.40
Lite-Heavy   8,501-10,000     1.10           0.00            81.80           18.20
Lite-Heavy  10,001-14,000     0.30           0.00            66.70           33.30
Med-Heavy   14,001-33,000     1.00           0.00            20.00           80.00
Heavy-Heavy 33,001-60,000     0.80           0.00             0.00          100.00
Line Haul > 60,000    lbs     0.00           0.00             0.00          100.00
Urban Bus                     0.20           0.00            50.00           50.00
Motorcycle                    1.60          50.00            50.00            0.00
School Bus                    0.10           0.00             0.00          100.00
Motor Home                    1.50           0.00            93.30            6.70

Travel Conditions
                                 Residential                  Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3      5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3      5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0     40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Cinema/Event                                             5.0       2.5     92.5
Health club                                              5.0       2.5     92.5
Quality resturant                                        8.0       4.0     88.0
Hotel                                                    5.0       2.5     92.5
Strip mall                                               2.0       1.0     97.0
Supermarket                                              2.0       1.0     97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/1.61 to 2.36/1.61
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.25 to 3.29/6.25

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                       V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel Q.urb
Project Name:                    Grand Avenue (Operations) - Parcel Q
Project Location:                South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                    DETAIL REPORT
                 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx        CO        SO2       PM10
 Natural Gas                      0.72       9.65       6.54        0       0.02
 Hearth - No summer emissions
 Landscaping                      0.72       0.08       5.05      0.00      0.01
 Consumer Prdcts                 24.46        -          -          -         -
 Architectural Coatings          13.37        -          -          -         -
 TOTALS(lbs/day,unmitigated)     39.27       9.72      11.59      0.00      0.03

                UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx        CO        SO2       PM10
Apartments high rise          1.41       1.30      10.80      0.01       2.39
Condo/townhouse high rise     7.00       7.27      60.24      0.08      13.33
Cinema/Event                  2.39       1.64      12.77      0.02       2.94
Health club                   1.94       2.72      21.21      0.03       4.89
Quality resturant             5.59       8.78      68.64      0.09      15.82
Hotel                         5.73       6.86      53.49      0.07      12.33
Strip mall                    8.91      13.67     106.16      0.14      24.48
Supermarket                   6.40       9.99      77.53      0.10      17.88

TOTAL EMISSIONS (lbs/day)    39.38      52.24     410.83      0.53      94.05

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:
                                                                   No.      Total
Unit Type                  Acreage    Trip Rate                    Units      Trips
Apartments high rise          1.61     2.36 trips/dwelling unit   100.00     236.00
Condo/townhouse high rise     6.25     3.29 trips/dwelling unit   400.00   1,316.00
Cinema/Event                           1.36 trips/Seats           250.00     339.00
Health club                           11.26 trips/1000 sq. ft.     50.00     563.00
Quality resturant                     42.31 trips/1000 sq. ft.     42.00   1,777.00
Hotel                                  5.16 trips/rooms           275.00   1,420.00
Strip mall                            29.59 trips/1000 sq. ft.     97.75   2,892.00
Supermarket                           39.85 trips/1000 sq. ft.     53.00   2,112.00

                                           Sum of Total Trips     10,655.00
                                   Total Vehicle Miles Traveled   62,170.19
Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst     Catalyst          Diesel
Light Auto                     54.40           0.40           99.40             0.20
Light Truck < 3,750    lbs     15.30           0.70           98.00             1.30
Light Truck  3,751- 5,750      16.40           0.60           98.80             0.60
Med Truck    5,751- 8,500       7.30           0.00           98.60             1.40
Lite-Heavy   8,501-10,000       1.10           0.00           81.80            18.20
Lite-Heavy  10,001-14,000       0.30           0.00           66.70            33.30
Med-Heavy   14,001-33,000       1.00           0.00           20.00            80.00
Heavy-Heavy 33,001-60,000       0.80           0.00            0.00           100.00
Line Haul > 60,000     lbs      0.00           0.00            0.00           100.00
Urban Bus                       0.20           0.00           50.00            50.00
Motorcycle                      1.60          50.00           50.00             0.00
School Bus                      0.10           0.00            0.00           100.00
Motor Home                      1.50           0.00           93.30             6.70

Travel Conditions
                                   Residential                      Commercial
                             Home-      Home-      Home-
                             Work       Shop       Other    Commute   Non-Work  Customer
Urban Trip Length (miles)   11.5        4.9        6.0      10.3       5.5        5.5
Rural Trip Length (miles)   11.5        4.9        6.0      10.3       5.5        5.5
Trip Speeds (mph)           35.0       40.0       40.0      40.0      40.0       40.0
% of Trips - Residential    20.0       37.0       43.0

% of Trips - Commercial (by land use)
Cinema/Event                                                  5.0       2.5       92.5
Health club                                                   5.0       2.5       92.5
Quality resturant                                             8.0       4.0       88.0
Hotel                                                         5.0       2.5       92.5
Strip mall                                                    2.0       1.0       97.0
Supermarket                                                   2.0       1.0       97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/1.61 to 2.36/1.61
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.25 to 3.29/6.25

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from  8 to 5.
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               URBEMIS 2002 For Windows    8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel Q.urb
Project Name:                  Grand Avenue (Operations) - Parcel Q
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                    DETAIL REPORT
                 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx         CO        SO2       PM10
 Natural Gas                     0.72       9.65       6.54          0       0.02
 Hearth - No summer emissions
 Landscaping                     0.72       0.08       5.05       0.00       0.01
 Consumer Prdcts                24.46          -          -          -          -
 Architectural Coatings         13.37          -          -          -          -
 TOTALS(lbs/day,unmitigated)    39.27       9.72      11.59       0.00       0.03

                UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx         CO        SO2       PM10
Apartments high rise         1.76       1.21      12.12       0.01       2.39
Condo/townhouse high rise    8.46       6.73      67.61       0.08      13.33
Cinema/Event                 3.21       1.52      14.31       0.02       2.94
Health club                  2.19       2.52      23.77       0.03       4.89
Quality resturant            6.03       8.13      76.98       0.09      15.82
Hotel                        6.80       6.36      59.95       0.07      12.33
Strip mall                   9.69      12.66     118.90       0.14      24.48
Supermarket                  6.92       9.25      86.83       0.10      17.88

TOTAL EMISSIONS (lbs/day)   45.05      48.37     460.46       0.54      94.05

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:
                                                                  No.      Total
Unit Type                   Acreage    Trip Rate                 Units      Trips
Apartments high rise           1.61     2.36 trips/dwelling unit   100.00    236.00
Condo/townhouse high rise      6.25     3.29 trips/dwelling unit   400.00 1,316.00
Cinema/Event                            1.36 trips/Seats           250.00    339.00
Health club                            11.26 trips/1000 sq. ft.     50.00    563.00
Quality resturant                      42.31 trips/1000 sq. ft.     42.00 1,777.00
Hotel                                   5.16 trips/rooms           275.00 1,420.00
Strip mall                             29.59 trips/1000 sq. ft.     97.75 2,892.00
Supermarket                            39.85 trips/1000 sq. ft.     53.00 2,112.00

                                               Sum of Total Trips    10,655.00
                                        Total Vehicle Miles Traveled   62,170.19
Vehicle Assumptions:

Fleet Mix:

Vehicle Type                Percent Type    Non-Catalyst      Catalyst          Diesel
Light Auto                      54.40            0.40            99.40             0.20
Light Truck < 3,750   lbs       15.30            0.70            98.00             1.30
Light Truck  3,751- 5,750       16.40            0.60            98.80             0.60
Med Truck     5,751- 8,500       7.30            0.00            98.60             1.40
Lite-Heavy   8,501-10,000        1.10            0.00            81.80            18.20
Lite-Heavy  10,001-14,000        0.30            0.00            66.70            33.30
Med-Heavy   14,001-33,000        1.00            0.00            20.00            80.00
Heavy-Heavy 33,001-60,000        0.80            0.00             0.00           100.00
Line Haul > 60,000    lbs        0.00            0.00             0.00           100.00
Urban Bus                        0.20            0.00            50.00            50.00
Motorcycle                       1.60           50.00            50.00             0.00
School Bus                       0.10            0.00             0.00           100.00
Motor Home                       1.50            0.00            93.30             6.70

Travel Conditions
                                    Residential                   Commercial
                           Home-      Home-      Home-
                           Work       Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0      10.3       5.5        5.5
Rural Trip Length (miles) 11.5        4.9        6.0      10.3       5.5        5.5
Trip Speeds (mph)         35.0       40.0       40.0      40.0      40.0       40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Cinema/Event                                               5.0       2.5       92.5
Health club                                                5.0       2.5       92.5
Quality resturant                                          8.0       4.0       88.0
Hotel                                                      5.0       2.5       92.5
Strip mall                                                 2.0       1.0       97.0
Supermarket                                                2.0       1.0       97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/1.61 to 2.36/1.61
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.25 to 3.29/6.25

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                       V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel L and M-2 (County Building Option).urb
Project Name:                    Grand Avenue (Operations) - Parcel L/M-2 - County Building Option
Project Location:                South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                         ROG        NOx        CO        SO2       PM10
 Natural Gas                      0.56       7.26      3.44          0       0.01
 Hearth                           0.28       4.70      2.00       0.03       0.38
 Landscaping - No winter emissions
 Consumer Prdcts                 41.58          -         -          -          -
 Architectural Coatings          14.90          -         -          -          -
 TOTALS(lbs/day,unmitigated)     57.32      11.96      5.44       0.03       0.39

                  UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG        NOx        CO        SO2       PM10
Apartments high rise            1.96       2.58     19.07       0.02       4.07
Condo/townhouse high rise      10.01      13.59    100.45       0.12      21.45
Quality resturant               2.27       3.63     25.71       0.03       5.64
General Retail                  8.27      13.13     92.75       0.10      20.27

TOTAL EMISSIONS (lbs/day)      22.52      32.93    237.97       0.27      51.44

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.      Total
Unit Type                  Acreage    Trip Rate                 Units    Trips

Apartments high rise          2.74     2.36 trips/dwelling unit   170.00   402.00
Condo/townhouse high rise    10.63     3.11 trips/dwelling unit   680.00 2,118.00
Quality resturant                     42.27 trips/1000 sq. ft.     15.00   634.00
General Retail                        32.76 trips/1000 sq. ft.     73.10 2,395.00

                                             Sum of Total Trips      5,549.00
                                     Total Vehicle Miles Traveled   33,992.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type                Percent Type   Non-Catalyst      Catalyst        Diesel
Light Auto                     54.40           0.40            99.40           0.20
Light Truck < 3,750    lbs     15.30           0.70            98.00           1.30
Light Truck  3,751- 5,750      16.40           0.60            98.80           0.60
Med Truck     5,751- 8,500      7.30           0.00            98.60           1.40
Lite-Heavy   8,501-10,000       1.10           0.00            81.80          18.20
Lite-Heavy  10,001-14,000       0.30           0.00            66.70          33.30
Med-Heavy   14,001-33,000       1.00           0.00            20.00          80.00
Heavy-Heavy 33,001-60,000       0.80           0.00             0.00         100.00
Line Haul > 60,000     lbs      0.00           0.00             0.00         100.00
Urban Bus                       0.20           0.00            50.00          50.00
Motorcycle                      1.60          50.00            50.00           0.00
School Bus                      0.10           0.00             0.00         100.00
Motor Home                      1.50           0.00            93.30           6.70

Travel Conditions
                                    Residential                  Commercial
                           Home-      Home-      Home-
                           Work       Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0      10.3        5.5        5.5
Rural Trip Length (miles) 11.5        4.9        6.0      10.3        5.5        5.5
Trip Speeds (mph)         35.0       40.0       40.0      40.0       40.0       40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Quality resturant                                          8.0        4.0       88.0
General Retail                                             2.0        1.0       97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.74 to 2.364706/2.74
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/10.63 to 3.114706/10.63

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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04/27/2006 10:00 AM

               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel L and M-2 (County Building Option).urb
Project Name:                   Grand Avenue (Operations) - Parcel L/M-2 - County Building Option
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                       DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx         CO        SO2       PM10
 Natural Gas                      0.56       7.26       3.44          0       0.01
 Hearth - No summer emissions
 Landscaping                      0.36       0.04       2.52       0.00       0.01
 Consumer Prdcts                 41.58          -          -          -          -
 Architectural Coatings          14.90          -          -          -          -
 TOTALS(lbs/day,unmitigated)     57.41       7.30       5.97       0.00       0.02

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx        CO        SO2        PM10
Apartments high rise           2.40       2.22      18.40      0.02       4.07
Condo/townhouse high rise     11.47      11.70      96.94      0.12      21.45
Quality resturant              1.99       3.13      24.49      0.03       5.64
General Retail                 7.33      11.32      87.92      0.11      20.27

TOTAL EMISSIONS (lbs/day)     23.20      28.38     227.75      0.29      51.44

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                              No.     Total
Unit Type                 Acreage    Trip Rate               Units     Trips

Apartments high rise         2.74    2.36 trips/dwelling unit   170.00   402.00
Condo/townhouse high rise   10.63    3.11 trips/dwelling unit   680.00 2,118.00
Quality resturant                   42.27 trips/1000 sq. ft.     15.00   634.00
General Retail                      32.76 trips/1000 sq. ft.     73.10 2,395.00

                                            Sum of Total Trips     5,549.00
                                      Total Vehicle Miles Traveled    33,992.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                    54.40            0.40           99.40            0.20
Light Truck < 3,750   lbs     15.30            0.70           98.00            1.30
Light Truck  3,751- 5,750     16.40            0.60           98.80            0.60
Med Truck     5,751- 8,500     7.30            0.00           98.60            1.40
Lite-Heavy    8,501-10,000     1.10            0.00           81.80           18.20
Lite-Heavy  10,001-14,000      0.30            0.00           66.70           33.30
Med-Heavy   14,001-33,000      1.00            0.00           20.00           80.00
Heavy-Heavy 33,001-60,000      0.80            0.00            0.00          100.00
Line Haul > 60,000     lbs     0.00            0.00            0.00          100.00
Urban Bus                      0.20            0.00           50.00           50.00
Motorcycle                     1.60           50.00           50.00            0.00
School Bus                     0.10            0.00            0.00          100.00
Motor Home                     1.50            0.00           93.30            6.70

Travel Conditions
                                     Residential                   Commercial
                            Home-      Home-      Home-
                            Work       Shop       Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0       10.3       5.5       5.5
Rural Trip Length (miles) 11.5        4.9        6.0       10.3       5.5       5.5
Trip Speeds (mph)         35.0       40.0       40.0       40.0      40.0      40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Quality resturant                                           8.0       4.0      88.0
General Retail                                              2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.74 to 2.364706/2.74
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/10.63 to 3.114706/10.63

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel L and M-2 (County Building Option).urb
Project Name:                 Grand Avenue (Operations) - Parcel L/M-2 - County Building Option
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx         CO        SO2       PM10
 Natural Gas                     0.56       7.26       3.44          0       0.01
 Hearth - No summer emissions
 Landscaping                     0.36       0.04       2.52       0.00       0.01
 Consumer Prdcts                41.58          -          -          -          -
 Architectural Coatings         14.90          -          -          -          -
 TOTALS(lbs/day,unmitigated)    57.41       7.30       5.97       0.00       0.02

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx         CO        SO2       PM10
Apartments high rise          2.99       2.06      20.65       0.02       4.07
Condo/townhouse high rise    13.92      10.83     108.81       0.12      21.45
Quality resturant             2.15       2.90      27.46       0.03       5.64
General Retail                7.96      10.49      98.46       0.12      20.27

TOTAL EMISSIONS (lbs/day)    27.02      26.27     255.39       0.30      51.44

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.     Total
Unit Type                  Acreage    Trip Rate                Units     Trips

Apartments high rise          2.74     2.36 trips/dwelling unit    170.00    402.00
Condo/townhouse high rise    10.63     3.11 trips/dwelling unit    680.00 2,118.00
Quality resturant                     42.27 trips/1000 sq. ft.      15.00    634.00
General Retail                        32.76 trips/1000 sq. ft.      73.10 2,395.00

                                              Sum of Total Trips      5,549.00
                                     Total Vehicle Miles Traveled    33,992.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                     54.40           0.40            99.40            0.20
Light Truck < 3,750    lbs     15.30           0.70            98.00            1.30
Light Truck  3,751- 5,750      16.40           0.60            98.80            0.60
Med Truck    5,751- 8,500       7.30           0.00            98.60            1.40
Lite-Heavy   8,501-10,000       1.10           0.00            81.80           18.20
Lite-Heavy  10,001-14,000       0.30           0.00            66.70           33.30
Med-Heavy   14,001-33,000       1.00           0.00            20.00           80.00
Heavy-Heavy 33,001-60,000       0.80           0.00             0.00          100.00
Line Haul > 60,000     lbs      0.00           0.00             0.00          100.00
Urban Bus                       0.20           0.00            50.00           50.00
Motorcycle                      1.60          50.00            50.00            0.00
School Bus                      0.10           0.00             0.00          100.00
Motor Home                      1.50           0.00            93.30            6.70

Travel Conditions
                                   Residential                    Commercial
                           Home-      Home-      Home-
                           Work       Shop       Other     Commute   Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0       10.3        5.5       5.5
Rural Trip Length (miles) 11.5        4.9        6.0       10.3        5.5       5.5
Trip Speeds (mph)         35.0       40.0       40.0       40.0       40.0      40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Quality resturant                                           8.0        4.0      88.0
General Retail                                              2.0        1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.74 to 2.364706/2.74
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/10.63 to 3.114706/10.63

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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                URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel W-1 and W-2 (County Building Option).urb
Project Name:                   Grand Avenue (Operations) - (Parcel W-1/W-2) - County Building Option
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                     DETAIL REPORT
                   (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                         ROG        NOx         CO        SO2        PM10
 Natural Gas                       0.79      10.52       6.62         0        0.02
 Hearth                            0.23       3.93       1.67       0.03       0.32
 Landscaping - No winter emissions
 Consumer Prdcts                  34.74          -          -          -          -
 Architectural Coatings           21.87          -          -          -          -
 TOTALS(lbs/day,unmitigated)      57.62      14.44       8.29       0.03       0.34

                UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx         CO       SO2       PM10
Apartments high rise          1.64       2.15      15.89      0.02       3.39
Condo/townhouse high rise     8.48      11.53      85.23      0.10      18.20
Quality resturant             1.52       2.42      17.15      0.02       3.77
General Retail                5.86       9.29      65.60      0.07      14.34
General office building      10.00      14.69     104.58      0.12      23.31

TOTAL EMISSIONS (lbs/day)    27.49      40.08     288.45      0.33      63.01

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.     Total
Unit Type                 Acreage    Trip Rate                 Units    Trips

Apartments high rise         2.29    2.36 trips/dwelling unit   142.00    335.00
Condo/townhouse high rise    8.88    3.16 trips/dwelling unit   568.00 1,797.00
Quality resturant                   42.30 trips/1000 sq. ft.     10.00    423.00
General Retail                      31.14 trips/1000 sq. ft.     54.40 1,694.00
General office building              3.15 trips/1000 sq. ft.    681.00 2,146.12

                                             Sum of Total Trips     6,395.12
                                    Total Vehicle Miles Traveled   41,641.81

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst          Diesel
Light Auto                    54.40            0.40            99.40             0.20
Light Truck < 3,750   lbs     15.30            0.70            98.00             1.30
Light Truck  3,751- 5,750     16.40            0.60            98.80             0.60
Med Truck    5,751- 8,500      7.30            0.00            98.60             1.40
Lite-Heavy   8,501-10,000      1.10            0.00            81.80            18.20
Lite-Heavy  10,001-14,000      0.30            0.00            66.70            33.30
Med-Heavy   14,001-33,000      1.00            0.00            20.00            80.00
Heavy-Heavy 33,001-60,000      0.80            0.00             0.00           100.00
Line Haul > 60,000    lbs      0.00            0.00             0.00           100.00
Urban Bus                      0.20            0.00            50.00            50.00
Motorcycle                     1.60           50.00            50.00             0.00
School Bus                     0.10            0.00             0.00           100.00
Motor Home                     1.50            0.00            93.30             6.70

Travel Conditions
                                   Residential                     Commercial
                          Home-      Home-      Home-
                          Work       Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0      10.3        5.5       5.5
Rural Trip Length (miles) 11.5        4.9        6.0      10.3        5.5       5.5
Trip Speeds (mph)         35.0       40.0       40.0      40.0       40.0      40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Quality resturant                                          8.0        4.0      88.0
General Retail                                             2.0        1.0      97.0
General office building                                   35.0       17.5      47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.29 to 2.359155/2.29
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/8.88 to 3.163732/8.88

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel W-1 and W-2 (County Building Option).urb
Project Name:                  Grand Avenue (Operations) - (Parcel W-1/W-2) - County Building Option
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                      DETAIL REPORT
                   (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG        NOx          CO         SO2        PM10
 Natural Gas                      0.79      10.52        6.62           0        0.02
 Hearth - No summer emissions
 Landscaping                      0.45       0.05        3.15        0.00        0.01
 Consumer Prdcts                 34.74          -           -           -           -
 Architectural Coatings          21.87          -           -           -           -
 TOTALS(lbs/day,unmitigated)     57.84      10.56        9.77        0.00        0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx          CO         SO2       PM10
Apartments high rise          2.01       1.85       15.33        0.02       3.39
Condo/townhouse high rise     9.68       9.93       82.25        0.10      18.20
Quality resturant             1.33       2.09       16.34        0.02       3.77
General Retail                5.20       8.01       62.19        0.08      14.34
General office building      11.45      12.64      101.38        0.13      23.31

TOTAL EMISSIONS (lbs/day)    29.67      34.52      277.49        0.36      63.01

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                  Acreage    Trip Rate                  Units     Trips

Apartments high rise          2.29    2.36 trips/dwelling unit   142.00    335.00
Condo/townhouse high rise     8.88    3.16 trips/dwelling unit   568.00 1,797.00
Quality resturant                    42.30 trips/1000 sq. ft.     10.00    423.00
General Retail                       31.14 trips/1000 sq. ft.     54.40 1,694.00
General office building               3.15 trips/1000 sq. ft.    681.00 2,146.12

                                              Sum of Total Trips     6,395.12
                                     Total Vehicle Miles Traveled    41,641.81

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type   Non-Catalyst     Catalyst         Diesel
Light Auto                    54.40          0.40           99.40            0.20
Light Truck < 3,750   lbs     15.30          0.70           98.00            1.30
Light Truck  3,751- 5,750     16.40          0.60           98.80            0.60
Med Truck    5,751- 8,500      7.30          0.00           98.60            1.40
Lite-Heavy   8,501-10,000      1.10          0.00           81.80           18.20
Lite-Heavy  10,001-14,000      0.30          0.00           66.70           33.30
Med-Heavy   14,001-33,000      1.00          0.00           20.00           80.00
Heavy-Heavy 33,001-60,000      0.80          0.00            0.00          100.00
Line Haul > 60,000    lbs      0.00          0.00            0.00          100.00
Urban Bus                      0.20          0.00           50.00           50.00
Motorcycle                     1.60         50.00           50.00            0.00
School Bus                     0.10          0.00            0.00          100.00
Motor Home                     1.50          0.00           93.30            6.70

Travel Conditions
                                  Residential                   Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0     10.3       5.5      5.5
Rural Trip Length (miles) 11.5       4.9       6.0     10.3       5.5      5.5
Trip Speeds (mph)         35.0      40.0      40.0     40.0      40.0     40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Quality resturant                                       8.0       4.0     88.0
General Retail                                          2.0       1.0     97.0
General office building                                35.0      17.5     47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.29 to 2.359155/2.29
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/8.88 to 3.163732/8.88

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel W-1 and W-2 (County Building Option).urb
Project Name:                 Grand Avenue (Operations) - (Parcel W-1/W-2) - County Building Option
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG       NOx        CO       SO2      PM10
 Natural Gas                      0.79     10.52      6.62         0      0.02
 Hearth - No summer emissions
 Landscaping                      0.45      0.05      3.15      0.00      0.01
 Consumer Prdcts                 34.74         -         -         -         -
 Architectural Coatings          21.87         -         -         -         -
 TOTALS(lbs/day,unmitigated)     57.84     10.56      9.77      0.00      0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG       NOx        CO       SO2      PM10
Apartments high rise          2.50      1.71     17.21      0.02      3.39
Condo/townhouse high rise    11.73      9.19     92.32      0.11     18.20
Quality resturant             1.43      1.93     18.32      0.02      3.77
General Retail                5.65      7.42     69.64      0.08     14.34
General office building      13.91     11.70    114.26      0.13     23.31

TOTAL EMISSIONS (lbs/day)    35.23     31.95    311.76      0.36     63.01

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.     Total
Unit Type                  Acreage    Trip Rate                Units    Trips

Apartments high rise         2.29     2.36 trips/dwelling unit   142.00   335.00
Condo/townhouse high rise    8.88     3.16 trips/dwelling unit   568.00 1,797.00
Quality resturant                    42.30 trips/1000 sq. ft.     10.00   423.00
General Retail                       31.14 trips/1000 sq. ft.     54.40 1,694.00
General office building               3.15 trips/1000 sq. ft.    681.00 2,146.12

                                               Sum of Total Trips     6,395.12
                                      Total Vehicle Miles Traveled   41,641.81

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                     54.40           0.40            99.40            0.20
Light Truck < 3,750   lbs      15.30           0.70            98.00            1.30
Light Truck  3,751- 5,750      16.40           0.60            98.80            0.60
Med Truck    5,751- 8,500       7.30           0.00            98.60            1.40
Lite-Heavy   8,501-10,000       1.10           0.00            81.80           18.20
Lite-Heavy  10,001-14,000       0.30           0.00            66.70           33.30
Med-Heavy   14,001-33,000       1.00           0.00            20.00           80.00
Heavy-Heavy 33,001-60,000       0.80           0.00             0.00          100.00
Line Haul > 60,000    lbs       0.00           0.00             0.00          100.00
Urban Bus                       0.20           0.00            50.00           50.00
Motorcycle                      1.60          50.00            50.00            0.00
School Bus                      0.10           0.00             0.00          100.00
Motor Home                      1.50           0.00            93.30            6.70

Travel Conditions
                                    Residential                   Commercial
                           Home-      Home-      Home-
                           Work       Shop       Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5        4.9        6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0       40.0       40.0      40.0      40.0      40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Quality resturant                                          8.0       4.0      88.0
General Retail                                             2.0       1.0      97.0
General office building                                   35.0      17.5      47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.29 to 2.359155/2.29
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/8.88 to 3.163732/8.88

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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              URBEMIS 2002 For Windows   8.7.0

File Name:                        V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel W-1 and W-2 (Residential Option).urb
Project Name:                     Grand Avenue (Operations) - (Parcel W-1/W-2) - Residential Option
Project Location:                 South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                       DETAIL REPORT
                    (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                          ROG       NOx        CO       SO2      PM10
 Natural Gas                       0.81     10.50      4.73         0      0.02
 Hearth                            0.42      7.24      3.08      0.05      0.59
 Landscaping - No winter emissions
 Consumer Prdcts                  64.09         -         -         -         -
 Architectural Coatings           21.97         -         -         -         -
 TOTALS(lbs/day,unmitigated)      87.29     17.75      7.81      0.05      0.61

                 UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG       NOx        CO       SO2      PM10
Apartments high rise            3.02      3.97     29.36      0.03      6.27
Condo/townhouse high rise      15.05     20.36    150.49      0.17     32.13
Quality resturant               1.52      2.42     17.15      0.02      3.77
General Retail                  5.86      9.29     65.60      0.07     14.34

TOTAL EMISSIONS (lbs/day)      25.44     36.04    262.60      0.30     56.51

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.     Total
Unit Type                 Acreage    Trip Rate                  Units    Trips

Apartments high rise         4.23     2.36 trips/dwelling unit   262.00   619.00
Condo/townhouse high rise   16.38     3.03 trips/dwelling unit 1,048.00 3,173.00
Quality resturant                    42.30 trips/1000 sq. ft.     10.00   423.00
General Retail                       31.14 trips/1000 sq. ft.     54.40 1,694.00

                                              Sum of Total Trips     5,909.00
                                       Total Vehicle Miles Traveled   37,338.93

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst      Catalyst        Diesel
Light Auto                   54.40            0.40           99.40            0.20
Light Truck < 3,750   lbs    15.30            0.70           98.00            1.30
Light Truck  3,751- 5,750    16.40            0.60           98.80            0.60
Med Truck    5,751- 8,500     7.30            0.00           98.60            1.40
Lite-Heavy   8,501-10,000     1.10            0.00           81.80           18.20
Lite-Heavy  10,001-14,000     0.30            0.00           66.70           33.30
Med-Heavy   14,001-33,000     1.00            0.00           20.00           80.00
Heavy-Heavy 33,001-60,000     0.80            0.00            0.00          100.00
Line Haul > 60,000    lbs     0.00            0.00            0.00          100.00
Urban Bus                     0.20            0.00           50.00           50.00
Motorcycle                    1.60           50.00           50.00            0.00
School Bus                    0.10            0.00            0.00          100.00
Motor Home                    1.50            0.00           93.30            6.70

Travel Conditions
                                    Residential                Commercial
                             Home-     Home-     Home-
                             Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles)  11.5       4.9       6.0      10.3       5.5      5.5
Rural Trip Length (miles)  11.5       4.9       6.0      10.3       5.5      5.5
Trip Speeds (mph)          35.0      40.0      40.0      40.0      40.0     40.0
% of Trips - Residential   20.0      37.0      43.0

% of Trips - Commercial (by land use)
Quality resturant                                         8.0       4.0     88.0
General Retail                                            2.0       1.0     97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/4.23 to 2.362595/4.23
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/16.38 to 3.027672/16.38

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel W-1 and W-2 (Residential Option).urb
Project Name:                   Grand Avenue (Operations) - (Parcel W-1/W-2) - Residential Option
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                          DETAIL REPORT
                      (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.81      10.50       4.73          0       0.02
 Hearth - No summer emissions
 Landscaping                       0.36       0.04       2.52       0.00       0.01
 Consumer Prdcts                  64.09          -          -          -          -
 Architectural Coatings           21.97          -          -          -          -
 TOTALS(lbs/day,unmitigated)      87.23      10.54       7.25       0.00       0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx         CO        SO2       PM10
Apartments high rise           3.70       3.42      28.33       0.04       6.27
Condo/townhouse high rise     17.34      17.53     145.23       0.18      32.13
Quality resturant              1.33       2.09      16.34       0.02       3.77
General Retail                 5.20       8.01      62.19       0.08      14.34

TOTAL EMISSIONS (lbs/day)     27.58      31.05     252.09       0.32      56.51

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.      Total
Unit Type                 Acreage    Trip Rate                  Units     Trips

Apartments high rise         4.23    2.36 trips/dwelling unit    262.00    619.00
Condo/townhouse high rise   16.38    3.03 trips/dwelling unit 1,048.00 3,173.00
Quality resturant                   42.30 trips/1000 sq. ft.      10.00    423.00
General Retail                      31.14 trips/1000 sq. ft.      54.40 1,694.00

                                               Sum of Total Trips      5,909.00
                                      Total Vehicle Miles Traveled    37,338.93

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                    54.40           0.40           99.40             0.20
Light Truck < 3,750    lbs    15.30           0.70           98.00             1.30
Light Truck  3,751- 5,750     16.40           0.60           98.80             0.60
Med Truck    5,751- 8,500      7.30           0.00           98.60             1.40
Lite-Heavy   8,501-10,000      1.10           0.00           81.80            18.20
Lite-Heavy  10,001-14,000      0.30           0.00           66.70            33.30
Med-Heavy   14,001-33,000      1.00           0.00           20.00            80.00
Heavy-Heavy 33,001-60,000      0.80           0.00            0.00           100.00
Line Haul > 60,000     lbs     0.00           0.00            0.00           100.00
Urban Bus                      0.20           0.00           50.00            50.00
Motorcycle                     1.60          50.00           50.00             0.00
School Bus                     0.10           0.00            0.00           100.00
Motor Home                     1.50           0.00           93.30             6.70

Travel Conditions
                                     Residential                  Commercial
                             Home-       Home-       Home-
                             Work        Shop        Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5         4.9         6.0       10.3       5.5       5.5
Rural Trip Length (miles) 11.5         4.9         6.0       10.3       5.5       5.5
Trip Speeds (mph)         35.0        40.0        40.0       40.0      40.0      40.0
% of Trips - Residential  20.0        37.0        43.0

% of Trips - Commercial (by land use)
Quality resturant                                             8.0       4.0      88.0
General Retail                                                2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/4.23 to 2.362595/4.23
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/16.38 to 3.027672/16.38

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel W-1 and W-2 (Residential Option).urb
Project Name:                   Grand Avenue (Operations) - (Parcel W-1/W-2) - Residential Option
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG       NOx        CO       SO2      PM10
 Natural Gas                      0.81     10.50      4.73         0      0.02
 Hearth - No summer emissions
 Landscaping                      0.36      0.04      2.52      0.00      0.01
 Consumer Prdcts                 64.09         -         -         -         -
 Architectural Coatings          21.97         -         -         -         -
 TOTALS(lbs/day,unmitigated)     87.23     10.54      7.25      0.00      0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG       NOx        CO       SO2      PM10
Apartments high rise            4.61      3.16     31.80      0.04      6.27
Condo/townhouse high rise      21.11     16.22    163.02      0.19     32.13
Quality resturant               1.43      1.93     18.32      0.02      3.77
General Retail                  5.65      7.42     69.64      0.08     14.34

TOTAL EMISSIONS (lbs/day)      32.80     28.74    282.78      0.33     56.51

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                 Acreage    Trip Rate                    Units    Trips

Apartments high rise         4.23    2.36 trips/dwelling unit    262.00   619.00
Condo/townhouse high rise   16.38    3.03 trips/dwelling unit  1,048.00 3,173.00
Quality resturant                   42.30 trips/1000 sq. ft.      10.00   423.00
General Retail                      31.14 trips/1000 sq. ft.      54.40 1,694.00

                                                 Sum of Total Trips     5,909.00
                                       Total Vehicle Miles Traveled    37,338.93

Vehicle Assumptions:

Fleet Mix:

Vehicle Type             Percent Type    Non-Catalyst     Catalyst         Diesel
Light Auto                  54.40            0.40            99.40           0.20
Light Truck < 3,750   lbs   15.30            0.70            98.00           1.30
Light Truck  3,751- 5,750   16.40            0.60            98.80           0.60
Med Truck    5,751- 8,500    7.30            0.00            98.60           1.40
Lite-Heavy   8,501-10,000    1.10            0.00            81.80          18.20
Lite-Heavy  10,001-14,000    0.30            0.00            66.70          33.30
Med-Heavy   14,001-33,000    1.00            0.00            20.00          80.00
Heavy-Heavy 33,001-60,000    0.80            0.00             0.00         100.00
Line Haul > 60,000    lbs    0.00            0.00             0.00         100.00
Urban Bus                    0.20            0.00            50.00          50.00
Motorcycle                   1.60           50.00            50.00           0.00
School Bus                   0.10            0.00             0.00         100.00
Motor Home                   1.50            0.00            93.30           6.70

Travel Conditions
                                 Residential                  Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Quality resturant                                        8.0       4.0      88.0
General Retail                                           2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/4.23 to 2.362595/4.23
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/16.38 to 3.027672/16.38

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
```

Grand Avenue (Phase 1&2 Buildout - Year 2013)
Concurrent Construction/Operations

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Parcel Q					
Mobile	705	86	94	67	<1
Area	12	12	<1	39	<1
Parcel L/M-2					
Mobile	388	47	52	40	<1
Area	6	12	<1	57	<1
Electricity Generation					
Total Stationary (Electricity)	10	56	2	<1	6
Net Project					
Net Mobile	1,093	133	146	107	<1
Net Stationary	27	80	3	97	6
Total Project (Operations)	1,121	214	149	205	7
Net Construction					
On-site	336	250	124	40	<1
Off-site	39	154	4	8	<1
Total Project (Construction)	375	404	127	48	<1
Total Net	1,496	618	276	253	7
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**946**	**563**	**126**	**198**	**(143)**
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	**No**

Grand Avenue (Phase 1&2 Buildout - Year 2013) Concurrent Construction/Operations

Electricity Usage

Electricity Usage

		Electricity			**Emission Factors (lbs/MWh)** [b]				
		Usage Rate [a]	**Total Electricity Usage**		**CO**	**ROC**	**NOx**	**PM10**	**SOx**
Land Use	**1,000 Sqft**	**(kWh\sq.ft\yr)**	**(KWh\year)**	**(MWh\Day)**	**0.2**	**0.01**	**1.15**	**0.04**	**0.12**
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	170.9	13.55	2,315,018	6.343	1.269	0.063	7.294	0.254	0.761
Hotel/Motel	168.8	9.95	1,679,063	4.600	0.920	0.046	5.290	0.184	0.552
Restaurant	57.0	47.45	2,704,650	7.410	1.482	0.074	8.522	0.296	0.889
Food Store	53.0	53.3	2,824,900	7.739	1.548	0.077	8.900	0.310	0.929
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Cinema/Health Club	62.5	10.5	656,250	1.798	0.360	0.018	2.068	0.072	0.216
Residential (DU)	1350.0	5,627	7,595,775	20.810	4.162	0.208	23.932	0.832	2.497
Total Project			**17,775,655**	**48.700**	**9.74**	**0.49**	**56.01**	**1.95**	**5.84**
Net Emissions From Electricity Usage					**9.74**	**0.49**	**56.01**	**1.95**	**5.84**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Project Emissions (lbs/day)	9.74	0.49	56.01	1.95	5.84
Total Net Emissions (lbs/day)	**9.74**	**0.49**	**56.01**	**1.95**	**5.84**

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[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

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File Name:                       V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel Q (2013).urb
Project Name:                    Grand Avenue (Operations) - Parcel Q Year 2013
Project Location:                South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                      (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                          ROG        NOx        CO        SO2       PM10
 Natural Gas                        0.72       9.65       6.54       0        0.02
 Hearth                             0.16       2.76       1.18      0.02      0.22
 Landscaping - No winter emissions
 Consumer Prdcts                   24.46        -          -         -          -
 Architectural Coatings            13.37        -          -         -          -
 TOTALS(lbs/day,unmitigated)       38.71      12.41       7.72      0.02      0.24

                  UNMITIGATED OPERATIONAL EMISSIONS

                                   ROG        NOx        CO        SO2       PM10
Apartments high rise               1.73       2.50      18.21      0.01       2.39
Condo/townhouse high rise          9.39      13.96     101.57      0.07      13.35
Cinema/Event                       2.28       3.14      21.96      0.02       2.95
Health club                        3.16       5.21      36.47      0.03       4.90
Quality resturant                  9.96      16.82     117.75      0.08      15.84
Hotel                              8.21      13.14      91.99      0.06      12.35
Strip mall                        15.61      26.17     183.04      0.13      24.52
Supermarket                       11.37      19.11     133.67      0.09      17.91

TOTAL EMISSIONS (lbs/day)         61.72     100.06     704.67      0.49      94.21

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:
                                                                  No.      Total
Unit Type                  Acreage     Trip Rate                 Units     Trips
Apartments high rise         1.61     2.36 trips/dwelling unit  100.00    236.00
Condo/townhouse high rise    6.25     3.29 trips/dwelling unit  400.00 1,316.00
Cinema/Event                          1.36 trips/Seats          250.00    339.00
Health club                          11.26 trips/1000 sq. ft.    50.00    563.00
Quality resturant                    42.31 trips/1000 sq. ft.    42.00 1,777.00
Hotel                                 5.16 trips/rooms          275.00 1,420.00
Strip mall                           29.59 trips/1000 sq. ft.    97.75 2,892.00
Supermarket                          39.85 trips/1000 sq. ft.    53.00 2,112.00

                                             Sum of Total Trips     10,655.00
                                     Total Vehicle Miles Traveled   62,170.19
Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst     Catalyst        Diesel
Light Auto                    54.70           1.10            98.70           0.20
Light Truck < 3,750   lbs     15.20           2.00            96.00           2.00
Light Truck  3,751- 5,750     16.20           1.20            98.10           0.70
Med Truck    5,751- 8,500      7.30           1.40            95.90           2.70
Lite-Heavy   8,501-10,000      1.10           0.00            81.80          18.20
Lite-Heavy  10,001-14,000      0.30           0.00            66.70          33.30
Med-Heavy   14,001-33,000      1.00           0.00            20.00          80.00
Heavy-Heavy 33,001-60,000      0.90           0.00            11.10          88.90
Line Haul > 60,000    lbs      0.00           0.00             0.00         100.00
Urban Bus                      0.20           0.00            50.00          50.00
Motorcycle                     1.60          68.80            31.20           0.00
School Bus                     0.10           0.00             0.00         100.00
Motor Home                     1.40           7.10            85.70           7.20

Travel Conditions
                                     Residential                  Commercial
                           Home-     Home-     Home-
                           Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3      5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3      5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0     40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Cinema/Event                                             5.0      2.5      92.5
Health club                                              5.0      2.5      92.5
Quality resturant                                        8.0      4.0      88.0
Hotel                                                    5.0      2.5      92.5
Strip mall                                               2.0      1.0      97.0
Supermarket                                              2.0      1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/1.61 to 2.36/1.61
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.25 to 3.29/6.25

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel Q (2013).urb
Project Name:                  Grand Avenue (Operations) - Parcel Q Year 2013
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.72       9.65       6.54          0       0.02
 Hearth - No summer emissions
 Landscaping                       0.72       0.08       5.05       0.00       0.01
 Consumer Prdcts                  24.46          -          -          -          -
 Architectural Coatings           13.37          -          -          -          -
 TOTALS(lbs/day,unmitigated)      39.27       9.72      11.59       0.00       0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx         CO        SO2       PM10
Apartments high rise           2.03       2.15      17.32       0.01       2.39
Condo/townhouse high rise     10.23      12.01      96.60       0.08      13.35
Cinema/Event                   3.32       2.70      20.59       0.02       2.95
Health club                    2.94       4.49      34.19       0.03       4.90
Quality resturant              8.63      14.49     110.63       0.09      15.84
Hotel                          8.46      11.32      86.23       0.07      12.35
Strip mall                    13.68      22.55     171.18       0.14      24.52
Supermarket                    9.86      16.47     125.01       0.10      17.91

TOTAL EMISSIONS (lbs/day)     59.14      86.19     661.75       0.53      94.21

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:
                                                                 No.      Total
Unit Type                  Acreage     Trip Rate                Units     Trips
Apartments high rise          1.61     2.36 trips/dwelling unit   100.00    236.00
Condo/townhouse high rise     6.25     3.29 trips/dwelling unit   400.00 1,316.00
Cinema/Event                           1.36 trips/Seats           250.00    339.00
Health club                           11.26 trips/1000 sq. ft.     50.00    563.00
Quality resturant                     42.31 trips/1000 sq. ft.     42.00 1,777.00
Hotel                                  5.16 trips/rooms           275.00 1,420.00
Strip mall                            29.59 trips/1000 sq. ft.     97.75 2,892.00
Supermarket                           39.85 trips/1000 sq. ft.     53.00 2,112.00

                                              Sum of Total Trips     10,655.00
                                     Total Vehicle Miles Traveled    62,170.19
Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst          Diesel
Light Auto                     54.70           1.10            98.70             0.20
Light Truck < 3,750    lbs     15.20           2.00            96.00             2.00
Light Truck  3,751- 5,750      16.20           1.20            98.10             0.70
Med Truck    5,751- 8,500       7.30           1.40            95.90             2.70
Lite-Heavy   8,501-10,000       1.10           0.00            81.80            18.20
Lite-Heavy  10,001-14,000       0.30           0.00            66.70            33.30
Med-Heavy   14,001-33,000       1.00           0.00            20.00            80.00
Heavy-Heavy 33,001-60,000       0.90           0.00            11.10            88.90
Line Haul > 60,000     lbs      0.00           0.00             0.00           100.00
Urban Bus                       0.20           0.00            50.00            50.00
Motorcycle                      1.60          68.80            31.20             0.00
School Bus                      0.10           0.00             0.00           100.00
Motor Home                      1.40           7.10            85.70             7.20

Travel Conditions
                                   Residential                  Commercial
                           Home-     Home-     Home-
                           Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles)  11.5       4.9       6.0       10.3       5.5       5.5
Rural Trip Length (miles)  11.5       4.9       6.0       10.3       5.5       5.5
Trip Speeds (mph)          35.0      40.0      40.0       40.0      40.0      40.0
% of Trips - Residential   20.0      37.0      43.0

% of Trips - Commercial (by land use)
Cinema/Event                                              5.0       2.5      92.5
Health club                                               5.0       2.5      92.5
Quality resturant                                         8.0       4.0      88.0
Hotel                                                     5.0       2.5      92.5
Strip mall                                                2.0       1.0      97.0
Supermarket                                               2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/1.61 to 2.36/1.61
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.25 to 3.29/6.25

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel Q (2013).urb
Project Name:                   Grand Avenue (Operations) - Parcel Q Year 2013
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG       NOx        CO       SO2      PM10
 Natural Gas                       0.72      9.65      6.54         0      0.02
 Hearth - No summer emissions
 Landscaping                       0.72      0.08      5.05      0.00      0.01
 Consumer Prdcts                  24.46         -         -         -         -
 Architectural Coatings           13.37         -         -         -         -
 TOTALS(lbs/day,unmitigated)      39.27      9.72     11.59      0.00      0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG        NOx        CO       SO2      PM10
Apartments high rise            2.51       1.99     19.56      0.01      2.39
Condo/townhouse high rise      12.25      11.09    109.08      0.08     13.35
Cinema/Event                    4.43       2.50     23.21      0.02      2.95
Health club                     3.29       4.15     38.54      0.03      4.90
Quality resturant               9.30      13.38    124.79      0.09     15.84
Hotel                           9.96      10.46     97.20      0.07     12.35
Strip mall                     14.86      20.83    192.83      0.14     24.52
Supermarket                    10.65      15.21    140.82      0.10     17.91

TOTAL EMISSIONS (lbs/day)      67.24      79.60    746.04      0.54     94.21

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:
                                                                  No.     Total
Unit Type                 Acreage    Trip Rate                   Units     Trips
Apartments high rise         1.61    2.36 trips/dwelling unit     100.00   236.00
Condo/townhouse high rise    6.25    3.29 trips/dwelling unit     400.00 1,316.00
Cinema/Event                         1.36 trips/Seats             250.00   339.00
Health club                         11.26 trips/1000 sq. ft.       50.00   563.00
Quality resturant                   42.31 trips/1000 sq. ft.       42.00 1,777.00
Hotel                                5.16 trips/rooms             275.00 1,420.00
Strip mall                          29.59 trips/1000 sq. ft.       97.75 2,892.00
Supermarket                         39.85 trips/1000 sq. ft.       53.00 2,112.00

                                                 Sum of Total Trips     10,655.00
                                       Total Vehicle Miles Traveled     62,170.19
Vehicle Assumptions:

Fleet Mix:

Vehicle Type             Percent Type    Non-Catalyst     Catalyst         Diesel
Light Auto                  54.70            1.10           98.70            0.20
Light Truck < 3,750   lbs   15.20            2.00           96.00            2.00
Light Truck  3,751- 5,750   16.20            1.20           98.10            0.70
Med Truck    5,751- 8,500    7.30            1.40           95.90            2.70
Lite-Heavy   8,501-10,000    1.10            0.00           81.80           18.20
Lite-Heavy  10,001-14,000    0.30            0.00           66.70           33.30
Med-Heavy   14,001-33,000    1.00            0.00           20.00           80.00
Heavy-Heavy 33,001-60,000    0.90            0.00           11.10           88.90
Line Haul > 60,000    lbs    0.00            0.00            0.00          100.00
Urban Bus                    0.20            0.00           50.00           50.00
Motorcycle                   1.60           68.80           31.20            0.00
School Bus                   0.10            0.00            0.00          100.00
Motor Home                   1.40            7.10           85.70            7.20

Travel Conditions
                                 Residential                  Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0     10.3        5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0     10.3        5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0     40.0       40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Cinema/Event                                            5.0        2.5      92.5
Health club                                             5.0        2.5      92.5
Quality resturant                                       8.0        4.0      88.0
Hotel                                                   5.0        2.5      92.5
Strip mall                                              2.0        1.0      97.0
Supermarket                                             2.0        1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/1.61 to 2.36/1.61
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.25 to 3.29/6.25

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
```

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              URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel L and M-2 (2013).urb
Project Name:                  Grand Avenue (Operations) - Parcel L/M-2 Year 2013
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                      (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                          ROG        NOx        CO        SO2       PM10
 Natural Gas                        0.56       7.26      3.44        0        0.01
 Hearth                             0.28       4.70      2.00      0.03       0.38
 Landscaping - No winter emissions
 Consumer Prdcts                   41.58        -          -          -         -
 Architectural Coatings            14.90        -          -          -         -
 TOTALS(lbs/day,unmitigated)       57.32      11.96      5.44      0.03       0.39

                    UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx        CO        SO2       PM10
Apartments high rise            2.95       4.26      31.03      0.02      4.08
Condo/townhouse high rise      15.18      22.47     163.47      0.12     21.48
Quality resturant               3.55       6.00      42.01      0.03      5.65
General Retail                 12.92      21.67     151.59      0.11     20.31

TOTAL EMISSIONS (lbs/day)      34.60      54.41     388.09      0.27     51.52

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                              No.      Total
Unit Type                Acreage   Trip Rate                  Units    Trips

Apartments high rise       2.74    2.36 trips/dwelling unit   170.00    402.00
Condo/townhouse high rise 10.63    3.11 trips/dwelling unit   680.00 2,118.00
Quality resturant                 42.27 trips/1000 sq. ft.     15.00    634.00
General Retail                    32.76 trips/1000 sq. ft.     73.10 2,395.00

                                          Sum of Total Trips       5,549.00
                                   Total Vehicle Miles Traveled   33,992.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst     Catalyst       Diesel
Light Auto                   54.70            1.10           98.70          0.20
Light Truck < 3,750   lbs    15.20            2.00           96.00          2.00
Light Truck  3,751- 5,750    16.20            1.20           98.10          0.70
Med Truck     5,751- 8,500    7.30            1.40           95.90          2.70
Lite-Heavy   8,501-10,000     1.10            0.00           81.80         18.20
Lite-Heavy  10,001-14,000     0.30            0.00           66.70         33.30
Med-Heavy   14,001-33,000     1.00            0.00           20.00         80.00
Heavy-Heavy 33,001-60,000     0.90            0.00           11.10         88.90
Line Haul > 60,000    lbs     0.00            0.00            0.00        100.00
Urban Bus                     0.20            0.00           50.00         50.00
Motorcycle                    1.60           68.80           31.20          0.00
School Bus                    0.10            0.00            0.00        100.00
Motor Home                    1.40            7.10           85.70          7.20

Travel Conditions
                                   Residential                 Commercial
                             Home-    Home-     Home-
                             Work     Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5        4.9       6.0       10.3      5.5      5.5
Rural Trip Length (miles) 11.5        4.9       6.0       10.3      5.5      5.5
Trip Speeds (mph)         35.0       40.0      40.0       40.0     40.0     40.0
% of Trips - Residential  20.0       37.0      43.0

% of Trips - Commercial (by land use)
Quality resturant                                          8.0      4.0     88.0
General Retail                                             2.0      1.0     97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.74 to 2.364706/2.74
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/10.63 to 3.114706/10.63

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel L and M-2 (2013).urb
Project Name:                   Grand Avenue (Operations) - Parcel L/M-2 Year 2013
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG       NOx        CO       SO2      PM10
 Natural Gas                      0.56      7.26      3.44         0      0.01
 Hearth - No summer emissions
 Landscaping                      0.36      0.04      2.52      0.00      0.01
 Consumer Prdcts                 41.58         -         -         -         -
 Architectural Coatings          14.90         -         -         -         -
 TOTALS(lbs/day,unmitigated)     57.41      7.30      5.97      0.00      0.02

                 UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG       NOx        CO       SO2      PM10
Apartments high rise            3.46      3.67     29.51      0.02      4.08
Condo/townhouse high rise      16.72     19.33    155.47      0.12     21.48
Quality resturant               3.08      5.17     39.47      0.03      5.65
General Retail                 11.27     18.68    141.76      0.11     20.31

TOTAL EMISSIONS (lbs/day)      34.53     46.84    366.21      0.29     51.52

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                Acreage    Trip Rate                     Units    Trips

Apartments high rise        2.74    2.36 trips/dwelling unit     170.00   402.00
Condo/townhouse high rise  10.63    3.11 trips/dwelling unit     680.00 2,118.00
Quality resturant                  42.27 trips/1000 sq. ft.       15.00   634.00
General Retail                     32.76 trips/1000 sq. ft.       73.10 2,395.00

                                                Sum of Total Trips      5,549.00
                                      Total Vehicle Miles Traveled     33,992.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type            Percent Type    Non-Catalyst     Catalyst          Diesel
Light Auto                  54.70            1.10           98.70            0.20
Light Truck < 3,750   lbs   15.20            2.00           96.00            2.00
Light Truck  3,751- 5,750   16.20            1.20           98.10            0.70
Med Truck    5,751- 8,500    7.30            1.40           95.90            2.70
Lite-Heavy   8,501-10,000    1.10            0.00           81.80           18.20
Lite-Heavy  10,001-14,000    0.30            0.00           66.70           33.30
Med-Heavy   14,001-33,000    1.00            0.00           20.00           80.00
Heavy-Heavy 33,001-60,000    0.90            0.00           11.10           88.90
Line Haul > 60,000    lbs    0.00            0.00            0.00          100.00
Urban Bus                    0.20            0.00           50.00           50.00
Motorcycle                   1.60           68.80           31.20            0.00
School Bus                   0.10            0.00            0.00          100.00
Motor Home                   1.40            7.10           85.70            7.20

Travel Conditions
                                Residential                  Commercial
                          Home-    Home-     Home-
                          Work     Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles) 11.5      4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5      4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0     40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0     37.0      43.0

% of Trips - Commercial (by land use)
Quality resturant                                       8.0       4.0      88.0
General Retail                                          2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.74 to 2.364706/2.74
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/10.63 to 3.114706/10.63

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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01/10/2006 12:30 PM

              URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Operations\Operations - Parcel L and M-2 (2013).urb
Project Name:                  Grand Avenue (Operations) - Parcel L/M-2 Year 2013
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                       (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx         CO        SO2       PM10
 Natural Gas                      0.56       7.26       3.44         0       0.01
 Hearth - No summer emissions
 Landscaping                      0.36       0.04       2.52       0.00       0.01
 Consumer Prdcts                 41.58          -          -          -          -
 Architectural Coatings          14.90          -          -          -          -
 TOTALS(lbs/day,unmitigated)     57.41       7.30       5.97       0.00       0.02

                 UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx         CO        SO2       PM10
Apartments high rise          4.27       3.39      33.32       0.02       4.08
Condo/townhouse high rise    20.12      17.85     175.55       0.12      21.48
Quality resturant             3.32       4.77      44.52       0.03       5.65
General Retail               12.22      17.25     159.69       0.12      20.31

TOTAL EMISSIONS (lbs/day)    39.93      43.26     413.09       0.30      51.52

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                     No.     Total
Unit Type                  Acreage    Trip Rate                      Units    Trips

Apartments high rise          2.74    2.36 trips/dwelling unit     170.00   402.00
Condo/townhouse high rise    10.63    3.11 trips/dwelling unit     680.00 2,118.00
Quality resturant                    42.27 trips/1000 sq. ft.       15.00   634.00
General Retail                       32.76 trips/1000 sq. ft.       73.10 2,395.00

                                           Sum of Total Trips      5,549.00
                                    Total Vehicle Miles Traveled    33,992.94

Vehicle Assumptions:

Fleet Mix:

Vehicle Type                Percent Type     Non-Catalyst       Catalyst          Diesel
Light Auto                     54.70             1.10            98.70              0.20
Light Truck < 3,750   lbs      15.20             2.00            96.00              2.00
Light Truck  3,751- 5,750      16.20             1.20            98.10              0.70
Med Truck    5,751- 8,500       7.30             1.40            95.90              2.70
Lite-Heavy   8,501-10,000       1.10             0.00            81.80             18.20
Lite-Heavy  10,001-14,000       0.30             0.00            66.70             33.30
Med-Heavy   14,001-33,000       1.00             0.00            20.00             80.00
Heavy-Heavy 33,001-60,000       0.90             0.00            11.10             88.90
Line Haul > 60,000    lbs       0.00             0.00             0.00            100.00
Urban Bus                       0.20             0.00            50.00             50.00
Motorcycle                      1.60            68.80            31.20              0.00
School Bus                      0.10             0.00             0.00            100.00
Motor Home                      1.40             7.10            85.70              7.20

Travel Conditions
                                     Residential                   Commercial
                             Home-      Home-      Home-
                             Work       Shop       Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0       10.3       5.5       5.5
Rural Trip Length (miles) 11.5        4.9        6.0       10.3       5.5       5.5
Trip Speeds (mph)         35.0       40.0       40.0       40.0      40.0      40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
Quality resturant                                           8.0       4.0      88.0
General Retail                                              2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.74 to 2.364706/2.74
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/10.63 to 3.114706/10.63

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2010.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
```

Grand Avenue
CO Hotspot Selection
LOS Analysis

		Future NP AM		Future WP AM		AM			Future NP PM		Future WP PM		PM		
No.	Intersection	V/C	LOS	V/C	LOS	V/C Increase %	LOS >=C?	Analyze?	V/C	LOS	V/C	LOS	V/C Increase %	LOS >=C?	Analyze?
1	Figueroa St. / 3rd St.	0.826	D	0.836	D	1.2%	Yes	No	0.957	E	0.975	E	1.9%	Yes	No
2	Figueroa St. / 5th St.	0.481	A	0.487	A	1.2%	No	No	0.771	C	0.784	C	1.7%	Yes	No
3	Figueroa St. / 6th St.	0.620	B	0.625	B	0.8%	No	No	0.648	B	0.656	B	1.2%	No	No
4	I-110 Off Ramp / Temple St.	0.397	A	0.399	A	0.5%	No	No	0.402	A	0.406	A	1.0%	No	No
5	Hope St. / Temple St. / US-101 Ramps	0.885	D	0.903	E	2.0%	Yes	Yes	0.948	E	0.987	E	4.1%	Yes	Yes
6	Hope St. / 1st St.	0.925	E	0.934	E	1.0%	Yes	No	0.728	C	0.822	D	12.9%	Yes	Yes
7	Hope St. / GTK Way / 2nd Place	0.420	A	0.451	A	7.4%	No	No	0.776	C	0.841	D	8.4%	Yes	Yes
8	Flower St. / 3rd St.	0.670	B	0.678	B	1.2%	No	No	0.532	A	0.553	A	3.9%	No	No
9	Flower St. / 5th St.	0.437	A	0.445	A	1.8%	No	No	0.507	A	0.522	A	3.0%	No	No
10	Flower St. / 6th St.	0.524	A	0.535	A	2.1%	No	No	0.491	A	0.507	A	3.3%	No	No
11	Grand Ave. / US-101 Ramps / I-110 Ramps	0.677	B	0.705	C	4.1%	Yes	Yes	0.970	E	1.064	F	9.7%	Yes	Yes
12	Grand Ave. / Temple St.	0.906	E	0.902	E	-0.4%	Yes	No	0.827	D	0.872	D	5.4%	Yes	Yes
13	Grand Ave. / 1st St.	0.787	C	0.812	D	3.2%	Yes	Yes	0.825	D	0.883	D	7.0%	Yes	Yes
14	Grand Ave. / Upper 2nd St.	0.536	A	0.657	B	22.6%	No	No	0.502	A	0.693	B	38.0%	No	No
15	Grand Ave. / 5th St.	0.485	A	0.500	A	3.1%	No	No	0.547	A	0.576	A	5.3%	No	No
16	Olive St. / 1st St.	0.515	A	0.586	A	13.8%	No	No	0.616	B	0.769	C	24.8%	Yes	Yes
17	Olive St. / 2nd St.	0.279	A	0.346	A	24.0%	No	No	0.384	A	0.561	A	46.1%	No	No
18	Olive St. / 4th St.	0.405	A	0.457	A	12.8%	No	No	0.641	B	0.726	C	13.3%	Yes	Yes
19	Olive St. / 5th St.	0.615	B	0.644	B	4.7%	No	No	0.744	C	0.784	C	5.4%	Yes	Yes
20	Olive St. / 6th St.	0.395	A	0.412	A	4.3%	No	No	0.483	A	0.509	A	5.4%	No	No
21	Hill St. / Temple St.	0.743	C	0.795	C	7.0%	Yes	Yes	0.918	E	0.926	E	0.9%	Yes	No
22	Hill St. / 1st St.	0.730	C	0.748	C	2.5%	Yes	Yes	0.879	D	0.913	E	3.9%	Yes	Yes
23	Hill St. / 2nd St.	0.723	C	0.748	C	3.5%	Yes	Yes	0.649	B	0.795	C	22.5%	Yes	Yes
24	Hill St. / 3rd St.	0.937	E	0.960	E	2.5%	Yes	Yes	0.961	E	1.029	F	7.1%	Yes	Yes
25	Hill St. / 4th St.	0.516	A	0.538	A	4.3%	No	No	0.670	B	0.746	C	11.3%	Yes	Yes
26	Hill St. / 6th St.	0.457	A	0.465	A	1.8%	No	No	0.586	A	0.606	B	3.4%	No	No
27	Broadway / Temple St.	0.845	D	0.873	D	3.3%	Yes	Yes	0.828	D	0.859	D	3.7%	Yes	Yes
28	Broadway / 1st St.	0.806	D	0.879	D	9.1%	Yes	Yes	0.828	D	0.922	E	11.4%	Yes	Yes
29	Broadway / 2nd St.	0.598	A	0.602	B	0.7%	No	No	0.705	C	0.744	C	5.5%	Yes	Yes
30	Broadway / 4th St.	0.471	A	0.486	A	3.2%	No	No	0.619	B	0.648	B	4.7%	No	No
31	Spring St. / 1st St.	0.582	A	0.599	A	2.9%	No	No	0.572	A	0.607	B	6.1%	No	No
32	Spring St. / 2nd St.	0.600	A	0.603	B	0.5%	No	No	0.501	A	0.509	A	1.6%	No	No

CO Hotspot Analysis Criteria
(Must meet both conditions)
1. V/C Increase >=2%
2. LOS >= C

Grand Avenue (1 of 4)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	1-Hr Concentration
2015	5.1

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
GRAND AVENUE AND 110/101 RAMPS AM					
NE	0.8	5.9	0.8	5.9	NO
SE	0.8	5.9	0.8	5.9	NO
SW	1.1	6.2	1.1	6.2	NO
NW	1.0	6.1	1.0	6.1	NO
GRAND AVENUE AND 110/101 RAMPS PM					
NE	0.9	6.0	1.0	6.1	NO
SE	1.0	6.1	1.0	6.1	NO
SW	0.9	6.0	0.8	5.9	NO
NW	1.0	6.1	1.1	6.2	NO
GRAND AVENUE AND TEMPLE STREET AM					
NE	1.2	6.3	1.2	6.3	NO
SE	1.3	6.4	1.3	6.4	NO
SW	1.5	6.6	1.5	6.6	NO
NW	1.6	6.7	1.6	6.7	NO
GRAND AVENUE AND TEMPLE STREET PM					
NE	1.5	6.6	1.6	6.7	NO
SE	1.6	6.7	1.7	6.8	NO
SW	1.2	6.3	1.3	6.4	NO
NW	1.3	6.4	1.4	6.5	NO
HOPE STREET AND 1ST STREET AM					
NE	1.0	6.1	1.0	6.1	NO
SE	1.5	6.6	1.6	6.7	NO
SW	1.5	6.6	1.6	6.7	NO
NW	1.7	6.8	1.8	6.9	NO
HOPE STREET AND 1ST STREET PM					
NE	1.2	6.3	1.4	6.5	NO
SE	1.3	6.4	1.5	6.6	NO
SW	1.3	6.4	1.4	6.5	NO
NW	1.2	6.3	1.2	6.3	NO
HOPE STREET AND GTK WAY / 2ND PLACE AM					
NE	0.6	5.7	0.7	5.8	NO
SE	0.6	5.7	0.7	5.8	NO
SW	0.5	5.6	0.6	5.7	NO
NW	0.5	5.6	0.6	5.7	NO
HOPE STREET AND GTK WAY / 2ND PLACE PM					
NE	1.3	6.4	1.4	6.5	NO
SE	1.5	6.6	1.6	6.7	NO
SW	0.7	5.8	0.8	5.9	NO
NW	0.9	6.0	1.0	6.1	NO
HOPE STREET AND TEMPLE STREET AM					
NE	0.9	6.0	0.9	6.0	NO
SE	1.1	6.2	1.1	6.2	NO
SW	1.2	6.3	1.2	6.3	NO
NW	1.2	6.3	1.1	6.2	NO
HOPE STREET AND TEMPLE STREET PM					
NE	1.2	6.3	1.3	6.4	NO
SE	1.3	6.4	1.4	6.5	NO
SW	1.1	6.2	1.1	6.2	NO
NW	0.9	6.0	1.0	6.1	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Grand Avenue (2 of 4)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	1-Hr Concentration
2015	5.1

	Future Without Project		Future With Project		
Intersection and Receptor Locations	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
GRAND AVENUE AND 1ST STREET AM					
NE	1.1	6.2	1.1	6.2	NO
SE	1.1	6.2	1.2	6.3	NO
SW	1.5	6.6	1.5	6.6	NO
NW	1.7	6.8	1.8	6.9	NO
GRAND AVENUE AND 1ST STREET PM					
NE	1.4	6.5	1.5	6.6	NO
SE	1.5	6.6	1.8	6.9	NO
SW	1.3	6.4	1.4	6.5	NO
NW	1.5	6.6	1.7	6.8	NO
HILL STREET AND TEMPLE STREET AM					
NE	1.2	6.3	1.2	6.3	NO
SE	0.9	6.0	1.0	6.1	NO
SW	1.4	6.5	1.5	6.6	NO
NW	1.2	6.3	1.2	6.3	NO
HILL STREET AND TEMPLE STREET PM					
NE	1.6	6.7	1.7	6.8	NO
SE	1.4	6.5	1.5	6.6	NO
SW	1.4	6.5	1.4	6.5	NO
NW	1.5	6.6	1.5	6.6	NO
OLIVE STREET AND 1ST STREET AM					
NE	1.1	6.2	1.2	6.3	NO
SE	1.1	6.2	1.2	6.3	NO
SW	1.0	6.1	1.1	6.2	NO
NW	1.2	6.3	1.3	6.4	NO
OLIVE STREET AND 1ST STREET PM					
NE	1.5	6.6	1.8	6.9	NO
SE	1.3	6.4	1.6	6.7	NO
SW	1.3	6.4	1.5	6.6	NO
NW	1.3	6.4	1.7	6.8	NO
OLIVE STREET AND 4TH STREET AM					
NE	0.7	5.8	0.8	5.9	NO
SE	0.9	6.0	1.0	6.1	NO
SW	0.7	5.8	0.8	5.9	NO
NW	0.7	5.8	0.7	5.8	NO
OLIVE STREET AND 4TH STREET PM					
NE	1.2	6.3	1.3	6.4	NO
SE	1.2	6.3	1.3	6.4	NO
SW	1.0	6.1	1.1	6.2	NO
NW	0.8	5.9	0.9	6.0	NO
OLIVE STREET AND 5TH STREET AM					
NE	1.0	6.1	1.0	6.1	NO
SE	0.9	6.0	1.0	6.1	NO
SW	0.9	6.0	0.9	6.0	NO
NW	0.8	5.9	0.9	6.0	NO
OLIVE STREET AND 5TH STREET PM					
NE	1.1	6.2	1.2	6.3	NO
SE	1.2	6.3	1.3	6.4	NO
SW	1.0	6.1	1.1	6.2	NO
NW	1.1	6.2	1.1	6.2	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Grand Avenue (3 of 4)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	1-Hr Concentration
2015	5.1

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
BROADWAY AND TEMPLE STREET AM					
NE	1.1	6.2	1.1	6.2	NO
SE	1.1	6.2	1.1	6.2	NO
SW	1.4	6.5	1.5	6.6	NO
NW	1.2	6.3	1.3	6.4	NO
BROADWAY AND TEMPLE STREET PM					
NE	1.4	6.5	1.5	6.6	NO
SE	1.2	6.3	1.3	6.4	NO
SW	1.3	6.4	1.4	6.5	NO
NW	1.3	6.4	1.3	6.4	NO
HILL STREET AND 1ST STREET AM					
NE	1.2	6.3	1.2	6.3	NO
SE	1.0	6.1	1.2	6.3	NO
SW	1.3	6.4	1.3	6.4	NO
NW	1.3	6.4	1.5	6.6	NO
HILL STREET AND 1ST STREET PM					
NE	1.5	6.6	1.6	6.7	NO
SE	1.5	6.6	1.6	6.7	NO
SW	1.5	6.6	1.4	6.5	NO
NW	1.3	6.4	1.5	6.6	NO
HILL STREET AND 2ND STREET AM					
NE	0.9	6.0	1.0	6.1	NO
SE	1.2	6.3	1.3	6.4	NO
SW	1.4	6.5	1.4	6.5	NO
NW	1.2	6.3	1.3	6.4	NO
HILL STREET AND 2ND STREET PM					
NE	1.2	6.3	1.2	6.3	NO
SE	1.1	6.2	1.2	6.3	NO
SW	1.1	6.2	1.3	6.4	NO
NW	1.1	6.2	1.3	6.4	NO
HILL STREET AND 3RD STREET AM					
NE	1.8	6.9	1.9	7.0	NO
SE	1.8	6.9	1.8	6.9	NO
SW	1.6	6.7	1.6	6.7	NO
NW	1.8	6.9	1.9	7.0	NO
HILL STREET AND 3RD STREET PM					
NE	2.1	7.2	2.2	7.3	NO
SE	2.0	7.1	2.1	7.2	NO
SW	1.8	6.9	1.9	7.0	NO
NW	1.9	7.0	2.0	7.1	NO
HILL STREET AND 4TH STREET AM					
NE	0.9	6.0	1.0	6.1	NO
SE	0.9	6.0	0.9	6.0	NO
SW	1.2	6.3	1.2	6.3	NO
NW	1.0	6.1	1.1	6.2	NO
HILL STREET AND 4TH STREET PM					
NE	1.2	6.3	1.3	6.4	NO
SE	1.2	6.3	1.3	6.4	NO
SW	1.3	6.4	1.4	6.5	NO
NW	1.2	6.3	1.3	6.4	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Grand Avenue (4 of 4)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	1-Hr Concentration
2015	5.1

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
BROADWAY AND 1ST STREET AM					
NE	1.2	6.3	1.3	6.4	NO
SE	1.1	6.2	1.1	6.2	NO
SW	1.1	6.2	1.4	6.5	NO
NW	1.3	6.4	1.4	6.5	NO
BROADWAY AND 1ST STREET PM					
NE	1.4	6.5	1.5	6.6	NO
SE	1.5	6.6	1.6	6.7	NO
SW	1.3	6.4	1.4	6.5	NO
NW	1.4	6.5	1.5	6.6	NO
BROADWAY AND 2ND STREET AM					
NE	0.9	6.0	0.9	6.0	NO
SE	0.9	6.0	0.9	6.0	NO
SW	1.0	6.1	1.0	6.1	NO
NW	0.9	6.0	0.9	6.0	NO
BROADWAY AND 2ND STREET PM					
NE	1.3	6.4	1.3	6.4	NO
SE	1.0	6.1	1.1	6.2	NO
SW	1.0	6.1	1.0	6.1	NO
NW	1.1	6.2	1.1	6.2	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Grand Avenue (1 of 4)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	8-Hr Concentration
2015	4.6

Average Persistence Factor = 0.70

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
GRAND AVENUE AND 110/101 RAMPS AM					
NE	0.4	5.0	0.4	5.0	NO
SE	0.4	5.0	0.4	5.0	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.4	5.0	0.5	5.1	NO
GRAND AVENUE AND 110/101 RAMPS PM					
NE	0.5	5.1	0.6	5.2	NO
SE	0.5	5.1	0.6	5.2	NO
SW	0.4	5.0	0.5	5.1	NO
NW	0.6	5.2	0.6	5.2	NO
GRAND AVENUE AND TEMPLE STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.7	5.3	0.7	5.3	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.7	5.3	0.7	5.3	NO
GRAND AVENUE AND TEMPLE STREET PM					
NE	0.8	5.4	0.8	5.4	NO
SE	0.7	5.3	0.8	5.4	NO
SW	0.7	5.3	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
HOPE STREET AND 1ST STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.8	5.4	0.8	5.4	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
HOPE STREET AND 1ST STREET PM					
NE	0.8	5.4	0.8	5.4	NO
SE	0.8	5.4	0.8	5.4	NO
SW	0.6	5.2	0.7	5.3	NO
NW	0.7	5.3	0.8	5.4	NO
HOPE STREET AND GTK WAY / 2ND PLACE AM					
NE	0.3	4.9	0.3	4.9	NO
SE	0.3	4.9	0.4	5.0	NO
SW	0.3	4.9	0.3	4.9	NO
NW	0.3	4.9	0.3	4.9	NO
HOPE STREET AND GTK WAY / 2ND PLACE PM					
NE	0.5	5.1	0.6	5.2	NO
SE	0.6	5.2	0.7	5.3	NO
SW	0.4	5.0	0.4	5.0	NO
NW	0.5	5.1	0.6	5.2	NO
HOPE STREET AND TEMPLE STREET AM					
NE	0.5	5.1	0.5	5.1	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.6	5.2	0.6	5.2	NO
HOPE STREET AND TEMPLE STREET PM					
NE	0.6	5.2	0.7	5.3	NO
SE	0.6	5.2	0.7	5.3	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.6	5.2	0.6	5.2	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

Grand Avenue (2 of 4)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	8-Hr Concentration
2015	4.6

Average Persistence Factor = 0.70

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
GRAND AVENUE AND 1ST STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.7	5.3	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
GRAND AVENUE AND 1ST STREET PM					
NE	0.7	5.3	0.8	5.4	NO
SE	0.8	5.4	0.9	5.5	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.8	5.4	1.0	5.6	NO
HILL STREET AND TEMPLE STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.7	5.3	0.7	5.3	NO
HILL STREET AND TEMPLE STREET PM					
NE	0.8	5.4	0.8	5.4	NO
SE	0.7	5.3	0.7	5.3	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
OLIVE STREET AND 1ST STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.6	5.2	0.7	5.3	NO
OLIVE STREET AND 1ST STREET PM					
NE	0.8	5.4	1.0	5.6	NO
SE	0.7	5.3	0.9	5.5	NO
SW	0.7	5.3	0.8	5.4	NO
NW	0.8	5.4	0.9	5.5	NO
OLIVE STREET AND 4TH STREET AM					
NE	0.4	5.0	0.4	5.0	NO
SE	0.5	5.1	0.6	5.2	NO
SW	0.4	5.0	0.4	5.0	NO
NW	0.4	5.0	0.4	5.0	NO
OLIVE STREET AND 4TH STREET PM					
NE	0.6	5.2	0.7	5.3	NO
SE	0.7	5.3	0.8	5.4	NO
SW	0.5	5.1	0.6	5.2	NO
NW	0.5	5.1	0.6	5.2	NO
OLIVE STREET AND 5TH STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.5	5.1	0.5	5.1	NO
NW	0.5	5.1	0.5	5.1	NO
OLIVE STREET AND 5TH STREET PM					
NE	0.7	5.3	0.8	5.4	NO
SE	0.7	5.3	0.8	5.4	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.6	5.2	0.6	5.2	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

Grand Avenue (3 of 4)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	8-Hr Concentration
2015	4.6

Average Persistence Factor = 0.70

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
BROADWAY AND TEMPLE STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.6	5.2	0.6	5.2	NO
BROADWAY AND TEMPLE STREET PM					
NE	0.7	5.3	0.8	5.4	NO
SE	0.7	5.3	0.7	5.3	NO
SW	0.7	5.3	0.8	5.4	NO
NW	0.7	5.3	0.7	5.3	NO
HILL STREET AND 1ST STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.7	5.3	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
HILL STREET AND 1ST STREET PM					
NE	0.8	5.4	0.8	5.4	NO
SE	0.8	5.4	0.9	5.5	NO
SW	0.8	5.4	0.9	5.5	NO
NW	0.8	5.4	0.9	5.5	NO
HILL STREET AND 2ND STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.7	5.3	0.7	5.3	NO
SW	0.7	5.3	0.8	5.4	NO
NW	0.6	5.2	0.6	5.2	NO
HILL STREET AND 2ND STREET PM					
NE	0.6	5.2	0.7	5.3	NO
SE	0.6	5.2	0.7	5.3	NO
SW	0.6	5.2	0.7	5.3	NO
NW	0.6	5.2	0.7	5.3	NO
HILL STREET AND 3RD STREET AM					
NE	0.8	5.4	0.8	5.4	NO
SE	0.8	5.4	0.8	5.4	NO
SW	0.8	5.4	0.9	5.5	NO
NW	0.9	5.5	1.0	5.6	NO
HILL STREET AND 3RD STREET PM					
NE	0.9	5.5	0.9	5.5	NO
SE	0.8	5.4	0.9	5.5	NO
SW	0.9	5.5	1.0	5.6	NO
NW	1.0	5.6	1.1	5.7	NO
HILL STREET AND 4TH STREET AM					
NE	0.5	5.1	0.6	5.2	NO
SE	0.5	5.1	0.5	5.1	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.5	5.1	0.6	5.2	NO
HILL STREET AND 4TH STREET PM					
NE	0.6	5.2	0.7	5.3	NO
SE	0.7	5.3	0.7	5.3	NO
SW	0.7	5.3	0.8	5.4	NO
NW	0.6	5.2	0.6	5.2	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

Grand Avenue (4 of 4)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]

Monitoring Station: Central LA

Year	8-Hr Concentration
2015	4.6

Average Persistence Factor = 0.70

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
BROADWAY AND 1ST STREET AM					
NE	0.6	5.2	0.6	5.2	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.7	5.3	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
BROADWAY AND 1ST STREET PM					
NE	0.8	5.4	0.8	5.4	NO
SE	0.8	5.4	0.9	5.5	NO
SW	0.8	5.4	0.8	5.4	NO
NW	0.8	5.4	0.8	5.4	NO
BROADWAY AND 2ND STREET AM					
NE	0.5	5.1	0.5	5.1	NO
SE	0.5	5.1	0.5	5.1	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.5	5.1	0.5	5.1	NO
BROADWAY AND 2ND STREET PM					
NE	0.7	5.3	0.7	5.3	NO
SE	0.6	5.2	0.6	5.2	NO
SW	0.6	5.2	0.6	5.2	NO
NW	0.6	5.2	0.6	5.2	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   GRAND AVENUE AND 110/101 RAMPS AM NP
              RUN:                    (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


    I.  SITE VARIABLES

          U=     .5 M/S              Z0= 100. CM             ALT=      0. (FT)
        BRG= WORST CASE              VD=    .0 CM/S
       CLAS=      7 (G)              VS=    .0 CM/S
       MIXH= 1000. M                AMB=    .0 PPM
      SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


   II.  LINK VARIABLES

         LINK        *  LINK COORDINATES (FT)  *                   EF      H     W
      DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  -------------------*-------------------------*-------------------------------
  A. NF              *    23 -1500     23   -500 *  AG    355    2.3      .0  50.0
  B. NA              *    23  -500     23      0 *  AG    159    3.3      .0  45.0
  C. ND              *    23     0     23    500 *  AG    219    2.5      .0  33.0
  D. NE              *    23   500     23   1500 *  AG    219    2.3      .0  50.0
  E. SF              *   -23  1500    -23    500 *  AG   1695    2.3      .0  50.0
  F. SA              *   -23   500    -23      0 *  AG   1695    4.0      .0  33.0
  G. SD              *   -23     0    -23   -500 *  AG   1568    2.6      .0  33.0
  H. SE              *   -23  -500    -23  -1500 *  AG   1568    2.3      .0  50.0
  I. WF              *     0  1800      0   1900 *  AG      0    2.3      .0  35.0
  J. WA              *     0  1800      0   1900 *  AG      0    5.0      .0  33.0
  K. WD              *     0  1800      0   1900 *  AG    755    5.3      .0  33.0
  L. WE              *     0  1800      0   1900 *  AG    755    2.3      .0  35.0
  M. EF              * -1500     0   -500      0 *  AG    492    2.3      .0  35.0
  N. EA              *  -500     0      0      0 *  AG    432    5.3      .0  33.0
  O. ED              *     0  1800      0   1900 *  AG      0    3.2      .0  33.0
  P. EE              *     0  1800      0   1900 *  AG      0    2.3      .0  35.0
  Q. NL              *     0     0     15   -500 *  AG    196    3.3      .0  33.0
  R. SL              *     0 -1900      0  -1800 *  AG      0    3.3      .0  33.0
  S. WL              *     0 -1900      0  -1800 *  AG      0    5.0      .0  33.0
  T. EL              *     0     0   -500      0 *  AG     60    5.0      .0  33.0

  III.  RECEPTOR LOCATIONS

                *    COORDINATES (FT)
    RECEPTOR    *     X        Y      Z
  --------------*---------------------
  1. NE3        *     48       18    6.0
  2. SE3        *     48      -18    6.0
  3. SW3        *    -48      -18    6.0
  4. NW3        *    -48       18    6.0
  5. NE7        *     61       31    6.0
  6. SE7        *     61      -31    6.0
  7. SW7        *    -61      -31    6.0
  8. NW7        *    -61       31    6.0


   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

                *        * PRED  *                       CONC/LINK
                *   BRG  * CONC  *                         (PPM)
    RECEPTOR    * (DEG)  * (PPM) *    A     B     C     D     E     F     G     H
  --------------*--------*-------*-----------------------------------------------
  1. NE3        *  267.  *    .8 *   .0    .0    .0    .0    .0    .2    .0    .0
  2. SE3        *  274.  *    .8 *   .0    .0    .0    .0    .0    .0    .1    .0
  3. SW3        *    6.  *   1.1 *   .0    .0    .0    .0    .0    .8    .0    .0
  4. NW3        *    6.  *   1.0 *   .0    .0    .0    .0    .0    .8    .0    .0
  5. NE7        *  264.  *    .6 *   .0    .0    .0    .0    .0    .2    .0    .0
  6. SE7        *  276.  *    .6 *   .0    .0    .0    .0    .0    .0    .1    .0
  7. SW7        *    7.  *    .8 *   .0    .0    .0    .0    .0    .5    .0    .0
  8. NW7        *  174.  *    .6 *   .0    .0    .0    .0    .0    .0    .3    .1

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

                *                           CONC/LINK
                *                             (PPM)
    RECEPTOR    *    I     J     K     L     M     N     O     P     Q     R     S     T
  --------------*---------------------------------------------------------------------
  1. NE3        *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
  2. SE3        *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
  3. SW3        *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
  4. NW3        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  5. NE7        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
  6. SE7        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
  7. SW7        *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  8. NW7        *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   GRAND AVENUE AND 110/101 RAMPS AM WP
            RUN:                     (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE              VD=    .0 CM/S
    CLAS=      7 (G)              VS=    .0 CM/S
    MIXH= 1000. M                AMB=    .0 PPM
   SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)   *                 EF     H     W
  DESCRIPTION    *   X1    Y1    X2    Y2   * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*--------------------------*-----------------------------
A. NF            *    23 -1500    23  -500  *  AG    423   2.3     .0  50.0
B. NA            *    23  -500    23     0  *  AG    175   3.3     .0  45.0
C. ND            *    23     0    23   500  *  AG    235   2.5     .0  33.0
D. NE            *    23   500    23  1500  *  AG    235   2.3     .0  50.0
E. SF            *   -23  1500   -23   500  *  AG   1680   2.3     .0  50.0
F. SA            *   -23   500   -23     0  *  AG   1680   4.0     .0  33.0
G. SD            *   -23     0   -23  -500  *  AG   1549   2.6     .0  33.0
H. SE            *   -23  -500   -23 -1500  *  AG   1549   2.3     .0  50.0
I. WF            *     0  1800     0  1900  *  AG      0   2.3     .0  35.0
J. WA            *     0  1800     0  1900  *  AG      0   5.0     .0  33.0
K. WD            *     0  1800     0  1900  *  AG    807   5.3     .0  33.0
L. WE            *     0  1800     0  1900  *  AG    807   2.3     .0  35.0
M. EF            * -1500     0  -500     0  *  AG    488   2.3     .0  35.0
N. EA            *  -500     0     0     0  *  AG    428   5.3     .0  33.0
O. ED            *     0  1800     0  1900  *  AG      0   3.2     .0  33.0
P. EE            *     0  1800     0  1900  *  AG      0   2.3     .0  35.0
Q. NL            *     0     0    15  -500  *  AG    248   3.3     .0  33.0
R. SL            *     0 -1900     0 -1800  *  AG      0   3.3     .0  33.0
S. WL            *     0 -1900     0 -1800  *  AG      0   5.0     .0  33.0
T. EL            *     0     0  -500     0  *  AG     60   5.0     .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X        Y      Z
-------------*---------------------
1. NE3       *     48       18    6.0
2. SE3       *     48      -18    6.0
3. SW3       *    -48      -18    6.0
4. NW3       *    -48       18    6.0
5. NE7       *     61       31    6.0
6. SE7       *     61      -31    6.0
7. SW7       *    -61      -31    6.0
8. NW7       *    -61       31    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                 CONC/LINK
              *  BRG   * CONC   *                   (PPM)
  RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
--------------*--------*--------*------------------------------------------------
1. NE3        *  267.  *    .8  *  .0    .0    .0    .0    .0    .2    .0    .0
2. SE3        *  274.  *    .8  *  .0    .0    .0    .0    .0    .0    .1    .0
3. SW3        *    6.  *   1.1  *  .0    .0    .0    .0    .0    .8    .0    .0
4. NW3        *    6.  *   1.0  *  .0    .0    .0    .0    .0    .8    .0    .0
5. NE7        *  264.  *    .6  *  .0    .0    .0    .0    .0    .2    .0    .0
6. SE7        *  276.  *    .6  *  .0    .0    .0    .0    .0    .0    .1    .0
7. SW7        *    7.  *    .8  *  .0    .0    .0    .0    .0    .5    .0    .0
8. NW7        *  174.  *    .7  *  .0    .0    .0    .0    .0    .0    .3    .1

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

              *                          CONC/LINK
              *                            (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
--------------*-----------------------------------------------------------------------
1. NE3        *  .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
2. SE3        *  .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
3. SW3        *  .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
4. NW3        *  .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
5. NE7        *  .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
6. SE7        *  .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
7. SW7        *  .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
8. NW7        *  .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
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           CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                    JUNE 1989 VERSION
                    PAGE   1

               JOB:   GRAND AVENUE AND 110/101 RAMPS PM NP
               RUN:                     (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


    I.  SITE VARIABLES

          U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
        BRG= WORST CASE              VD=    .0 CM/S
       CLAS=      7 (G)              VS=    .0 CM/S
       MIXH= 1000. M                AMB=    .0 PPM
      SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


   II.  LINK VARIABLES

        LINK        *  LINK COORDINATES (FT)  *                    EF      H     W
     DESCRIPTION    *   X1     Y1    X2    Y2 * TYPE  VPH  (G/MI)  (FT)  (FT)
  ------------------*-------------------------*-------------------------------
  A. NF             *    23 -1500    23  -500 *  AG   1648   2.3      .0  50.0
  B. NA             *    23  -500    23     0 *  AG    808   3.3      .0  45.0
  C. ND             *    23     0    23   500 *  AG    947   2.5      .0  33.0
  D. NE             *    23   500    23  1500 *  AG    947   2.3      .0  50.0
  E. SF             *   -23  1500   -23   500 *  AG    970   2.3      .0  50.0
  F. SA             *   -23   500   -23     0 *  AG    970   3.4      .0  33.0
  G. SD             *   -23     0   -23  -500 *  AG    909   2.5      .0  33.0
  H. SE             *   -23  -500   -23 -1500 *  AG    909   2.3      .0  50.0
  I. WF             *     0  1800     0  1900 *  AG      0   2.3      .0  35.0
  J. WA             *     0  1800     0  1900 *  AG      0   5.3      .0  33.0
  K. WD             *     0  1800     0  1900 *  AG   1229   5.3      .0  33.0
  L. WE             *     0  1800     0  1900 *  AG   1229   2.3      .0  35.0
  M. EF             * -1500     0  -500     0 *  AG    467   2.3      .0  35.0
  N. EA             *  -500     0     0     0 *  AG    328   5.3      .0  33.0
  O. ED             *     0  1800     0  1900 *  AG      0   4.0      .0  33.0
  P. EE             *     0  1800     0  1900 *  AG      0   2.3      .0  35.0
  Q. NL             *     0     0    15  -500 *  AG    840   4.0      .0  33.0
  R. SL             *     0 -1900     0 -1800 *  AG      0   3.3      .0  33.0
  S. WL             *     0 -1900     0 -1800 *  AG      0   5.3      .0  33.0
  T. EL             *     0     0  -500     0 *  AG    139   5.3      .0  33.0

  III.  RECEPTOR LOCATIONS

                *     COORDINATES (FT)
    RECEPTOR    *     X        Y      Z
  --------------*-------------------------
  1. NE3        *     48       18    6.0
  2. SE3        *     48      -18    6.0
  3. SW3        *    -48      -18    6.0
  4. NW3        *    -48       18    6.0
  5. NE7        *     61       31    6.0
  6. SE7        *     61      -31    6.0
  7. SW7        *    -61      -31    6.0
  8. NW7        *    -61       31    6.0


   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

                *        * PRED   *                   CONC/LINK
                *  BRG   * CONC   *                     (PPM)
   RECEPTOR     * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
 ---------------*--------*--------*------------------------------------------------
  1. NE3        *  186.  *     .9 *   .0    .5    .0    .0    .0    .0    .0    .1
  2. SE3        *  186.  *    1.0 *   .0    .5    .0    .0    .0    .0    .0    .1
  3. SW3        *    5.  *     .9 *   .0    .0    .0    .1    .0    .4    .0    .0
  4. NW3        *  171.  *    1.0 *   .0    .1    .0    .0    .0    .0    .3    .0
  5. NE7        *  188.  *     .7 *   .0    .3    .0    .0    .0    .0    .0    .0
  6. SE7        *  276.  *     .7 *   .0    .1    .0    .0    .0    .0    .0    .0
  7. SW7        *    6.  *     .6 *   .0    .0    .0    .1    .0    .3    .0    .0
  8. NW7        *  169.  *     .8 *   .0    .1    .0    .0    .0    .0    .2    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

                *                            CONC/LINK
                *                              (PPM)
   RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
  --------------*--------------------------------------------------------------------
  1. NE3        *   .0    .0    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0
  2. SE3        *   .0    .0    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0
  3. SW3        *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  4. NW3        *   .0    .0    .0    .0    .0    .1    .0    .0    .2    .0    .0    .0
  5. NE7        *   .0    .0    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0
  6. SE7        *   .0    .0    .0    .0    .0    .2    .0    .0    .1    .0    .0    .1
  7. SW7        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  8. NW7        *   .0    .0    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   GRAND AVENUE AND 110/101 RAMPS PM WP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

        U=    .5 M/S              Z0= 100. CM            ALT=     0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=     7 (G)              VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                  EF      H     W
  DESCRIPTION   *   X1    Y1     X2    Y2 * TYPE  VPH   (G/MI)  (FT)  (FT)
----------------*-------------------------*----------------------------------
A. NF           *    23 -1500    23  -500 *  AG   1785    2.3      .0  50.0
B. NA           *    23  -500    23     0 *  AG    838    3.3      .0  45.0
C. ND           *    23     0    23   500 *  AG    977    2.5      .0  33.0
D. NE           *    23   500    23  1500 *  AG    977    2.3      .0  50.0
E. SF           *   -23  1500   -23   500 *  AG    992    2.3      .0  50.0
F. SA           *   -23   500   -23     0 *  AG    992    3.4      .0  33.0
G. SD           *   -23     0   -23  -500 *  AG    998    2.5      .0  33.0
H. SE           *   -23  -500   -23 -1500 *  AG    998    2.3      .0  50.0
I. WF           *     0  1800     0  1900 *  AG      0    2.3      .0  35.0
J. WA           *     0  1800     0  1900 *  AG      0    5.3      .0  33.0
K. WD           *     0  1800     0  1900 *  AG   1336    5.3      .0  33.0
L. WE           *     0  1800     0  1900 *  AG   1336    2.3      .0  35.0
M. EF           * -1500     0  -500     0 *  AG    534    2.3      .0  35.0
N. EA           *  -500     0     0     0 *  AG    395    5.3      .0  33.0
O. ED           *     0  1800     0  1900 *  AG      0    3.8      .0  33.0
P. EE           *     0  1800     0  1900 *  AG      0    2.3      .0  35.0
Q. NL           *     0     0    15  -500 *  AG    947    4.3      .0  33.0
R. SL           *     0 -1900     0 -1800 *  AG      0    3.3      .0  33.0
S. WL           *     0 -1900     0 -1800 *  AG      0    5.3      .0  33.0
T. EL           *     0     0  -500     0 *  AG    139    5.3      .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X       Y      Z
-------------*--------------------
1. NE3       *    48      18    6.0
2. SE3       *    48     -18    6.0
3. SW3       *   -48     -18    6.0
4. NW3       *   -48      18    6.0
5. NE7       *    61      31    6.0
6. SE7       *    61     -31    6.0
7. SW7       *   -61     -31    6.0
8. NW7       *   -61      31    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *       * PRED  *                 CONC/LINK
             *  BRG  * CONC  *                   (PPM)
  RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*---------------------------------------
1. NE3       *  186. *   1.0 *  .0   .5   .0   .0   .0   .0   .0   .1
2. SE3       *  186. *   1.0 *  .0   .5   .0   .0   .0   .0   .0   .1
3. SW3       *  171. *    .8 *  .1   .1   .0   .0   .0   .0   .3   .0
4. NW3       *  171. *   1.1 *  .0   .1   .0   .0   .0   .0   .3   .0
5. NE7       *  188. *    .8 *  .0   .3   .0   .0   .0   .0   .0   .1
6. SE7       *  276. *    .8 *  .0   .1   .0   .0   .0   .0   .0   .0
7. SW7       *  168. *    .7 *  .0   .1   .0   .0   .0   .0   .2   .0
8. NW7       *  169. *    .8 *  .0   .1   .0   .0   .0   .0   .2   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                         CONC/LINK
             *                           (PPM)
  RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*-----------------------------------------------------------
1. NE3       *  .0   .0   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0
2. SE3       *  .0   .0   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0
3. SW3       *  .0   .0   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0
4. NW3       *  .0   .0   .0   .0   .0   .1   .0   .0   .3   .0   .0   .0
5. NE7       *  .0   .0   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0
6. SE7       *  .0   .0   .0   .0   .0   .3   .0   .0   .2   .0   .0   .1
7. SW7       *  .0   .0   .0   .0   .0   .0   .0   .0   .2   .0   .0   .0
8. NW7       *  .0   .0   .0   .0   .0   .1   .0   .0   .3   .0   .0   .0
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           CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                    JUNE 1989 VERSION
                    PAGE   1

               JOB:   GRAND AVENUE AND TEMPLE STREET AM NP
               RUN:                    (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=      7 (G)             VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

    LINK         *  LINK COORDINATES (FT)   *                EF     H     W
 DESCRIPTION     *   X1     Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*--------------------------*---------------------------------
A. NF            *     23 -1500     23  -500 *  AG    421   2.3      .0  50.0
B. NA            *     23  -500     23     0 *  AG    366   4.0      .0  45.0
C. ND            *     23     0     23   500 *  AG    454   2.6      .0  33.0
D. NE            *     23   500     23  1500 *  AG    454   2.3      .0  50.0
E. SF            *    -23  1500    -23   500 *  AG   1531   2.3      .0  50.0
F. SA            *    -23   500    -23     0 *  AG   1457   4.4      .0  45.0
G. SD            *    -23     0    -23  -500 *  AG   1668   3.9      .0  33.0
H. SE            *    -23  -500    -23 -1500 *  AG   1668   2.3      .0  50.0
I. WF            *   1500    23    500    23 *  AG   1040   2.3      .0  50.0
J. WA            *    500    23      0    23 *  AG    757   3.9      .0  45.0
K. WD            *      0    23   -500    23 *  AG   1191   2.8      .0  33.0
L. WE            *   -500    23  -1500    23 *  AG   1191   2.3      .0  50.0
M. EF            *  -1500   -23   -500   -23 *  AG   1184   2.3      .0  50.0
N. EA            *   -500   -23      0   -23 *  AG   1074   4.0      .0  45.0
O. ED            *      0   -23    500   -23 *  AG    863   2.6      .0  33.0
P. EE            *    500   -23   1500   -23 *  AG    863   2.3      .0  50.0
Q. NL            *      0     0     15  -500 *  AG     55   4.0      .0  33.0
R. SL            *      0     0    -15   500 *  AG     74   4.0      .0  33.0
S. WL            *      0     0    500    15 *  AG    283   3.9      .0  33.0
T. EL            *      0     0   -500   -15 *  AG    110   3.8      .0  33.0

III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *     X        Y      Z
 -------------*---------------------
1. NE3        *     48       48    6.0
2. SE3        *     48      -48    6.0
3. SW3        *    -48      -48    6.0
4. NW3        *    -48       48    6.0
5. NE7        *     61       61    6.0
6. SE7        *     61      -61    6.0
7. SW7        *    -61      -61    6.0
8. NW7        *    -61       61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                 CONC/LINK
              *  BRG   * CONC  *                   (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
--------------*--------*-------*-------------------------------------------------
1. NE3        *  262.  *   1.2 *   .0    .0    .0    .0    .0    .2    .0    .0
2. SE3        *  275.  *   1.3 *   .0    .0    .0    .0    .0    .0    .2    .0
3. SW3        *    5.  *   1.5 *   .0    .0    .0    .0    .0    .9    .0    .0
4. NW3        *  173.  *   1.6 *   .0    .0    .0    .0    .0    .2    .8    .0
5. NE7        *  260.  *    .9 *   .0    .0    .0    .0    .0    .2    .0    .0
6. SE7        *  277.  *   1.0 *   .0    .0    .0    .0    .0    .0    .2    .0
7. SW7        *    7.  *   1.1 *   .0    .0    .0    .0    .0    .6    .0    .0
8. NW7        *  173.  *   1.0 *   .0    .0    .0    .0    .0    .0    .5    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                             CONC/LINK
              *                               (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
--------------*-----------------------------------------------------------------------
1. NE3        *   .0    .1    .4    .0    .0    .2    .0    .0    .0    .0    .0    .0
2. SE3        *   .0    .0    .0    .1    .0    .6    .0    .0    .0    .0    .0    .0
3. SW3        *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
4. NW3        *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
5. NE7        *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
6. SE7        *   .0    .0    .0    .1    .0    .4    .0    .0    .0    .0    .0    .0
7. SW7        *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7        *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

             JOB:   GRAND AVENUE AND TEMPLE STREET AM WP
             RUN:                  (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=     .5 M/S              Z0= 100. CM          ALT=     0. (FT)
      BRG= WORST CASE              VD=    .0 CM/S
     CLAS=      7 (G)              VS=    .0 CM/S
     MIXH= 1000. M                AMB=    .0 PPM
    SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)     *                  EF      H     W
   DESCRIPTION    *    X1     Y1     X2     Y2 * TYPE  VPH  (G/MI)   (FT)  (FT)
 -----------------*----------------------------*-------------------------------
 A. NF            *     23 -1500     23   -500 *  AG    495   2.3      .0  50.0
 B. NA            *     23  -500     23      0 *  AG    433   4.0      .0  45.0
 C. ND            *     23     0     23    500 *  AG    521   2.6      .0  33.0
 D. NE            *     23   500     23   1500 *  AG    521   2.3      .0  50.0
 E. SF            *    -23  1500    -23    500 *  AG   1512   2.3      .0  50.0
 F. SA            *    -23   500    -23      0 *  AG   1433   4.4      .0  45.0
 G. SD            *    -23     0    -23   -500 *  AG   1594   3.9      .0  33.0
 H. SE            *    -23  -500    -23  -1500 *  AG   1594   2.3      .0  50.0
 I. WF            *   1500    23    500     23 *  AG   1040   2.3      .0  50.0
 J. WA            *    500    23      0     23 *  AG    757   3.9      .0  45.0
 K. WD            *      0    23   -500     23 *  AG   1198   2.8      .0  33.0
 L. WE            *   -500    23  -1500     23 *  AG   1198   2.3      .0  50.0
 M. EF            *  -1500   -23   -500    -23 *  AG   1184   2.3      .0  50.0
 N. EA            *   -500   -23      0    -23 *  AG   1074   4.0      .0  45.0
 O. ED            *      0   -23    500    -23 *  AG    918   2.7      .0  33.0
 P. EE            *    500   -23   1500    -23 *  AG    918   2.3      .0  50.0
 Q. NL            *      0     0     15   -500 *  AG     62   4.0      .0  33.0
 R. SL            *      0     0    -15    500 *  AG     79   4.0      .0  33.0
 S. WL            *      0     0    500     15 *  AG    283   3.9      .0  33.0
 T. EL            *      0     0   -500    -15 *  AG    110   3.8      .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *     X       Y      Z
 -------------*---------------------
 1. NE3       *     48      48    6.0
 2. SE3       *     48     -48    6.0
 3. SW3       *    -48     -48    6.0
 4. NW3       *    -48      48    6.0
 5. NE7       *     61      61    6.0
 6. SE7       *     61     -61    6.0
 7. SW7       *    -61     -61    6.0
 8. NW7       *    -61      61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                     CONC/LINK
              *  BRG   * CONC   *                       (PPM)
  RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
 -------------*--------*--------*-----------------------------------------------
 1. NE3       *  262.  *   1.2  *   .0    .0    .0    .0    .0    .2    .0    .0
 2. SE3       *  275.  *   1.3  *   .0    .1    .0    .0    .0    .0    .2    .0
 3. SW3       *    5.  *   1.5  *   .0    .0    .0    .0    .0    .9    .0    .0
 4. NW3       *  172.  *   1.6  *   .0    .0    .0    .0    .0    .2    .8    .0
 5. NE7       *  260.  *    .9  *   .0    .0    .0    .0    .0    .2    .0    .0
 6. SE7       *  277.  *   1.0  *   .0    .0    .0    .0    .0    .0    .2    .0
 7. SW7       *    7.  *   1.2  *   .0    .0    .0    .0    .0    .6    .0    .0
 8. NW7       *  172.  *   1.0  *   .0    .0    .0    .0    .0    .0    .5    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                            CONC/LINK
              *                              (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*------------------------------------------------------------------------
 1. NE3       *   .0    .1    .4    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .0    .0    .2    .0    .6    .0    .0    .0    .0    .0    .0
 3. SW3       *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .1    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
```

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         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   GRAND AVENUE AND TEMPLE STREET PM NP
             RUN:                     (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=     .5 M/S              Z0= 100. CM           ALT=     0. (FT)
       BRG= WORST CASE              VD=    .0 CM/S
      CLAS=      7 (G)              VS=    .0 CM/S
      MIXH= 1000. M                AMB=    .0 PPM
     SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                  EF      H      W
   DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 -----------------*-------------------------*-------------------------------
 A. NF            *    23 -1500    23  -500 *  AG   1469   2.3       .0  50.0
 B. NA            *    23  -500    23     0 *  AG   1340   4.1       .0  45.0
 C. ND            *    23     0    23   500 *  AG   1645   3.6       .0  33.0
 D. NE            *    23   500    23  1500 *  AG   1645   2.3       .0  50.0
 E. SF            *   -23  1500   -23   500 *  AG    887   2.3       .0  50.0
 F. SA            *   -23   500   -23     0 *  AG    853   4.0       .0  45.0
 G. SD            *   -23     0   -23  -500 *  AG    991   2.8       .0  33.0
 H. SE            *   -23  -500   -23 -1500 *  AG    991   2.3       .0  50.0
 I. WF            *  1500    23   500    23 *  AG   1312   2.3       .0  50.0
 J. WA            *   500    23     0    23 *  AG   1132   4.0       .0  45.0
 K. WD            *     0    23  -500    23 *  AG   1235   2.8       .0  33.0
 L. WE            *  -500    23 -1500    23 *  AG   1235   2.3       .0  50.0
 M. EF            * -1500   -23  -500   -23 *  AG   1118   2.3       .0  50.0
 N. EA            *  -500   -23     0   -23 *  AG    888   4.0       .0  45.0
 O. ED            *     0   -23   500   -23 *  AG    915   2.7       .0  33.0
 P. EE            *   500   -23  1500   -23 *  AG    915   2.3       .0  50.0
 Q. NL            *     0     0    15  -500 *  AG    129   3.9       .0  33.0
 R. SL            *     0     0   -15   500 *  AG     34   3.9       .0  33.0
 S. WL            *     0     0   500    15 *  AG    180   3.9       .0  33.0
 T. EL            *     0     0  -500   -15 *  AG    230   3.9       .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *    X        Y      Z
 -------------*---------------------
 1. NE3       *     48       48   6.0
 2. SE3       *     48      -48   6.0
 3. SW3       *    -48      -48   6.0
 4. NW3       *    -48       48   6.0
 5. NE7       *     61       61   6.0
 6. SE7       *     61      -61   6.0
 7. SW7       *    -61      -61   6.0
 8. NW7       *    -61       61   6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                    CONC/LINK
              *  BRG   * CONC   *                      (PPM)
  RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
 -------------*--------*--------*------------------------------------------------
 1. NE3       *  262.  *   1.5  *   .0    .0    .4    .0    .0    .1    .0    .0
 2. SE3       *  352.  *   1.6  *   .0    .2    .7    .0    .0    .2    .0    .0
 3. SW3       *   81.  *   1.2  *   .0    .2    .0    .0    .0    .0    .2    .0
 4. NW3       *  171.  *   1.3  *   .0    .3    .0    .0    .0    .1    .4    .0
 5. NE7       *  187.  *   1.2  *   .0    .5    .0    .0    .0    .0    .0    .1
 6. SE7       *  351.  *   1.0  *   .0    .0    .5    .0    .0    .1    .0    .0
 7. SW7       *    8.  *   1.0  *   .0    .0    .1    .1    .0    .4    .0    .0
 8. NW7       *   97.  *   1.1  *   .0    .0    .2    .0    .0    .2    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

              *                             CONC/LINK
              *                               (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*------------------------------------------------------------------------
 1. NE3       *   .0    .2    .5    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .2    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 3. SW3       *   .0    .2    .0    .0    .0    .1    .3    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .2    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .5    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
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         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   GRAND AVENUE AND TEMPLE STREET PM WP
             RUN:                  (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=    .5 M/S            Z0= 100. CM          ALT=     0. (FT)
     BRG= WORST CASE           VD=    .0 CM/S
    CLAS=     7 (G)            VS=    .0 CM/S
    MIXH= 1000. M             AMB=    .0 PPM
   SIGTH=     5. DEGREES     TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK         *  LINK COORDINATES (FT)  *                    EF     H     W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
------------------*-------------------------*------------------------------------
A. NF             *    23 -1500    23   -500 *  AG   1620   2.3     .0  50.0
B. NA             *    23  -500    23      0 *  AG   1476   4.1     .0  45.0
C. ND             *    23     0    23    500 *  AG   1781   4.0     .0  33.0
D. NE             *    23   500    23   1500 *  AG   1781   2.3     .0  50.0
E. SF             *   -23  1500   -23    500 *  AG    977   2.3     .0  50.0
F. SA             *   -23   500   -23      0 *  AG    942   3.9     .0  45.0
G. SD             *   -23     0   -23   -500 *  AG   1076   2.7     .0  33.0
H. SE             *   -23  -500   -23  -1500 *  AG   1076   2.3     .0  50.0
I. WF             *  1500    23   500     23 *  AG   1312   2.3     .0  50.0
J. WA             *   500    23     0     23 *  AG   1132   4.1     .0  45.0
K. WD             *     0    23  -500     23 *  AG   1250   2.9     .0  33.0
L. WE             *  -500    23 -1500     23 *  AG   1250   2.3     .0  50.0
M. EF             * -1500   -23  -500    -23 *  AG   1117   2.3     .0  50.0
N. EA             *  -500   -23     0    -23 *  AG    887   4.0     .0  45.0
O. ED             *     0   -23   500    -23 *  AG    919   2.8     .0  33.0
P. EE             *   500   -23  1500    -23 *  AG    919   2.3     .0  50.0
Q. NL             *     0     0    15   -500 *  AG    144   3.9     .0  33.0
R. SL             *     0     0   -15    500 *  AG     35   3.9     .0  33.0
S. WL             *     0     0   500     15 *  AG    180   4.0     .0  33.0
T. EL             *     0     0  -500    -15 *  AG    230   4.0     .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X       Y      Z
-------------*--------------------
1. NE3       *     48      48    6.0
2. SE3       *     48     -48    6.0
3. SW3       *    -48     -48    6.0
4. NW3       *    -48      48    6.0
5. NE7       *     61      61    6.0
6. SE7       *     61     -61    6.0
7. SW7       *    -61     -61    6.0
8. NW7       *    -61      61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                  CONC/LINK
             *  BRG   * CONC  *                    (PPM)
 RECEPTOR    * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
-------------*--------*-------*----------------------------------------
1. NE3       *  262.  *   1.6 *   .0   .0   .4   .0   .0   .1   .0   .0
2. SE3       *  352.  *   1.7 *   .0   .2   .9   .0   .0   .2   .0   .0
3. SW3       *   81.  *   1.3 *   .0   .2   .0   .0   .0   .0   .2   .0
4. NW3       *  171.  *   1.4 *   .0   .3   .0   .0   .0   .1   .4   .0
5. NE7       *  187.  *   1.2 *   .0   .6   .0   .0   .0   .0   .0   .1
6. SE7       *  351.  *   1.2 *   .0   .0   .6   .0   .0   .1   .0   .0
7. SW7       *    9.  *   1.1 *   .0   .0   .2   .1   .0   .4   .0   .0
8. NW7       *   97.  *   1.1 *   .0   .0   .2   .0   .0   .2   .0   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

             *                          CONC/LINK
             *                            (PPM)
 RECEPTOR    *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*-----------------------------------------------------------
1. NE3       *   .0   .2   .5   .0   .0   .2   .0   .0   .0   .0   .0   .0
2. SE3       *   .0   .2   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
3. SW3       *   .0   .2   .0   .0   .0   .1   .3   .0   .0   .0   .0   .0
4. NW3       *   .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
5. NE7       *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
6. SE7       *   .0   .2   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
7. SW7       *   .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7       *   .0   .5   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   HOPE STREET AND 1ST STREET AM NP
            RUN:                     (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S             Z0= 100. CM           ALT=     0. (FT)
     BRG= WORST CASE             VD=    .0 CM/S
    CLAS=      7 (G)             VS=    .0 CM/S
    MIXH= 1000. M               AMB=    .0 PPM
   SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                     EF     H     W
  DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*-------------------------------
A. NF            *    23 -1500    23  -500 *  AG    205   2.3     .0  50.0
B. NA            *    23  -500    23     0 *  AG    144   4.6     .0  45.0
C. ND            *    23     0    23   500 *  AG    265   2.9     .0  33.0
D. NE            *    23   500    23  1500 *  AG    265   2.3     .0  50.0
E. SF            *   -23  1500   -23   500 *  AG    898   2.3     .0  50.0
F. SA            *   -23   500   -23     0 *  AG    839   5.0     .0  45.0
G. SD            *   -23     0   -23  -500 *  AG   1620   5.3     .0  33.0
H. SE            *   -23  -500   -23 -1500 *  AG   1620   2.3     .0  50.0
I. WF            *  1500    23   500    23 *  AG   1231   2.3     .0  65.0
J. WA            *   500    23     0    23 *  AG    946   3.3     .0  60.0
K. WD            *     0    23  -500    23 *  AG   1093   2.5     .0  45.0
L. WE            *  -500    23 -1500    23 *  AG   1093   2.3     .0  65.0
M. EF            * -1500   -30  -500   -30 *  AG   1892   2.3     .0  50.0
N. EA            *  -500   -30     0   -30 *  AG   1789   3.5     .0  45.0
O. ED            *     0   -30   500   -30 *  AG   1248   2.5     .0  33.0
P. EE            *   500   -30  1500   -30 *  AG   1248   2.3     .0  50.0
Q. NL            *     0     0    15  -500 *  AG     61   4.6     .0  33.0
R. SL            *     0     0   -15   500 *  AG     59   4.6     .0  33.0
S. WL            *     0     0   500     8 *  AG    285   3.3     .0  33.0
T. EL            *     0     0  -500   -23 *  AG    103   3.3     .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X       Y      Z
-------------*-------------------
1. NE3       *     48      55    6.0
2. SE3       *     48     -55    6.0
3. SW3       *    -48     -55    6.0
4. NW3       *    -48      55    6.0
5. NE7       *     61      68    6.0
6. SE7       *     61     -68    6.0
7. SW7       *    -61     -68    6.0
8. NW7       *    -61      68    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                    CONC/LINK
             *  BRG   * CONC  *                      (PPM)
  RECEPTOR   * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
-------------*--------*-------*----------------------------------------
 1. NE3      *  260.  *   1.0 *  .0   .0   .0   .0   .0   .2   .0   .0
 2. SE3      *  275.  *   1.5 *  .0   .0   .0   .0   .0   .0   .3   .0
 3. SW3      *   81.  *   1.5 *  .0   .0   .0   .0   .0   .0   .5   .0
 4. NW3      *  174.  *   1.7 *  .0   .0   .0   .0   .0   .2  1.1   .0
 5. NE7      *  192.  *    .8 *  .0   .0   .0   .0   .0   .0   .4   .0
 6. SE7      *  277.  *   1.2 *  .0   .0   .0   .0   .0   .0   .3   .0
 7. SW7      *   41.  *   1.1 *  .0   .0   .0   .0   .0   .0   .5   .0
 8. NW7      *  171.  *   1.2 *  .0   .0   .0   .0   .0   .0   .8   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                          CONC/LINK
             *                            (PPM)
  RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*----------------------------------------------------------
 1. NE3      *  .0   .0   .3   .0   .0   .2   .0   .0   .0   .0   .0   .0
 2. SE3      *  .0   .0   .0   .1   .1   .8   .0   .0   .0   .0   .0   .0
 3. SW3      *  .0   .1   .0   .0   .0   .3   .4   .0   .0   .0   .0   .0
 4. NW3      *  .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
 5. NE7      *  .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. SE7      *  .0   .0   .0   .1   .0   .6   .0   .0   .0   .0   .0   .0
 7. SW7      *  .0   .0   .0   .0   .0   .4   .0   .0   .0   .0   .0   .0
 8. NW7      *  .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HOPE STREET AND 1ST STREET AM WP
              RUN:                     (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


    I.  SITE VARIABLES

         U=     .5 M/S             Z0= 100. CM           ALT=      0. (FT)
       BRG= WORST CASE             VD=    .0 CM/S
      CLAS=      7 (G)             VS=    .0 CM/S
      MIXH= 1000. M               AMB=    .0 PPM
     SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


   II.  LINK VARIABLES

        LINK         *  LINK COORDINATES (FT)  *                EF     H     W
     DESCRIPTION     *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  -------------------*-------------------------*--------------------------------
  A. NF              *    23 -1500    23  -500 *  AG    267   2.3      .0  50.0
  B. NA              *    23  -500    23     0 *  AG    199   4.6      .0  45.0
  C. ND              *    23     0    23   500 *  AG    322   2.9      .0  33.0
  D. NE              *    23   500    23  1500 *  AG    322   2.3      .0  50.0
  E. SF              *   -23  1500   -23   500 *  AG    926   2.3      .0  50.0
  F. SA              *   -23   500   -23     0 *  AG    843   5.0      .0  45.0
  G. SD              *   -23     0   -23  -500 *  AG   1629   5.3      .0  33.0
  H. SE              *   -23  -500   -23 -1500 *  AG   1629   2.3      .0  50.0
  I. WF              *  1500    23   500    23 *  AG   1265   2.3      .0  65.0
  J. WA              *   500    23     0    23 *  AG    976   3.3      .0  60.0
  K. WD              *     0    23  -500    23 *  AG   1124   2.5      .0  45.0
  L. WE              *  -500    23 -1500    23 *  AG   1124   2.3      .0  65.0
  M. EF              * -1500   -30  -500   -30 *  AG   1948   2.3      .0  50.0
  N. EA              *  -500   -30     0   -30 *  AG   1845   3.5      .0  45.0
  O. ED              *     0   -30   500   -30 *  AG   1331   2.5      .0  33.0
  P. EE              *   500   -30  1500   -30 *  AG   1331   2.3      .0  50.0
  Q. NL              *     0     0    15  -500 *  AG     68   4.6      .0  33.0
  R. SL              *     0     0   -15   500 *  AG     83   4.6      .0  33.0
  S. WL              *     0     0   500     8 *  AG    289   3.3      .0  33.0
  T. EL              *     0     0  -500   -23 *  AG    103   3.3      .0  33.0

  III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
    RECEPTOR   *     X        Y      Z
  -------------*---------------------------
  1. NE3       *      48       55    6.0
  2. SE3       *      48      -55    6.0
  3. SW3       *     -48      -55    6.0
  4. NW3       *     -48       55    6.0
  5. NE7       *      61       68    6.0
  6. SE7       *      61      -68    6.0
  7. SW7       *     -61      -68    6.0
  8. NW7       *     -61       68    6.0


   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED   *                  CONC/LINK
               *  BRG   * CONC   *                    (PPM)
   RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
  -------------*--------*--------*-------------------------------------------------
  1. NE3       *  260.  *   1.0  *   .0    .0    .0    .0    .0    .2    .0    .0
  2. SE3       *  275.  *   1.6  *   .0    .0    .0    .0    .0    .0    .3    .0
  3. SW3       *   82.  *   1.6  *   .0    .0    .0    .0    .0    .0    .5    .0
  4. NW3       *  174.  *   1.8  *   .0    .0    .0    .0    .0    .2   1.1    .0
  5. NE7       *  192.  *    .8  *   .0    .1    .0    .0    .0    .0    .4    .0
  6. SE7       *  277.  *   1.2  *   .0    .0    .0    .0    .0    .0    .3    .0
  7. SW7       *   41.  *   1.1  *   .0    .0    .0    .0    .0    .0    .5    .0
  8. NW7       *  171.  *   1.2  *   .0    .0    .0    .0    .0    .0    .8    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                            CONC/LINK
               *                              (PPM)
   RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
  -------------*------------------------------------------------------------------------
  1. NE3       *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
  2. SE3       *   .0    .0    .0    .1    .1    .9    .0    .0    .0    .0    .0    .0
  3. SW3       *   .1    .1    .0    .0    .0    .2    .4    .0    .0    .0    .0    .0
  4. NW3       *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
  5. NE7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  6. SE7       *   .0    .0    .0    .1    .0    .6    .0    .0    .0    .0    .0    .0
  7. SW7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
  8. NW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   HOPE STREET AND 1ST STREET PM NP
            RUN:                      (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=     .5 M/S               Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE               VD=    .0 CM/S
     CLAS=      7 (G)               VS=    .0 CM/S
     MIXH= 1000. M                 AMB=    .0 PPM
    SIGTH=     5. DEGREES         TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                   EF     H     W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
------------------*-------------------------*---------------------------------
A. NF             *     23 -1500     23   -500 *  AG   1075   2.3      .0  50.0
B. NA             *     23  -500     23      0 *  AG    910   4.6      .0  45.0
C. ND             *     23     0     23    500 *  AG   1066   3.6      .0  33.0
D. NE             *     23   500     23   1500 *  AG   1066   2.3      .0  50.0
E. SF             *    -23  1500    -23    500 *  AG    491   2.3      .0  50.0
F. SA             *    -23   500    -23      0 *  AG    442   4.4      .0  45.0
G. SD             *    -23     0    -23   -500 *  AG    857   3.1      .0  33.0
H. SE             *    -23  -500    -23  -1500 *  AG    857   2.3      .0  50.0
I. WF             *   1500    23    500     23 *  AG   1635   2.3      .0  65.0
J. WA             *    500    23      0     23 *  AG   1452   3.4      .0  60.0
K. WD             *      0    23   -500     23 *  AG   1553   2.5      .0  45.0
L. WE             *   -500    23  -1500     23 *  AG   1553   2.3      .0  65.0
M. EF             *  -1500   -30   -500    -30 *  AG   1571   2.3      .0  50.0
N. EA             *   -500   -30      0    -30 *  AG   1332   3.4      .0  45.0
O. ED             *      0   -30    500    -30 *  AG   1296   2.5      .0  33.0
P. EE             *    500   -30   1500    -30 *  AG   1296   2.3      .0  50.0
Q. NL             *      0     0     15   -500 *  AG    165   4.4      .0  33.0
R. SL             *      0     0    -15    500 *  AG     49   4.4      .0  33.0
S. WL             *      0     0    500      8 *  AG    183   3.3      .0  33.0
T. EL             *      0     0   -500    -23 *  AG    239   3.3      .0  33.0

III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
  RECEPTOR    *     X        Y      Z
--------------*---------------------
1. NE3        *     48       55    6.0
2. SE3        *     48      -55    6.0
3. SW3        *    -48      -55    6.0
4. NW3        *    -48       55    6.0
5. NE7        *     61       68    6.0
6. SE7        *     61      -68    6.0
7. SW7        *    -61      -68    6.0
8. NW7        *    -61       68    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                    CONC/LINK
              *   BRG  * CONC  *                      (PPM)
 RECEPTOR     *  (DEG) * (PPM) *   A     B     C     D     E     F     G     H
--------------*--------*-------*------------------------------------------------
1. NE3        *   262. *   1.2 *   .0    .0    .2    .0    .0    .0    .0    .0
2. SE3        *   353. *   1.3 *   .0    .2    .5    .0    .0    .0    .0    .0
3. SW3        *    82. *   1.3 *   .0    .2    .0    .0    .0    .0    .2    .0
4. NW3        *   172. *   1.2 *   .0    .2    .0    .0    .0    .0    .4    .0
5. NE7        *   188. *   1.1 *   .0    .4    .0    .0    .0    .0    .0    .0
6. SE7        *   277. *   1.1 *   .0    .2    .0    .0    .0    .0    .0    .0
7. SW7        *    81. *    .9 *   .0    .1    .0    .0    .0    .0    .1    .0
8. NW7        *    97. *   1.0 *   .0    .0    .1    .0    .0    .1    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
 RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
--------------*--------------------------------------------------------------------
1. NE3        *   .0    .1    .5    .0    .1    .1    .0    .0    .0    .0    .0    .0
2. SE3        *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
3. SW3        *   .1    .2    .0    .0    .0    .2    .4    .0    .0    .0    .0    .0
4. NW3        *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
5. NE7        *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7        *   .0    .0    .0    .2    .0    .5    .0    .0    .0    .0    .0    .0
7. SW7        *   .1    .1    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
8. NW7        *   .0    .4    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
```

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         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

            JOB:   HOPE STREET AND 1ST STREET PM WP
            RUN:                         (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

      U=     .5 M/S             Z0= 100. CM             ALT=      0. (FT)
    BRG= WORST CASE             VD=    .0 CM/S
   CLAS=      7 (G)             VS=    .0 CM/S
   MIXH= 1000. M               AMB=    .0 PPM
  SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)   *                 EF     H     W
  DESCRIPTION    *   X1    Y1    X2    Y2   * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*--------------------------*-----------------------------
 A. NF           *    23 -1500    23  -500  *  AG   1158   2.3     .0  50.0
 B. NA           *    23  -500    23     0  *  AG    976   4.4     .0  45.0
 C. ND           *    23     0    23   500  *  AG   1170   4.1     .0  33.0
 D. NE           *    23   500    23  1500  *  AG   1170   2.3     .0  50.0
 E. SF           *   -23  1500   -23   500  *  AG    560   2.3     .0  50.0
 F. SA           *   -23   500   -23     0  *  AG    456   4.4     .0  45.0
 G. SD           *   -23     0   -23  -500  *  AG    880   3.0     .0  33.0
 H. SE           *   -23  -500   -23 -1500  *  AG    880   2.3     .0  50.0
 I. WF           *  1500    23   500    23  *  AG   1722   2.3     .0  65.0
 J. WA           *   500    23     0    23  *  AG   1533   3.5     .0  60.0
 K. WD           *     0    23  -500    23  *  AG   1611   2.5     .0  45.0
 L. WE           *  -500    23 -1500    23  *  AG   1611   2.3     .0  65.0
 M. EF           * -1500   -30  -500   -30  *  AG   1675   2.3     .0  50.0
 N. EA           *  -500   -30     0   -30  *  AG   1436   3.6     .0  45.0
 O. ED           *     0   -30   500   -30  *  AG   1454   2.6     .0  33.0
 P. EE           *   500   -30  1500   -30  *  AG   1454   2.3     .0  50.0
 Q. NL           *     0     0    15  -500  *  AG    182   4.4     .0  33.0
 R. SL           *     0     0   -15   500  *  AG    104   4.4     .0  33.0
 S. WL           *     0     0   500     8  *  AG    189   3.3     .0  33.0
 T. EL           *     0     0  -500   -23  *  AG    239   3.3     .0  33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
  RECEPTOR    *     X      Y      Z
--------------*---------------------
 1. NE3       *    48     55    6.0
 2. SE3       *    48    -55    6.0
 3. SW3       *   -48    -55    6.0
 4. NW3       *   -48     55    6.0
 5. NE7       *    61     68    6.0
 6. SE7       *    61    -68    6.0
 7. SW7       *   -61    -68    6.0
 8. NW7       *   -61     68    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                  CONC/LINK
              *  BRG   * CONC  *                    (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
--------------*--------*-------*------------------------------------------------
 1. NE3       *  260.  *   1.4 *  .0    .0    .3    .0    .0    .0    .0    .0
 2. SE3       *  353.  *   1.5 *  .0    .2    .6    .0    .0    .0    .0    .0
 3. SW3       *   82.  *   1.4 *  .0    .2    .0    .0    .0    .0    .2    .0
 4. NW3       *  172.  *   1.2 *  .0    .2    .0    .0    .0    .0    .4    .0
 5. NE7       *  187.  *   1.1 *  .0    .5    .0    .0    .0    .0    .0    .0
 6. SE7       *  277.  *   1.2 *  .0    .2    .0    .0    .0    .0    .0    .0
 7. SW7       *   81.  *   1.0 *  .0    .1    .0    .0    .0    .0    .1    .0
 8. NW7       *   97.  *   1.1 *  .0    .0    .2    .0    .0    .1    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
--------------*-------------------------------------------------------------------------
 1. NE3       *  .0    .2    .5    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *  .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
 3. SW3       *  .1    .2    .0    .0    .0    .2    .5    .0    .0    .0    .0    .0
 4. NW3       *  .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 5. NE7       *  .0    .3    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 6. SE7       *  .0    .0    .0    .2    .0    .5    .0    .0    .0    .0    .0    .0
 7. SW7       *  .1    .2    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
 8. NW7       *  .0    .5    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HOPE STREET AND GTK WAY / 2ND PLACE AM NP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (FT)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (FT)  *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*-------------------------*------------------------------
A. NF           *    15 -1500    15  -500 *  AG    381   2.3     .0  35.0
B. NA           *    15  -500    15     0 *  AG    248   4.1     .0  33.0
C. ND           *    15     0    15   500 *  AG    558   3.3     .0  33.0
D. NE           *    15   500    15  1500 *  AG    558   2.3     .0  35.0
E. SF           *   -15  1500   -15   500 *  AG    187   2.3     .0  35.0
F. SA           *   -15   500   -15     0 *  AG    178   4.1     .0  33.0
G. SD           *   -15     0   -15  -500 *  AG    293   2.8     .0  33.0
H. SE           *   -15  -500   -15 -1500 *  AG    293   2.3     .0  35.0
I. WF           *  1500    23   500    23 *  AG    273   2.3     .0  50.0
J. WA           *   500    23     0    23 *  AG    172   3.6     .0  45.0
K. WD           *     0    23  -500    23 *  AG    247   2.5     .0  33.0
L. WE           *  -500    23 -1500    23 *  AG    247   2.3     .0  50.0
M. EF           * -1500   -23  -500   -23 *  AG    548   2.3     .0  50.0
N. EA           *  -500   -23     0   -23 *  AG    244   3.6     .0  45.0
O. ED           *     0   -23   500   -23 *  AG    291   2.5     .0  33.0
P. EE           *   500   -23  1500   -23 *  AG    291   2.3     .0  50.0
Q. NL           *     0     0    15  -500 *  AG    133   4.1     .0  33.0
R. SL           *     0     0   -15   500 *  AG      9   4.1     .0  33.0
S. WL           *     0     0   500    15 *  AG    101   3.6     .0  33.0
T. EL           *     0     0  -500   -15 *  AG    304   3.6     .0  33.0

III.  RECEPTOR LOCATIONS

            *    COORDINATES (FT)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *     33     48   6.0
2. SE3      *     33    -48   6.0
3. SW3      *    -33    -48   6.0
4. NW3      *    -33     48   6.0
5. NE7      *     46     61   6.0
6. SE7      *     46    -61   6.0
7. SW7      *    -46    -61   6.0
8. NW7      *    -46     61   6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *               CONC/LINK
            *  BRG  * CONC  *                  (PPM)
 RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
------------*-------*-------*----------------------------------------
1. NE3      *  185. *    .6 *   .0   .2   .1   .0   .0   .0   .0   .0
2. SE3      *  356. *    .6 *   .0   .0   .3   .0   .0   .0   .0   .0
3. SW3      *    5. *    .5 *   .0   .0   .1   .0   .0   .2   .0   .0
4. NW3      *  175. *    .5 *   .0   .0   .0   .0   .0   .0   .2   .0
5. NE7      *  260. *    .4 *   .0   .0   .1   .0   .0   .0   .0   .0
6. SE7      *  354. *    .4 *   .0   .0   .2   .0   .0   .0   .0   .0
7. SW7      *    7. *    .4 *   .0   .0   .1   .0   .0   .1   .0   .0
8. NW7      *  173. *    .4 *   .0   .0   .0   .0   .0   .0   .1   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)     (CONT.)

            *                         CONC/LINK
            *                            (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*------------------------------------------------------------
1. NE3      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
5. NE7      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
6. SE7      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
7. SW7      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
8. NW7      *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

              JOB:   HOPE STREET AND GTK WAY / 2ND PLACE AM WP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
       BRG= WORST CASE             VD=    .0 CM/S
      CLAS=      7 (G)             VS=    .0 CM/S
      MIXH= 1000. M               AMB=    .0 PPM
     SIGTH=      5. DEGREES      TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

        LINK        *  LINK COORDINATES (FT)  *                  EF      H      W
     DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 -------------------*--------------------------*---------------------------------
 A. NF              *    15 -1500    15   -500 *  AG    402   2.3      .0   35.0
 B. NA              *    15  -500    15      0 *  AG    269   4.3      .0   33.0
 C. ND              *    15     0    15    500 *  AG    601   3.5      .0   33.0
 D. NE              *    15   500    15   1500 *  AG    601   2.3      .0   35.0
 E. SF              *   -15  1500   -15    500 *  AG    199   2.3      .0   35.0
 F. SA              *   -15   500   -15      0 *  AG    189   4.3      .0   33.0
 G. SD              *   -15     0   -15   -500 *  AG    293   2.8      .0   33.0
 H. SE              *   -15  -500   -15  -1500 *  AG    293   2.3      .0   35.0
 I. WF              *  1500    23   500     23 *  AG    374   2.3      .0   50.0
 J. WA              *   500    23     0     23 *  AG    273   3.5      .0   45.0
 K. WD              *     0    23  -500     23 *  AG    331   2.5      .0   33.0
 L. WE              *  -500    23 -1500     23 *  AG    331   2.3      .0   50.0
 M. EF              * -1500   -23  -500    -23 *  AG    558   2.3      .0   50.0
 N. EA              *  -500   -23     0    -23 *  AG    252   3.5      .0   45.0
 O. ED              *     0   -23   500    -23 *  AG    308   2.5      .0   33.0
 P. EE              *   500   -23  1500    -23 *  AG    308   2.3      .0   50.0
 Q. NL              *     0     0    15   -500 *  AG    133   4.3      .0   33.0
 R. SL              *     0     0   -15    500 *  AG     10   4.3      .0   33.0
 S. WL              *     0     0   500     15 *  AG    101   3.5      .0   33.0
 T. EL              *     0     0  -500    -15 *  AG    306   3.6      .0   33.0

 III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
   RECEPTOR    *     X        Y       Z
 --------------*---------------------------
 1. NE3        *      33       48    6.0
 2. SE3        *      33      -48    6.0
 3. SW3        *     -33      -48    6.0
 4. NW3        *     -33       48    6.0
 5. NE7        *      46       61    6.0
 6. SE7        *      46      -61    6.0
 7. SW7        *     -46      -61    6.0
 8. NW7        *     -46       61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *         * PRED   *                      CONC/LINK
               *   BRG   * CONC   *                        (PPM)
   RECEPTOR    *  (DEG)  * (PPM)  *    A     B     C     D     E     F     G     H
 --------------*---------*--------*-----------------------------------------------
 1. NE3        *   185.  *     .7 *   .0    .2    .1    .0    .0    .0    .0    .0
 2. SE3        *   356.  *     .7 *   .0    .0    .4    .0    .0    .0    .0    .0
 3. SW3        *     5.  *     .6 *   .0    .0    .1    .0    .0    .2    .0    .0
 4. NW3        *   174.  *     .6 *   .0    .0    .0    .0    .0    .0    .2    .0
 5. NE7        *   260.  *     .4 *   .0    .0    .1    .0    .0    .0    .0    .0
 6. SE7        *   354.  *     .5 *   .0    .0    .3    .0    .0    .0    .0    .0
 7. SW7        *     7.  *     .4 *   .0    .0    .1    .0    .0    .1    .0    .0
 8. NW7        *   172.  *     .4 *   .0    .0    .0    .0    .0    .0    .1    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                            CONC/LINK
               *                              (PPM)
   RECEPTOR    *    I     J     K     L     M     N     O     P     Q     R     S     T
 --------------*----------------------------------------------------------------------
 1. NE3        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 2. SE3        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 3. SW3        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 4. NW3        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 5. NE7        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 7. SW7        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 8. NW7        *   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:    HOPE STREET AND GTK WAY / 2ND PLACE PM NP
            RUN:                  (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=    .5 M/S              Z0= 100. CM              ALT=     0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=     7 (G)              VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

       LINK        *  LINK COORDINATES (FT)  *                 EF     H     W
    DESCRIPTION    *   X1     Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  -----------------*-------------------------*------------------------------
  A. NF            *    15 -1500    15  -500 *  AG    870   2.3      .0  35.0
  B. NA            *    15  -500    15     0 *  AG    725   4.3      .0  33.0
  C. ND            *    15     0    15   500 *  AG   1237   5.0      .0  33.0
  D. NE            *    15   500    15  1500 *  AG   1237   2.3      .0  35.0
  E. SF            *   -15  1500   -15   500 *  AG     78   2.3      .0  35.0
  F. SA            *   -15   500   -15     0 *  AG     69   4.0      .0  33.0
  G. SD            *   -15     0   -15  -500 *  AG    250   2.7      .0  33.0
  H. SE            *   -15  -500   -15 -1500 *  AG    250   2.3      .0  35.0
  I. WF            *  1500    23   500    23 *  AG    930   2.3      .0  50.0
  J. WA            *   500    23     0    23 *  AG    770   3.8      .0  45.0
  K. WD            *     0    23  -500    23 *  AG    505   2.6      .0  33.0
  L. WE            *  -500    23 -1500    23 *  AG    505   2.3      .0  50.0
  M. EF            * -1500   -23  -500   -23 *  AG    240   2.3      .0  50.0
  N. EA            *  -500   -23     0   -23 *  AG     67   3.8      .0  45.0
  O. ED            *     0   -23   500   -23 *  AG    126   2.5      .0  33.0
  P. EE            *   500   -23  1500   -23 *  AG    126   2.3      .0  50.0
  Q. NL            *     0     0    15  -500 *  AG    145   4.0      .0  33.0
  R. SL            *     0     0   -15   500 *  AG      9   4.0      .0  33.0
  S. WL            *     0     0   500    15 *  AG    160   3.8      .0  33.0
  T. EL            *     0     0  -500   -15 *  AG    173   3.8      .0  33.0

  III.  RECEPTOR LOCATIONS

                *     COORDINATES (FT)
    RECEPTOR    *    X       Y      Z
  --------------*---------------------
  1. NE3        *     33      48    6.0
  2. SE3        *     33     -48    6.0
  3. SW3        *    -33     -48    6.0
  4. NW3        *    -33      48    6.0
  5. NE7        *     46      61    6.0
  6. SE7        *     46     -61    6.0
  7. SW7        *    -46     -61    6.0
  8. NW7        *    -46      61    6.0


   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

                *        * PRED  *                   CONC/LINK
                *  BRG   * CONC  *                     (PPM)
   RECEPTOR     * (DEG)  * (PPM) *    A     B     C     D     E     F     G     H
 ---------------*--------*-------*------------------------------------------------
  1. NE3        *  185.  *   1.3 *   .0    .5    .3    .0    .0    .0    .0    .0
  2. SE3        *  356.  *   1.5 *   .0    .2   1.0    .0    .0    .0    .0    .0
  3. SW3        *    8.  *    .7 *   .0    .0    .5    .0    .0    .0    .0    .0
  4. NW3        *   95.  *    .9 *   .0    .0    .3    .0    .0    .0    .0    .0
  5. NE7        *  186.  *    .7 *   .0    .4    .0    .0    .0    .0    .0    .0
  6. SE7        *  354.  *    .9 *   .0    .0    .7    .0    .0    .0    .0    .0
  7. SW7        *   10.  *    .6 *   .0    .0    .4    .0    .0    .0    .0    .0
  8. NW7        *   96.  *    .7 *   .0    .0    .2    .0    .0    .0    .0    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

                *                          CONC/LINK
                *                            (PPM)
   RECEPTOR     *   I    J    K    L    M    N    O    P    Q    R    S    T
 ---------------*------------------------------------------------------------
  1. NE3        *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  2. SE3        *   .0   .1   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  3. SW3        *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  4. NW3        *   .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  5. NE7        *   .0   .1   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  6. SE7        *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  7. SW7        *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  8. NW7        *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HOPE STREET AND GTK WAY / 2ND PLACE PM WP
              RUN:                   (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


    I.  SITE VARIABLES

         U=    .5 M/S              Z0= 100. CM            ALT=     0. (FT)
       BRG= WORST CASE             VD=    .0 CM/S
      CLAS=     7 (G)              VS=    .0 CM/S
      MIXH= 1000. M               AMB=    .0 PPM
     SIGTH=    5. DEGREES        TEMP= 15.6 DEGREE (C)


   II.  LINK VARIABLES

        LINK         *  LINK COORDINATES (FT)  *                    EF     H     W
     DESCRIPTION     *   X1     Y1    X2    Y2 * TYPE  VPH  (G/MI)  (FT)  (FT)
   ------------------*-------------------------*-------------------------------
   A. NF             *    15 -1500    15  -500 *  AG    932    2.3     .0  35.0
   B. NA             *    15  -500    15     0 *  AG    787    4.3     .0  33.0
   C. ND             *    15     0    15   500 *  AG   1328    5.2     .0  33.0
   D. NE             *    15   500    15  1500 *  AG   1328    2.3     .0  35.0
   E. SF             *   -15  1500   -15   500 *  AG    113    2.3     .0  35.0
   F. SA             *   -15   500   -15     0 *  AG    100    4.1     .0  33.0
   G. SD             *   -15     0   -15  -500 *  AG    250    2.7     .0  33.0
   H. SE             *   -15  -500   -15 -1500 *  AG    250    2.3     .0  35.0
   I. WF             *  1500    23   500    23 *  AG   1083    2.3     .0  50.0
   J. WA             *   500    23     0    23 *  AG    923    3.8     .0  45.0
   K. WD             *     0    23  -500    23 *  AG    639    2.6     .0  33.0
   L. WE             *  -500    23 -1500    23 *  AG    639    2.3     .0  50.0
   M. EF             * -1500   -23  -500   -23 *  AG    274    2.3     .0  50.0
   N. EA             *  -500   -23     0   -23 *  AG     95    3.6     .0  45.0
   O. ED             *     0   -23   500   -23 *  AG    185    2.5     .0  33.0
   P. EE             *   500   -23  1500   -23 *  AG    185    2.3     .0  50.0
   Q. NL             *     0     0    15  -500 *  AG    145    4.1     .0  33.0
   R. SL             *     0     0   -15   500 *  AG     13    4.1     .0  33.0
   S. WL             *     0     0   500    15 *  AG    160    3.6     .0  33.0
   T. EL             *     0     0  -500   -15 *  AG    179    3.6     .0  33.0

   III.  RECEPTOR LOCATIONS

                  *     COORDINATES (FT)
     RECEPTOR     *     X        Y      Z
   ---------------*-------------------------
   1. NE3         *      33       48    6.0
   2. SE3         *      33      -48    6.0
   3. SW3         *     -33      -48    6.0
   4. NW3         *     -33       48    6.0
   5. NE7         *      46       61    6.0
   6. SE7         *      46      -61    6.0
   7. SW7         *     -46      -61    6.0
   8. NW7         *     -46       61    6.0


    IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

                  *        * PRED  *                  CONC/LINK
                  *   BRG  * CONC  *                    (PPM)
    RECEPTOR      *  (DEG) * (PPM) *    A     B     C     D     E     F     G     H
  ----------------*--------*-------*--------------------------------------------------
   1. NE3         *   185. *   1.4 *   .0    .6    .4    .0    .0    .0    .0    .0
   2. SE3         *   356. *   1.6 *   .0    .2   1.1    .0    .0    .0    .0    .0
   3. SW3         *     8. *    .8 *   .0    .0    .5    .0    .0    .0    .0    .0
   4. NW3         *    95. *   1.0 *   .0    .0    .3    .0    .0    .0    .0    .0
   5. NE7         *   352. *    .8 *   .0    .0    .7    .0    .0    .0    .0    .0
   6. SE7         *   354. *   1.0 *   .0    .0    .7    .0    .0    .0    .0    .0
   7. SW7         *    10. *    .6 *   .0    .0    .4    .0    .0    .0    .0    .0
   8. NW7         *    96. *    .8 *   .0    .0    .3    .0    .0    .0    .0    .0

    IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

                  *                           CONC/LINK
                  *                             (PPM)
    RECEPTOR      *   I    J    K    L    M    N    O    P    Q    R    S    T
   ---------------*------------------------------------------------------------
   1. NE3         *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   2. SE3         *   .0   .1   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   3. SW3         *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   4. NW3         *   .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   5. NE7         *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   6. SE7         *   .0   .1   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   7. SW7         *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   8. NW7         *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   HOPE STREET AND TEMPLE STREET AM NP
            RUN:                     (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=    .5 M/S              Z0= 100. CM           ALT=     0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=     7 (G)              VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=    5. DEGREES        TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                 EF     H     W
   DESCRIPTION    *   X1     Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -----------------*-------------------------*-----------------------------
 A. NF            *    23  -1500     23  -500 *  AG    224   2.3      .0  50.0
 B. NA            *    23   -500     23     0 *  AG    199   4.8      .0  45.0
 C. ND            *    23      0     23   500 *  AG    499   2.9      .0  33.0
 D. NE            *    23    500     23  1500 *  AG    499   2.3      .0  50.0
 E. SF            *   -23   1500    -23   500 *  AG    586   2.3      .0  50.0
 F. SA            *   -23    500    -23     0 *  AG    354   4.8      .0  45.0
 G. SD            *   -23      0    -23  -500 *  AG   1020   5.0      .0  33.0
 H. SE            *   -23   -500    -23 -1500 *  AG   1020   2.3      .0  50.0
 I. WF            *  1500     23    500    23 *  AG   1203   2.3      .0  50.0
 J. WA            *   500     23      0    23 *  AG    819   3.3      .0  45.0
 K. WD            *     0     23   -500    23 *  AG    710   2.5      .0  33.0
 L. WE            *  -500     23  -1500    23 *  AG    710   2.3      .0  50.0
 M. EF            * -1500    -23   -500   -23 *  AG   1398   2.3      .0  50.0
 N. EA            *  -500    -23      0   -23 *  AG   1173   3.3      .0  45.0
 O. ED            *     0    -23    500   -23 *  AG   1182   2.5      .0  33.0
 P. EE            *   500    -23   1500   -23 *  AG   1182   2.3      .0  50.0
 Q. NL            *     0      0     15  -500 *  AG     25   4.8      .0  33.0
 R. SL            *     0      0    -15   500 *  AG    232   4.8      .0  33.0
 S. WL            *     0      0    500    15 *  AG    384   3.3      .0  33.0
 T. EL            *     0      0   -500   -15 *  AG    225   3.3      .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *    X        Y     Z
 -------------*---------------------
 1. NE3       *     48      48   6.0
 2. SE3       *     48     -48   6.0
 3. SW3       *    -48     -48   6.0
 4. NW3       *    -48      48   6.0
 5. NE7       *     61      61   6.0
 6. SE7       *     61     -61   6.0
 7. SW7       *    -61     -61   6.0
 8. NW7       *    -61      61   6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                    CONC/LINK
              *  BRG   * CONC  *                      (PPM)
   RECEPTOR   * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 -------------*--------*-------*------------------------------------------------
 1. NE3       *  262.  *    .9 *   .0    .0    .0    .0    .0    .0    .0    .0
 2. SE3       *  275.  *   1.1 *   .0    .0    .0    .0    .0    .0    .2    .0
 3. SW3       *   82.  *   1.2 *   .0    .0    .0    .0    .0    .0    .3    .0
 4. NW3       *  174.  *   1.2 *   .0    .0    .0    .0    .0    .0    .7    .0
 5. NE7       *  191.  *    .7 *   .0    .1    .0    .0    .0    .0    .2    .0
 6. SE7       *  276.  *    .8 *   .0    .0    .0    .0    .0    .0    .2    .0
 7. SW7       *   82.  *    .9 *   .0    .0    .0    .0    .0    .0    .2    .0
 8. NW7       *  172.  *    .8 *   .0    .0    .0    .0    .0    .0    .5    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                              CONC/LINK
              *                                (PPM)
   RECEPTOR   *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*---------------------------------------------------------------------
 1. NE3       *   .0    .1    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
 3. SW3       *   .0    .1    .0    .0    .0    .1    .4    .0    .0    .0    .1    .0
 4. NW3       *   .0    .0    .1    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7       *   .1    .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
 8. NW7       *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
```

```
          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HOPE STREET AND TEMPLE STREET AM WP
              RUN:                     (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=    .5 M/S            Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE           VD=    .0 CM/S
     CLAS=     7 (G)            VS=    .0 CM/S
     MIXH= 1000. M             AMB=    .0 PPM
    SIGTH=     5. DEGREES     TEMP= 15.6 DEGREE (C)

  II.  LINK VARIABLES

       LINK       *  LINK COORDINATES (FT)  *              EF     H     W
    DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -----------------*-------------------------*-----------------------------
 A. NF            *    23 -1500    23  -500 *  AG    280   2.3     .0  50.0
 B. NA            *    23  -500    23     0 *  AG    253   4.6     .0  45.0
 C. ND            *    23     0    23   500 *  AG    556   3.3     .0  33.0
 D. NE            *    23   500    23  1500 *  AG    556   2.3     .0  50.0
 E. SF            *   -23  1500   -23   500 *  AG    614   2.3     .0  50.0
 F. SA            *   -23   500   -23     0 *  AG    382   4.6     .0  45.0
 G. SD            *   -23     0   -23  -500 *  AG   1048   4.6     .0  33.0
 H. SE            *   -23  -500   -23 -1500 *  AG   1048   2.3     .0  50.0
 I. WF            *  1500    23   500    23 *  AG   1210   2.3     .0  50.0
 J. WA            *   500    23     0    23 *  AG    826   3.3     .0  45.0
 K. WD            *     0    23  -500    23 *  AG    716   2.5     .0  33.0
 L. WE            *  -500    23 -1500    23 *  AG    716   2.3     .0  50.0
 M. EF            * -1500   -23  -500   -23 *  AG   1398   2.3     .0  50.0
 N. EA            *  -500   -23     0   -23 *  AG   1173   3.3     .0  45.0
 O. ED            *     0   -23   500   -23 *  AG   1182   2.5     .0  33.0
 P. EE            *   500   -23  1500   -23 *  AG   1182   2.3     .0  50.0
 Q. NL            *     0     0    15  -500 *  AG     27   4.6     .0  33.0
 R. SL            *     0     0   -15   500 *  AG    232   4.6     .0  33.0
 S. WL            *     0     0   500    15 *  AG    384   3.3     .0  33.0
 T. EL            *     0     0  -500   -15 *  AG    225   3.3     .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *    X       Y      Z
 -------------*---------------------
 1. NE3       *     48      48    6.0
 2. SE3       *     48     -48    6.0
 3. SW3       *    -48     -48    6.0
 4. NW3       *    -48      48    6.0
 5. NE7       *     61      61    6.0
 6. SE7       *     61     -61    6.0
 7. SW7       *    -61     -61    6.0
 8. NW7       *    -61      61    6.0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                CONC/LINK
              *  BRG   * CONC  *                  (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 -------------*--------*-------*------------------------------------------------
 1. NE3       *  262.  *    .9 *   .0    .0    .1    .0    .0    .0    .0    .0
 2. SE3       *  275.  *   1.1 *   .0    .0    .0    .0    .0    .0    .2    .0
 3. SW3       *   82.  *   1.2 *   .0    .0    .0    .0    .0    .0    .3    .0
 4. NW3       *  174.  *   1.1 *   .0    .0    .0    .0    .0    .0    .7    .0
 5. NE7       *  191.  *    .7 *   .0    .1    .0    .0    .0    .0    .2    .0
 6. SE7       *  276.  *    .9 *   .0    .0    .0    .0    .0    .0    .2    .0
 7. SW7       *   82.  *    .8 *   .0    .0    .0    .0    .0    .0    .2    .0
 8. NW7       *  172.  *    .8 *   .0    .0    .0    .0    .0    .0    .5    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                         CONC/LINK
              *                           (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*------------------------------------------------------------------------
 1. NE3       *   .0    .1    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .0    .0    .1    .0    .6    .0    .0    .0    .0    .0    .0
 3. SW3       *   .0    .1    .0    .0    .0    .1    .4    .0    .0    .0    .1    .0
 4. NW3       *   .0    .0    .1    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7       *   .1    .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
 8. NW7       *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
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         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   HOPE STREET AND TEMPLE STREET PM NP
             RUN:                      (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=     .5 M/S             Z0= 100. CM             ALT=      0. (FT)
       BRG= WORST CASE             VD=    .0 CM/S
      CLAS=      7 (G)             VS=    .0 CM/S
      MIXH= 1000. M               AMB=    .0 PPM
     SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK         *  LINK COORDINATES (FT)  *                  EF     H     W
   DESCRIPTION     *   X1     Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ------------------*--------------------------*--------------------------------
 A. NF             *     23 -1500    23  -500 *  AG   1121   2.3     .0  50.0
 B. NA             *     23  -500    23     0 *  AG    863   4.4     .0  45.0
 C. ND             *     23     0    23   500 *  AG   1247   4.0     .0  33.0
 D. NE             *     23   500    23  1500 *  AG   1247   2.3     .0  50.0
 E. SF             *    -23  1500   -23   500 *  AG    244   2.3     .0  50.0
 F. SA             *    -23   500   -23     0 *  AG    109   4.3     .0  45.0
 G. SD             *    -23     0   -23  -500 *  AG    470   2.8     .0  33.0
 H. SE             *    -23  -500   -23 -1500 *  AG    470   2.3     .0  50.0
 I. WF             *   1500    23   500    23 *  AG   1222   2.3     .0  50.0
 J. WA             *    500    23     0    23 *  AG    989   3.4     .0  45.0
 K. WD             *      0    23  -500    23 *  AG   1060   2.5     .0  33.0
 L. WE             *   -500    23 -1500    23 *  AG   1060   2.3     .0  50.0
 M. EF             *  -1500   -23  -500   -23 *  AG   1295   2.3     .0  50.0
 N. EA             *   -500   -23     0   -23 *  AG    856   3.4     .0  45.0
 O. ED             *      0   -23   500   -23 *  AG   1105   2.6     .0  33.0
 P. EE             *    500   -23  1500   -23 *  AG   1105   2.3     .0  50.0
 Q. NL             *      0     0    15  -500 *  AG    258   4.4     .0  33.0
 R. SL             *      0     0   -15   500 *  AG    135   4.3     .0  33.0
 S. WL             *      0     0   500    15 *  AG    233   3.4     .0  33.0
 T. EL             *      0     0  -500   -15 *  AG    439   3.5     .0  33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *    X        Y      Z
 -------------*---------------------
 1. NE3       *     48       48    6.0
 2. SE3       *     48      -48    6.0
 3. SW3       *    -48      -48    6.0
 4. NW3       *    -48       48    6.0
 5. NE7       *     61       61    6.0
 6. SE7       *     61      -61    6.0
 7. SW7       *    -61      -61    6.0
 8. NW7       *    -61       61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *       * PRED   *                   CONC/LINK
               *  BRG  * CONC   *                     (PPM)
  RECEPTOR     * (DEG) * (PPM)  *   A     B     C     D     E     F     G     H
 --------------*-------*--------*------------------------------------------------
 1. NE3        *  262. *   1.2  *   .0    .0    .3    .0    .0    .0    .0    .0
 2. SE3        *  353. *   1.3  *   .0    .1    .7    .0    .0    .0    .0    .0
 3. SW3        *   82. *   1.1  *   .0    .1    .0    .0    .0    .0    .0    .0
 4. NW3        *  171. *    .9  *   .0    .2    .0    .0    .0    .0    .2    .0
 5. NE7        *  187. *    .9  *   .0    .4    .0    .0    .0    .0    .0    .0
 6. SE7        *  277. *    .9  *   .0    .2    .0    .0    .0    .0    .0    .0
 7. SW7        *   82. *    .8  *   .0    .1    .0    .0    .0    .0    .0    .0
 8. NW7        *   97. *    .8  *   .0    .0    .2    .0    .0    .0    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*--------------------------------------------------------------------
 1. NE3       *   .0    .1    .4    .0    .0    .1    .0    .0    .0    .0    .0    .1
 2. SE3       *   .0    .1    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
 3. SW3       *   .0    .2    .0    .0    .0    .1    .4    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .1    .0    .0    .0
 5. NE7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .1    .0    .3    .0    .0    .0    .0    .0    .1
 7. SW7       *   .1    .1    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
 8. NW7       *   .0    .4    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
```

```
      CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
               JUNE 1989 VERSION
               PAGE   1

          JOB:   HOPE STREET AND TEMPLE STREET PM WP
          RUN:                    (WORST CASE ANGLE)
    POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S            Z0= 100. CM           ALT=      0. (FT)
     BRG= WORST CASE            VD=    .0 CM/S
    CLAS=      7 (G)            VS=    .0 CM/S
    MIXH= 1000. M              AMB=    .0 PPM
   SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                 EF     H     W
  DESCRIPTION    *   X1     Y1     X2    Y2 * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*-------------------------------
A. NF            *    23 -1500    23  -500 *  AG   1225   2.3     .0  50.0
B. NA            *    23  -500    23     0 *  AG    966   4.4     .0  45.0
C. ND            *    23     0    23   500 *  AG   1353   4.3     .0  33.0
D. NE            *    23   500    23  1500 *  AG   1353   2.3     .0  50.0
E. SF            *   -23  1500   -23   500 *  AG    313   2.3     .0  50.0
F. SA            *   -23   500   -23     0 *  AG    178   4.3     .0  45.0
G. SD            *   -23     0   -23  -500 *  AG    539   2.8     .0  33.0
H. SE            *   -23  -500   -23 -1500 *  AG    539   2.3     .0  50.0
I. WF            *  1500    23   500    23 *  AG   1236   2.3     .0  50.0
J. WA            *   500    23     0    23 *  AG   1003   3.5     .0  45.0
K. WD            *     0    23  -500    23 *  AG   1072   2.5     .0  33.0
L. WE            *  -500    23 -1500    23 *  AG   1072   2.3     .0  50.0
M. EF            * -1500   -23  -500   -23 *  AG   1295   2.3     .0  50.0
N. EA            *  -500   -23     0   -23 *  AG    856   3.5     .0  45.0
O. ED            *     0   -23   500   -23 *  AG   1105   2.6     .0  33.0
P. EE            *   500   -23  1500   -23 *  AG   1105   2.3     .0  50.0
Q. NL            *     0     0    15  -500 *  AG    259   4.4     .0  33.0
R. SL            *     0     0   -15   500 *  AG    135   4.3     .0  33.0
S. WL            *     0     0   500    15 *  AG    233   3.5     .0  33.0
T. EL            *     0     0  -500   -15 *  AG    439   3.6     .0  33.0

III.  RECEPTOR LOCATIONS

            *    COORDINATES (FT)
  RECEPTOR  *    X        Y      Z
------------*---------------------
1. NE3      *     48       48    6.0
2. SE3      *     48      -48    6.0
3. SW3      *    -48      -48    6.0
4. NW3      *    -48       48    6.0
5. NE7      *     61       61    6.0
6. SE7      *     61      -61    6.0
7. SW7      *    -61      -61    6.0
8. NW7      *    -61       61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *        * PRED   *                   CONC/LINK
            *  BRG   * CONC   *                     (PPM)
 RECEPTOR   * (DEG)  * (PPM)  *   A    B    C    D    E    F    G    H
------------*--------*--------*---------------------------------------
1. NE3      *  262.  *   1.3  *  .0   .0   .3   .0   .0   .0   .0   .0
2. SE3      *  353.  *   1.4  *  .0   .1   .8   .0   .0   .0   .0   .0
3. SW3      *   82.  *   1.1  *  .0   .2   .0   .0   .0   .0   .0   .0
4. NW3      *  171.  *   1.0  *  .0   .2   .0   .0   .0   .0   .2   .0
5. NE7      *  187.  *   1.0  *  .0   .4   .0   .0   .0   .0   .0   .0
6. SE7      *  352.  *   1.0  *  .0   .0   .5   .0   .0   .0   .0   .0
7. SW7      *   81.  *    .8  *  .0   .1   .0   .0   .0   .0   .0   .0
8. NW7      *   97.  *    .9  *  .0   .0   .2   .0   .0   .0   .0   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

            *                           CONC/LINK
            *                             (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*------------------------------------------------------------
1. NE3      *  .0   .1   .4   .0   .0   .1   .0   .0   .0   .0   .0   .1
2. SE3      *  .0   .1   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
3. SW3      *  .0   .2   .0   .0   .0   .1   .4   .0   .0   .0   .0   .0
4. NW3      *  .0   .0   .2   .0   .0   .1   .0   .0   .1   .0   .0   .0
5. NE7      *  .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
6. SE7      *  .0   .1   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
7. SW7      *  .0   .1   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0
8. NW7      *  .0   .4   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

               JOB:   GRAND AVENUE AND 1ST STREET AM NP
               RUN:                    (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S              Z0= 100. CM             ALT=       0. (FT)
     BRG= WORST CASE              VD=    .0 CM/S
    CLAS=      7 (G)              VS=    .0 CM/S
    MIXH= 1000. M                AMB=    .0 PPM
   SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK          *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION      *   X1     Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ------------------*-------------------------*-------------------------------
 A. NF             *    23 -1500    23  -500 *  AG    189   2.3     .0  50.0
 B. NA             *    23  -500    23     0 *  AG    172   4.3     .0  45.0
 C. ND             *    23     0    23   500 *  AG    570   2.8     .0  33.0
 D. NE             *    23   500    23  1500 *  AG    570   2.3     .0  50.0
 E. SF             *   -23  1500   -23   500 *  AG   1591   2.3     .0  50.0
 F. SA             *   -23   500   -23     0 *  AG   1405   4.8     .0  45.0
 G. SD             *   -23     0   -23  -500 *  AG   1644   5.0     .0  33.0
 H. SE             *   -23  -500   -23 -1500 *  AG   1644   2.3     .0  50.0
 I. WF             *  1500    38   500    38 *  AG   1558   2.3     .0  65.0
 J. WA             *   500    38     0    38 *  AG   1313   3.6     .0  60.0
 K. WD             *     0    38  -500    38 *  AG   1249   2.5     .0  45.0
 L. WE             *  -500    38 -1500    38 *  AG   1249   2.3     .0  65.0
 M. EF             * -1500   -38  -500   -38 *  AG   1261   2.3     .0  65.0
 N. EA             *  -500   -38     0   -38 *  AG   1118   3.5     .0  75.0
 O. ED             *     0   -38   500   -38 *  AG   1136   2.5     .0  45.0
 P. EE             *   500   -38  1500   -38 *  AG   1136   2.3     .0  65.0
 Q. NL             *     0     0    15  -500 *  AG     17   4.3     .0  33.0
 R. SL             *     0     0   -15   500 *  AG    186   4.3     .0  33.0
 S. WL             *     0     0   500    23 *  AG    245   3.5     .0  33.0
 T. EL             *     0     0  -500   -23 *  AG    143   3.5     .0  33.0

 III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
   RECEPTOR  *     X       Y      Z
 ------------*--------------------
 1. NE3      *     48      70    6.0
 2. SE3      *     48     -70    6.0
 3. SW3      *    -48     -70    6.0
 4. NW3      *    -48      70    6.0
 5. NE7      *     61      83    6.0
 6. SE7      *     61     -83    6.0
 7. SW7      *    -61     -83    6.0
 8. NW7      *    -61      83    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                  CONC/LINK
             *  BRG   * CONC   *                    (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *   A    B    C    D    E    F    G    H
 ------------*--------*--------*---------------------------------------
 1. NE3      *  261.  *   1.1  *  .0   .0   .0   .0   .0   .2   .0   .0
 2. SE3      *  351.  *   1.1  *  .0   .0   .2   .0   .0   .3   .0   .0
 3. SW3      *    5.  *   1.5  *  .0   .0   .0   .0   .0   .9   .0   .0
 4. NW3      *  174.  *   1.7  *  .0   .0   .0   .0   .0   .3  1.0   .0
 5. NE7      *  192.  *    .8  *  .0   .0   .0   .0   .0   .0   .4   .0
 6. SE7      *  348.  *    .9  *  .0   .0   .1   .0   .0   .3   .0   .0
 7. SW7      *    7.  *   1.2  *  .0   .0   .0   .0   .0   .7   .0   .0
 8. NW7      *  171.  *   1.1  *  .0   .0   .0   .0   .0   .0   .7   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                            CONC/LINK
             *                              (PPM)
  RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
 ------------*-----------------------------------------------------------
 1. NE3      *  .0   .1   .4   .0   .1   .0   .0   .0   .0   .0   .0   .0
 2. SE3      *  .0   .1   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
 3. SW3      *  .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
 4. NW3      *  .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
 5. NE7      *  .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. SE7      *  .0   .1   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
 7. SW7      *  .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
 8. NW7      *  .0   .0   .1   .0   .0   .1   .0   .0   .0   .0   .0   .0
```

```
        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   GRAND AVENUE AND 1ST STREET AM WP
            RUN:                      (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=    .5 M/S              Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE             VD=    .0 CM/S
    CLAS=     7 (G)              VS=    .0 CM/S
    MIXH= 1000. M               AMB=    .0 PPM
   SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*-------------------------------
A. NF            *    23 -1500    23  -500 *  AG    388   2.3     .0  50.0
B. NA            *    23  -500    23     0 *  AG    347   4.1     .0  45.0
C. ND            *    23     0    23   500 *  AG    645   2.8     .0  33.0
D. NE            *    23   500    23  1500 *  AG    645   2.3     .0  50.0
E. SF            *   -23  1500   -23   500 *  AG   1628   2.3     .0  50.0
F. SA            *   -23   500   -23     0 *  AG   1417   4.6     .0  45.0
G. SD            *   -23     0   -23  -500 *  AG   1672   4.8     .0  33.0
H. SE            *   -23  -500   -23 -1500 *  AG   1672   2.3     .0  50.0
I. WF            *  1500    38   500    38 *  AG   1585   2.3     .0  65.0
J. WA            *   500    38     0    38 *  AG   1335   3.6     .0  60.0
K. WD            *     0    38  -500    38 *  AG   1283   2.6     .0  45.0
L. WE            *  -500    38 -1500    38 *  AG   1283   2.3     .0  65.0
M. EF            * -1500   -38  -500   -38 *  AG   1345   2.3     .0  65.0
N. EA            *  -500   -38     0   -38 *  AG   1202   3.6     .0  75.0
O. ED            *     0   -38   500   -38 *  AG   1346   2.6     .0  45.0
P. EE            *   500   -38  1500   -38 *  AG   1346   2.3     .0  65.0
Q. NL            *     0     0    15  -500 *  AG     41   4.1     .0  33.0
R. SL            *     0     0   -15   500 *  AG    211   4.1     .0  33.0
S. WL            *     0     0   500    23 *  AG    250   3.6     .0  33.0
T. EL            *     0     0  -500   -23 *  AG    143   3.6     .0  33.0

III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
  RECEPTOR    *     X        Y      Z
-------------*---------------------
1. NE3        *     48       70    6.0
2. SE3        *     48      -70    6.0
3. SW3        *    -48      -70    6.0
4. NW3        *    -48       70    6.0
5. NE7        *     61       83    6.0
6. SE7        *     61      -83    6.0
7. SW7        *    -61      -83    6.0
8. NW7        *    -61       83    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                CONC/LINK
              *   BRG  * CONC  *                  (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
-------------*--------*-------*----------------------------------------
1. NE3        *  261.  *   1.1 *  .0   .0   .1   .0   .0   .2   .0   .0
2. SE3        *  351.  *   1.2 *  .0   .0   .2   .0   .0   .3   .0   .0
3. SW3        *    5.  *   1.5 *  .0   .0   .0   .0   .0   .8   .0   .0
4. NW3        *  174.  *   1.8 *  .0   .0   .0   .0   .0   .3   .9   .0
5. NE7        *  191.  *    .9 *  .0   .2   .0   .0   .0   .0   .3   .0
6. SE7        *  348.  *   1.0 *  .0   .0   .2   .0   .0   .3   .0   .0
7. SW7        *    7.  *   1.2 *  .0   .0   .0   .0   .0   .6   .0   .0
8. NW7        *  171.  *   1.2 *  .0   .0   .0   .0   .0   .0   .7   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                          CONC/LINK
              *                            (PPM)
  RECEPTOR    *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*------------------------------------------------------------
1. NE3        *  .0   .1   .4   .0   .1   .0   .0   .0   .0   .0   .0   .0
2. SE3        *  .0   .1   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
3. SW3        *  .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3        *  .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
5. NE7        *  .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
6. SE7        *  .0   .1   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
7. SW7        *  .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7        *  .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
```

```
       CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                JUNE 1989 VERSION
                PAGE   1

           JOB:   GRAND AVENUE AND 1ST STREET PM NP
           RUN:                     (WORST CASE ANGLE)
     POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

      U=    .5 M/S              Z0= 100. CM            ALT=     0. (FT)
    BRG= WORST CASE             VD=    .0 CM/S
   CLAS=      7 (G)             VS=    .0 CM/S
   MIXH= 1000. M               AMB=    .0 PPM
  SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION    *   X1     Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*-------------------------*----------------------------------
 A. NF           *    23 -1500    23  -500 *  AG    720   2.3      .0  50.0
 B. NA           *    23  -500    23     0 *  AG    679   4.4      .0  45.0
 C. ND           *    23     0    23   500 *  AG   1178   4.4      .0  33.0
 D. NE           *    23   500    23  1500 *  AG   1178   2.3      .0  50.0
 E. SF           *   -23  1500   -23   500 *  AG    988   2.3      .0  50.0
 F. SA           *   -23   500   -23     0 *  AG    932   4.6      .0  45.0
 G. SD           *   -23     0   -23  -500 *  AG   1121   4.4      .0  33.0
 H. SE           *   -23  -500   -23 -1500 *  AG   1121   2.3      .0  50.0
 I. WF           *  1500    38   500    38 *  AG   2147   2.3      .0  65.0
 J. WA           *   500    38     0    38 *  AG   1939   3.5      .0  60.0
 K. WD           *     0    38  -500    38 *  AG   1718   2.5      .0  45.0
 L. WE           *  -500    38 -1500    38 *  AG   1718   2.3      .0  65.0
 M. EF           * -1500   -38  -500   -38 *  AG   1276   2.3      .0  65.0
 N. EA           *  -500   -38     0   -38 *  AG   1103   3.3      .0  75.0
 O. ED           *     0   -38   500   -38 *  AG   1114   2.5      .0  45.0
 P. EE           *   500   -38  1500   -38 *  AG   1114   2.3      .0  65.0
 Q. NL           *     0     0    15  -500 *  AG     41   4.4      .0  33.0
 R. SL           *     0     0   -15   500 *  AG     56   4.4      .0  33.0
 S. WL           *     0     0   500    23 *  AG    208   3.3      .0  33.0
 T. EL           *     0     0  -500   -23 *  AG    173   3.3      .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *     X       Y      Z
 -------------*---------------------
 1. NE3       *     48      70    6.0
 2. SE3       *     48     -70    6.0
 3. SW3       *    -48     -70    6.0
 4. NW3       *    -48      70    6.0
 5. NE7       *     61      83    6.0
 6. SE7       *     61     -83    6.0
 7. SW7       *    -61     -83    6.0
 8. NW7       *    -61      83    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                  CONC/LINK
              *  BRG   * CONC  *                    (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 -------------*--------*-------*-----------------------------------------------
 1. NE3       *  261.  *   1.4 *   .0    .0    .3    .0    .0    .2    .0    .0
 2. SE3       *  353.  *   1.5 *   .0    .2    .7    .0    .0    .2    .0    .0
 3. SW3       *    7.  *   1.3 *   .0    .0    .2    .1    .0    .5    .0    .0
 4. NW3       *  173.  *   1.5 *   .0    .1    .0    .0    .0    .2    .6    .0
 5. NE7       *  189.  *   1.0 *   .0    .3    .0    .0    .0    .0    .2    .0
 6. SE7       *  350.  *   1.1 *   .0    .0    .5    .0    .0    .2    .0    .0
 7. SW7       *    8.  *   1.1 *   .0    .0    .2    .0    .0    .5    .0    .0
 8. NW7       *   98.  *   1.2 *   .0    .0    .2    .0    .0    .2    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                            CONC/LINK
              *                              (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*-----------------------------------------------------------------------
 1. NE3       *   .0    .2    .5    .0    .1    .0    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
 3. SW3       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .2    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .6    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
```

```
           CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                    JUNE 1989 VERSION
                    PAGE   1

               JOB:   GRAND AVENUE AND 1ST STREET PM WP
               RUN:                  (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

          U=    .5 M/S             Z0= 100. CM            ALT=     0. (FT)
        BRG= WORST CASE            VD=   .0 CM/S
       CLAS=     7 (G)             VS=   .0 CM/S
       MIXH= 1000. M              AMB=   .0 PPM
      SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)  *              EF     H     W
   DESCRIPTION   *    X1    Y1    X2    Y2 * TYPE  VPH (G/MI)   (FT)  (FT)
-----------------*-------------------------*------------------------------
A. NF            *    23 -1500    23  -500 * AG   1029    2.3     .0  50.0
B. NA            *    23  -500    23     0 * AG    963    4.4     .0  45.0
C. ND            *    23     0    23   500 * AG   1329    4.6     .0  33.0
D. NE            *    23   500    23  1500 * AG   1329    2.3     .0  50.0
E. SF            *   -23  1500   -23   500 * AG   1081    2.3     .0  50.0
F. SA            *   -23   500   -23     0 * AG    976    4.4     .0  45.0
G. SD            *   -23     0   -23  -500 * AG   1223    3.9     .0  33.0
H. SE            *   -23  -500   -23 -1500 * AG   1223    2.3     .0  50.0
I. WF            *  1500    38   500    38 * AG   2289    2.3     .0  65.0
J. WA            *   500    38     0    38 * AG   2063    3.6     .0  60.0
K. WD            *     0    38  -500    38 * AG   1805    2.6     .0  45.0
L. WE            *  -500    38 -1500    38 * AG   1805    2.3     .0  65.0
M. EF            * -1500   -38  -500   -38 * AG   1435    2.3     .0  65.0
N. EA            *  -500   -38     0   -38 * AG   1262    3.5     .0  75.0
O. ED            *     0   -38   500   -38 * AG   1477    2.5     .0  45.0
P. EE            *   500   -38  1500   -38 * AG   1477    2.3     .0  65.0
Q. NL            *     0     0    15  -500 * AG     66    4.3     .0  33.0
R. SL            *     0     0   -15   500 * AG    105    4.3     .0  33.0
S. WL            *     0     0   500    23 * AG    226    3.4     .0  33.0
T. EL            *     0     0  -500   -23 * AG    173    3.4     .0  33.0

 III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X      Y      Z
-------------*--------------------
1. NE3       *     48     70   6.0
2. SE3       *     48    -70   6.0
3. SW3       *    -48    -70   6.0
4. NW3       *    -48     70   6.0
5. NE7       *     61     83   6.0
6. SE7       *     61    -83   6.0
7. SW7       *    -61    -83   6.0
8. NW7       *    -61     83   6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *       * PRED  *                CONC/LINK
             *  BRG  * CONC  *                  (PPM)
 RECEPTOR    * (DEG) * (PPM) *  A    B    C    D    E    F    G    H
-------------*-------*-------*---------------------------------------
1. NE3       * 261.  *   1.5 *  .0   .0   .4   .0   .0   .2   .0   .0
2. SE3       * 353.  *   1.8 *  .0   .2   .7   .0   .0   .2   .0   .0
3. SW3       *  81.  *   1.4 *  .0   .2   .0   .0   .0   .0   .3   .0
4. NW3       *  96.  *   1.7 *  .0   .0   .2   .0   .0   .3   .0   .0
5. NE7       * 188.  *   1.2 *  .0   .4   .0   .0   .0   .0   .1   .1
6. SE7       * 350.  *   1.3 *  .0   .0   .6   .0   .0   .2   .0   .0
7. SW7       *   9.  *   1.2 *  .0   .0   .2   .0   .0   .4   .0   .0
8. NW7       *  98.  *   1.4 *  .0   .0   .2   .0   .0   .2   .0   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

             *                         CONC/LINK
             *                           (PPM)
 RECEPTOR    *  I    J    K    L    M    N    O    P    Q    R    S    T
-------------*-----------------------------------------------------------
1. NE3       *  .0   .2   .5   .0   .1   .0   .0   .0   .0   .0   .0   .0
2. SE3       *  .0   .2   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
3. SW3       *  .2   .1   .0   .0   .0   .1   .4   .0   .0   .0   .0   .0
4. NW3       *  .1   .9   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0
5. NE7       *  .0   .4   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
6. SE7       *  .0   .2   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
7. SW7       *  .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7       *  .0   .7   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND TEMPLE STREET AM NP
              RUN:                 (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=    .5 M/S            Z0= 100. CM           ALT=     0. (FT)
       BRG= WORST CASE           VD=    .0 CM/S
      CLAS=     7 (G)            VS=    .0 CM/S
      MIXH= 1000. M             AMB=    .0 PPM
     SIGTH=    5. DEGREES      TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                 EF      H     W
  DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*--------------------------------
A. NF            *    30 -1500    30  -500 *  AG    328   2.3      .0  50.0
B. NA            *    30  -500    30     0 *  AG    264   3.6      .0  45.0
C. ND            *    30     0    30   500 *  AG    305   2.5      .0  33.0
D. NE            *    30   500    30  1500 *  AG    305   2.3      .0  50.0
E. SF            *   -23  1500   -23   500 *  AG   2091   2.3      .0  65.0
F. SA            *   -23   500   -23     0 *  AG   1820   3.9      .0  60.0
G. SD            *   -23     0   -23  -500 *  AG   1792   2.6      .0  45.0
H. SE            *   -23  -500   -23 -1500 *  AG   1792   2.3      .0  65.0
I. WF            *  1500    23   500    23 *  AG    894   2.3      .0  50.0
J. WA            *   500    23     0    23 *  AG    753   4.3      .0  45.0
K. WD            *     0    23  -500    23 *  AG   1138   3.3      .0  33.0
L. WE            *  -500    23 -1500    23 *  AG   1138   2.3      .0  50.0
M. EF            * -1500   -23  -500   -23 *  AG    799   2.3      .0  50.0
N. EA            *  -500   -23     0   -23 *  AG    761   4.3      .0  45.0
O. ED            *     0   -23   500   -23 *  AG    877   2.8      .0  33.0
P. EE            *   500   -23  1500   -23 *  AG    877   2.3      .0  50.0
Q. NL            *     0     0    23  -500 *  AG     64   3.6      .0  33.0
R. SL            *     0     0    -8   500 *  AG    271   3.6      .0  33.0
S. WL            *     0     0   500    15 *  AG    141   4.1      .0  33.0
T. EL            *     0     0  -500   -15 *  AG     38   4.1      .0  33.0

III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
  RECEPTOR    *     X        Y      Z
--------------*---------------------
1. NE3        *     55      48    6.0
2. SE3        *     55     -48    6.0
3. SW3        *    -55     -48    6.0
4. NW3        *    -55      48    6.0
5. NE7        *     68      61    6.0
6. SE7        *     68     -61    6.0
7. SW7        *    -68     -61    6.0
8. NW7        *    -68      61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *       * PRED  *                CONC/LINK
              *  BRG  * CONC  *                  (PPM)
 RECEPTOR     * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
--------------*-------*-------*-----------------------------------------
1. NE3        *  263. *   1.2 *  .0   .0   .0   .0   .0   .2   .0   .0
2. SE3        *  350. *    .9 *  .0   .0   .1   .0   .0   .3   .0   .0
3. SW3        *    5. *   1.4 *  .0   .0   .0   .0   .2   .8   .0   .0
4. NW3        *  173. *   1.2 *  .0   .0   .0   .0   .0   .2   .5   .0
5. NE7        *  261. *    .9 *  .0   .0   .0   .0   .0   .2   .0   .0
6. SE7        *  278. *    .8 *  .0   .0   .0   .0   .0   .0   .1   .0
7. SW7        *    8. *   1.1 *  .0   .0   .0   .0   .0   .6   .0   .0
8. NW7        *   97. *   1.0 *  .0   .0   .0   .0   .0   .3   .0   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)     (CONT.)

              *                        CONC/LINK
              *                          (PPM)
 RECEPTOR     *   I    J    K    L    M    N    O    P    Q    R    S    T
--------------*-------------------------------------------------------------
1. NE3        *  .0   .1   .5   .0   .0   .1   .0   .0   .0   .0   .0   .0
2. SE3        *  .0   .1   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
3. SW3        *  .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3        *  .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
5. NE7        *  .0   .0   .4   .0   .0   .1   .0   .0   .0   .0   .0   .0
6. SE7        *  .0   .0   .1   .1   .0   .4   .0   .0   .0   .0   .0   .0
7. SW7        *  .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7        *  .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND TEMPLE STREET AM WP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=    .5 M/S            Z0= 100. CM          ALT=     0. (FT)
     BRG= WORST CASE           VD=    .0 CM/S
    CLAS=     7 (G)            VS=    .0 CM/S
    MIXH= 1000. M             AMB=    .0 PPM
   SIGTH=     5. DEGREES     TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                 EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*-------------------------*--------------------------------
A. NF           *    30 -1500    30  -500 *  AG    340   2.3     .0  50.0
B. NA           *    30  -500    30     0 *  AG    276   3.6     .0  45.0
C. ND           *    30     0    30   500 *  AG    317   2.5     .0  33.0
D. NE           *    30   500    30  1500 *  AG    317   2.3     .0  50.0
E. SF           *   -23  1500   -23   500 *  AG   2126   2.3     .0  65.0
F. SA           *   -23   500   -23     0 *  AG   1855   3.9     .0  60.0
G. SD           *   -23     0   -23  -500 *  AG   1927   2.6     .0  45.0
H. SE           *   -23  -500   -23 -1500 *  AG   1927   2.3     .0  65.0
I. WF           *  1500    23   500    23 *  AG    938   2.3     .0  50.0
J. WA           *   500    23     0    23 *  AG    753   4.3     .0  45.0
K. WD           *     0    23  -500    23 *  AG   1138   3.3     .0  33.0
L. WE           *  -500    23 -1500    23 *  AG   1138   2.3     .0  50.0
M. EF           * -1500   -23  -500   -23 *  AG    855   2.3     .0  50.0
N. EA           *  -500   -23     0   -23 *  AG    817   4.3     .0  45.0
O. ED           *     0   -23   500   -23 *  AG    877   2.8     .0  33.0
P. EE           *   500   -23  1500   -23 *  AG    877   2.3     .0  50.0
Q. NL           *     0     0    23  -500 *  AG     64   3.6     .0  33.0
R. SL           *     0     0    -8   500 *  AG    271   3.8     .0  33.0
S. WL           *     0     0   500    15 *  AG    185   4.1     .0  33.0
T. EL           *     0     0  -500   -15 *  AG     38   4.1     .0  33.0

III.  RECEPTOR LOCATIONS

             *     COORDINATES (FT)
  RECEPTOR   *     X      Y      Z
-------------*--------------------
1. NE3       *     55     48    6.0
2. SE3       *     55    -48    6.0
3. SW3       *    -55    -48    6.0
4. NW3       *    -55     48    6.0
5. NE7       *     68     61    6.0
6. SE7       *     68    -61    6.0
7. SW7       *    -68    -61    6.0
8. NW7       *    -68     61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                 CONC/LINK
             *  BRG   * CONC   *                   (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *   A    B    C    D    E    F    G    H
-------------*--------*--------*----------------------------------------
1. NE3       *  262.  *   1.2  *   .0   .0   .0   .0   .0   .3   .0   .0
2. SE3       *  350.  *   1.0  *   .0   .0   .1   .0   .0   .3   .0   .0
3. SW3       *    5.  *   1.5  *   .0   .0   .0   .0   .2   .8   .0   .0
4. NW3       *  173.  *   1.2  *   .0   .0   .0   .0   .0   .2   .6   .0
5. NE7       *  261.  *    .9  *   .0   .0   .0   .0   .0   .2   .0   .0
6. SE7       *  278.  *    .8  *   .0   .0   .0   .0   .0   .0   .2   .0
7. SW7       *    8.  *   1.1  *   .0   .0   .0   .0   .0   .6   .0   .0
8. NW7       *   97.  *   1.0  *   .0   .0   .0   .0   .0   .3   .0   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                           CONC/LINK
             *                             (PPM)
  RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*------------------------------------------------------------
1. NE3       *   .0   .1   .5   .0   .0   .2   .0   .0   .0   .0   .0   .0
2. SE3       *   .0   .1   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
3. SW3       *   .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3       *   .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
5. NE7       *   .0   .0   .4   .0   .0   .1   .0   .0   .0   .0   .0   .0
6. SE7       *   .0   .0   .1   .1   .0   .4   .0   .0   .0   .0   .0   .0
7. SW7       *   .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7       *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

             JOB:   HILL STREET AND TEMPLE STREET PM NP
             RUN:                  (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=      0. (FT)
       BRG= WORST CASE            VD=    .0 CM/S
      CLAS=     7 (G)             VS=    .0 CM/S
      MIXH= 1000. M              AMB=    .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK         *  LINK COORDINATES (FT)    *                   EF      H     W
  DESCRIPTION     *    X1    Y1    X2    Y2   * TYPE  VPH  (G/MI)  (FT)  (FT)
------------------*---------------------------*------------------------------
A. NF             *    30 -1500    30  -500 *  AG  1325   2.3      .0  50.0
B. NA             *    30  -500    30     0 *  AG  1240   3.8      .0  45.0
C. ND             *    30     0    30   500 *  AG  1497   2.8      .0  33.0
D. NE             *    30   500    30  1500 *  AG  1497   2.3      .0  50.0
E. SF             *   -23  1500   -23   500 *  AG  1576   2.3      .0  65.0
F. SA             *   -23   500   -23     0 *  AG  1435   3.8      .0  60.0
G. SD             *   -23     0   -23  -500 *  AG  1314   2.6      .0  45.0
H. SE             *   -23  -500   -23 -1500 *  AG  1314   2.3      .0  65.0
I. WF             *  1500    23   500    23 *  AG  1268   2.3      .0  50.0
J. WA             *   500    23     0    23 *  AG  1229   4.4      .0  45.0
K. WD             *     0    23  -500    23 *  AG  1357   3.9      .0  33.0
L. WE             *  -500    23 -1500    23 *  AG  1357   2.3      .0  50.0
M. EF             * -1500   -23  -500   -23 *  AG   865   2.3      .0  50.0
N. EA             *  -500   -23     0   -23 *  AG   767   4.3      .0  45.0
O. ED             *     0   -23   500   -23 *  AG   866   2.8      .0  33.0
P. EE             *   500   -23  1500   -23 *  AG   866   2.3      .0  50.0
Q. NL             *     0     0    23  -500 *  AG    85   3.6      .0  33.0
R. SL             *     0     0    -8   500 *  AG   141   3.6      .0  33.0
S. WL             *     0     0   500    15 *  AG    39   4.1      .0  33.0
T. EL             *     0     0  -500   -15 *  AG    98   4.1      .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *     X      Y      Z
-------------*---------------------
1. NE3       *     55     48    6.0
2. SE3       *     55    -48    6.0
3. SW3       *    -55    -48    6.0
4. NW3       *    -55     48    6.0
5. NE7       *     68     61    6.0
6. SE7       *     68    -61    6.0
7. SW7       *    -68    -61    6.0
8. NW7       *    -68     61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                      CONC/LINK
             *  BRG   * CONC   *                        (PPM)
 RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
-------------*--------*--------*------------------------------------------------
1. NE3       *  262.  *   1.6  *   .0    .0    .2    .0    .0    .2    .0    .0
2. SE3       *  352.  *   1.4  *   .0    .2    .5    .0    .1    .2    .0    .0
3. SW3       *    6.  *   1.4  *   .0    .0    .0    .2    .0    .6    .0    .0
4. NW3       *   95.  *   1.5  *   .0    .0    .1    .0    .0    .3    .0    .0
5. NE7       *  261.  *   1.1  *   .0    .0    .2    .0    .0    .2    .0    .0
6. SE7       *  278.  *   1.0  *   .0    .2    .0    .0    .0    .0    .1    .0
7. SW7       *    8.  *   1.1  *   .0    .0    .0    .1    .0    .5    .0    .0
8. NW7       *   97.  *   1.2  *   .0    .0    .1    .0    .0    .3    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                               CONC/LINK
             *                                 (PPM)
 RECEPTOR    *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*-----------------------------------------------------------
1. NE3       *   .0   .2   .7   .0   .0   .2   .0   .0   .0   .0   .0   .0
2. SE3       *   .0   .2   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
3. SW3       *   .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3       *   .0   .8   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
5. NE7       *   .0   .0   .5   .0   .0   .1   .0   .0   .0   .0   .0   .0
6. SE7       *   .0   .0   .1   .1   .0   .4   .0   .0   .0   .0   .0   .0
7. SW7       *   .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7       *   .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

             JOB:   HILL STREET AND TEMPLE STREET PM WP
             RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

          U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
        BRG= WORST CASE              VD=    .0 CM/S
       CLAS=      7 (G)              VS=    .0 CM/S
       MIXH= 1000. M                AMB=    .0 PPM
      SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)  *                EF     H     W
   DESCRIPTION   *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*-----------------------------
 A. NF           *     30 -1500     30  -500 *  AG   1349   2.3     .0  50.0
 B. NA           *     30  -500     30     0 *  AG   1264   3.8     .0  45.0
 C. ND           *     30     0     30   500 *  AG   1521   2.9     .0  33.0
 D. NE           *     30   500     30  1500 *  AG   1521   2.3     .0  50.0
 E. SF           *    -23  1500    -23   500 *  AG   1605   2.3     .0  65.0
 F. SA           *    -23   500    -23     0 *  AG   1464   3.8     .0  60.0
 G. SD           *    -23     0    -23  -500 *  AG   1350   2.6     .0  45.0
 H. SE           *    -23  -500    -23 -1500 *  AG   1350   2.3     .0  65.0
 I. WF           *   1500    23    500    23 *  AG   1271   2.3     .0  50.0
 J. WA           *    500    23      0    23 *  AG   1229   4.4     .0  45.0
 K. WD           *      0    23   -500    23 *  AG   1357   3.9     .0  33.0
 L. WE           *   -500    23  -1500    23 *  AG   1357   2.3     .0  50.0
 M. EF           *  -1500   -23   -500   -23 *  AG    869   2.3     .0  50.0
 N. EA           *   -500   -23      0   -23 *  AG    771   4.3     .0  45.0
 O. ED           *      0   -23    500   -23 *  AG    866   2.8     .0  33.0
 P. EE           *    500   -23   1500   -23 *  AG    866   2.3     .0  50.0
 Q. NL           *      0     0     23  -500 *  AG     85   3.6     .0  33.0
 R. SL           *      0     0     -8   500 *  AG    141   3.6     .0  33.0
 S. WL           *      0     0    500    15 *  AG     42   4.1     .0  33.0
 T. EL           *      0     0   -500   -15 *  AG     98   4.1     .0  33.0

 III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
   RECEPTOR  *      X      Y      Z
-------------*---------------------
 1. NE3      *     55     48    6.0
 2. SE3      *     55    -48    6.0
 3. SW3      *    -55    -48    6.0
 4. NW3      *    -55     48    6.0
 5. NE7      *     68     61    6.0
 6. SE7      *     68    -61    6.0
 7. SW7      *    -68    -61    6.0
 8. NW7      *    -68     61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                    CONC/LINK
             *   BRG  * CONC   *                      (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *    A     B     C     D     E     F     G     H
-------------*--------*--------*-------------------------------------------------
 1. NE3      *  262.  *   1.7  *   .0    .0    .3    .0    .0    .2    .0    .0
 2. SE3      *  352.  *   1.5  *   .0    .2    .6    .0    .1    .2    .0    .0
 3. SW3      *    6.  *   1.4  *   .0    .0    .0    .2    .0    .7    .0    .0
 4. NW3      *   95.  *   1.5  *   .0    .0    .1    .0    .0    .3    .0    .0
 5. NE7      *  261.  *   1.1  *   .0    .0    .2    .0    .0    .2    .0    .0
 6. SE7      *  351.  *   1.0  *   .0    .0    .4    .0    .1    .2    .0    .0
 7. SW7      *    8.  *   1.1  *   .0    .0    .0    .2    .0    .5    .0    .0
 8. NW7      *   97.  *   1.2  *   .0    .0    .1    .0    .0    .3    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                                  CONC/LINK
             *                                    (PPM)
  RECEPTOR   *    I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
 1. NE3      *   .0    .2    .7    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3      *   .0    .2    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 3. SW3      *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3      *   .0    .8    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
 5. NE7      *   .0    .0    .5    .0    .0    .1    .0    .0    .0    .0    .0    .0
 6. SE7      *   .0    .2    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 7. SW7      *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7      *   .0    .5    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
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         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   OLIVE STREET AND 1ST STREET AM NP
             RUN:                   (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=    .5 M/S              Z0= 100. CM            ALT=     0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=     7 (G)              VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
   DESCRIPTION    *   X1     Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -----------------*-------------------------*---------------------------------
 A. NF            *     8 -1500      8  -500 *  AG    600   2.3     .0  50.0
 B. NA            *     8  -500      8     0 *  AG    332   5.2     .0  33.0
 C. ND            *  1800     0   1900     0 *  AG      0   3.3     .0  33.0
 D. NE            *  1800     0   1900     0 *  AG      0   2.3     .0  50.0
 E. SF            *  1800     0   1900     0 *  AG      0   2.3     .0  35.0
 F. SA            *  1800     0   1900     0 *  AG      0   5.2     .0  33.0
 G. SD            *   -15     0    -15  -500 *  AG    485   5.3     .0  33.0
 H. SE            *   -15  -500    -15 -1500 *  AG    485   2.3     .0  35.0
 I. WF            *  1500    30    500    30 *  AG   1546   2.3     .0  65.0
 J. WA            *   500    30      0    30 *  AG   1314   3.3     .0  45.0
 K. WD            *     0    30   -500    30 *  AG   1582   2.5     .0  45.0
 L. WE            *  -500    30  -1500    30 *  AG   1582   2.3     .0  65.0
 M. EF            * -1500   -30   -500   -30 *  AG   1114   2.3     .0  65.0
 N. EA            *  -500   -30      0   -30 *  AG   1114   3.3     .0  60.0
 O. ED            *     0   -30    500   -30 *  AG   1193   2.5     .0  45.0
 P. EE            *   500   -30   1500   -30 *  AG   1193   2.3     .0  65.0
 Q. NL            *     0     0      0  -500 *  AG    268   5.2     .0  33.0
 R. SL            *  1900     0   1800     0 *  AG      0   5.2     .0  33.0
 S. WL            *     0     0    500    15 *  AG    232   3.3     .0  33.0
 T. EL            *  1900     0   1800     0 *  AG      0   3.3     .0  33.0

 III.  RECEPTOR LOCATIONS

               *    COORDINATES (FT)
   RECEPTOR    *    X       Y      Z
 -------------*---------------------
 1. NE3        *     33      63    6.0
 2. SE3        *     33     -63    6.0
 3. SW3        *    -33     -63    6.0
 4. NW3        *    -33      63    6.0
 5. NE7        *     46      76    6.0
 6. SE7        *     46     -76    6.0
 7. SW7        *    -46     -76    6.0
 8. NW7        *    -46      76    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                    CONC/LINK
               *  BRG   * CONC  *                      (PPM)
  RECEPTOR     * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 --------------*--------*-------*-----------------------------------------------
 1. NE3        *  186.  *   1.1 *   .0    .3    .0    .0    .0    .0    .2    .0
 2. SE3        *  276.  *   1.1 *   .0    .1    .0    .0    .0    .0    .1    .0
 3. SW3        *   81.  *   1.0 *   .0    .0    .0    .0    .0    .0    .2    .0
 4. NW3        *  175.  *   1.2 *   .0    .1    .0    .0    .0    .0    .4    .0
 5. NE7        *  188.  *    .9 *   .0    .2    .0    .0    .0    .0    .2    .0
 6. SE7        *  277.  *    .8 *   .0    .0    .0    .0    .0    .0    .1    .0
 7. SW7        *   79.  *    .8 *   .0    .0    .0    .0    .0    .0    .1    .0
 8. NW7        *  173.  *    .9 *   .0    .1    .0    .0    .0    .0    .3    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                            CONC/LINK
               *                              (PPM)
  RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
 --------------*-------------------------------------------------------------------
 1. NE3        *   .0    .2    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0
 2. SE3        *   .0    .0    .0    .2    .0    .5    .0    .0    .0    .0    .0    .0
 3. SW3        *   .1    .1    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0
 4. NW3        *   .0    .0    .2    .0    .0    .1    .0    .0    .2    .0    .0    .0
 5. NE7        *   .0    .2    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0
 6. SE7        *   .0    .0    .0    .2    .0    .3    .0    .0    .0    .0    .0    .0
 7. SW7        *   .0    .1    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
 8. NW7        *   .0    .0    .2    .0    .0    .1    .0    .0    .1    .0    .0    .0
```

```
         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   OLIVE STREET AND 1ST STREET AM WP
             RUN:                    (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=     .5 M/S            Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE            VD=    .0 CM/S
     CLAS=      7 (G)            VS=    .0 CM/S
     MIXH= 1000. M              AMB=    .0 PPM
    SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

     LINK         *  LINK COORDINATES (FT)  *                 EF     H      W
  DESCRIPTION     *   X1     Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 -----------------*-------------------------*--------------------------------
 A. NF            *     8 -1500      8  -500 *  AG    673    2.3      .0   50.0
 B. NA            *     8  -500      8     0 *  AG    384    5.0      .0   33.0
 C. ND            *  1800     0   1900     0 *  AG      0    3.2      .0   33.0
 D. NE            *  1800     0   1900     0 *  AG      0    2.3      .0   50.0
 E. SF            *  1800     0   1900     0 *  AG      0    2.3      .0   35.0
 F. SA            *  1800     0   1900     0 *  AG      0    5.0      .0   33.0
 G. SD            *   -15     0    -15  -500 *  AG    575    5.3      .0   33.0
 H. SE            *   -15  -500    -15 -1500 *  AG    575    2.3      .0   35.0
 I. WF            *  1500    30    500    30 *  AG   1575    2.3      .0   65.0
 J. WA            *   500    30      0    30 *  AG   1319    3.3      .0   45.0
 K. WD            *     0    30   -500    30 *  AG   1608    2.5      .0   45.0
 L. WE            *  -500    30  -1500    30 *  AG   1608    2.3      .0   65.0
 M. EF            * -1500   -30   -500   -30 *  AG   1281    2.3      .0   65.0
 N. EA            *  -500   -30      0   -30 *  AG   1281    3.3      .0   60.0
 O. ED            *     0   -30    500   -30 *  AG   1346    2.5      .0   45.0
 P. EE            *   500   -30   1500   -30 *  AG   1346    2.3      .0   65.0
 Q. NL            *     0     0      0  -500 *  AG    289    5.0      .0   33.0
 R. SL            *  1900     0   1800     0 *  AG      0    5.0      .0   33.0
 S. WL            *     0     0    500    15 *  AG    256    3.3      .0   33.0
 T. EL            *  1900     0   1800     0 *  AG      0    3.3      .0   33.0

 III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
   RECEPTOR    *     X        Y       Z
 --------------*---------------------
 1. NE3        *      33      63     6.0
 2. SE3        *      33     -63     6.0
 3. SW3        *     -33     -63     6.0
 4. NW3        *     -33      63     6.0
 5. NE7        *      46      76     6.0
 6. SE7        *      46     -76     6.0
 7. SW7        *     -46     -76     6.0
 8. NW7        *     -46      76     6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                  CONC/LINK
               *  BRG   * CONC  *                    (PPM)
  RECEPTOR     * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 --------------*--------*-------*-----------------------------------------------
 1. NE3        *  186.  *   1.2 *   .0    .3    .0    .0    .0    .0    .2    .0
 2. SE3        *  276.  *   1.2 *   .0    .1    .0    .0    .0    .0    .1    .0
 3. SW3        *   81.  *   1.1 *   .0    .0    .0    .0    .0    .0    .2    .0
 4. NW3        *  175.  *   1.3 *   .0    .2    .0    .0    .0    .0    .5    .0
 5. NE7        *  189.  *    .9 *   .0    .2    .0    .0    .0    .0    .2    .0
 6. SE7        *  277.  *    .9 *   .0    .0    .0    .0    .0    .0    .1    .0
 7. SW7        *   79.  *    .9 *   .0    .0    .0    .0    .0    .0    .2    .0
 8. NW7        *  173.  *   1.0 *   .0    .1    .0    .0    .0    .0    .4    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                             CONC/LINK
               *                               (PPM)
  RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
 --------------*------------------------------------------------------------------------
 1. NE3        *   .0    .2    .0    .0    .0    .0    .1    .0    .2    .0    .0    .0
 2. SE3        *   .0    .0    .0    .2    .0    .6    .0    .0    .0    .0    .0    .0
 3. SW3        *   .1    .1    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0
 4. NW3        *   .0    .0    .2    .0    .0    .1    .0    .0    .2    .0    .0    .0
 5. NE7        *   .0    .2    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0
 6. SE7        *   .0    .0    .0    .2    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7        *   .0    .1    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
 8. NW7        *   .0    .0    .2    .0    .0    .1    .0    .0    .1    .0    .0    .0
```

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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   OLIVE STREET AND 1ST STREET PM NP
            RUN:                  (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=    .5 M/S              Z0= 100. CM            ALT=     0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=     7 (G)              VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*-------------------------*---------------------------------
A. NF           *     8 -1500     8  -500 *  AG   1580   2.3     .0  50.0
B. NA           *     8  -500     8     0 *  AG    834   4.6     .0  33.0
C. ND           *  1800     0  1900     0 *  AG      0   2.8     .0  33.0
D. NE           *  1800     0  1900     0 *  AG      0   2.3     .0  50.0
E. SF           *  1800     0  1900     0 *  AG      0   2.3     .0  35.0
F. SA           *  1800     0  1900     0 *  AG      0   4.3     .0  33.0
G. SD           *   -15     0   -15  -500 *  AG    190   2.8     .0  33.0
H. SE           *   -15  -500   -15 -1500 *  AG    190   2.3     .0  35.0
I. WF           *  1500    30   500    30 *  AG   1550   2.3     .0  65.0
J. WA           *   500    30     0    30 *  AG   1442   3.8     .0  45.0
K. WD           *     0    30  -500    30 *  AG   2188   2.6     .0  45.0
L. WE           *  -500    30 -1500    30 *  AG   2188   2.3     .0  65.0
M. EF           * -1500   -30  -500   -30 *  AG   1114   2.3     .0  65.0
N. EA           *  -500   -30     0   -30 *  AG   1114   3.5     .0  60.0
O. ED           *     0   -30   500   -30 *  AG   1866   2.6     .0  45.0
P. EE           *   500   -30  1500   -30 *  AG   1866   2.3     .0  65.0
Q. NL           *     0     0     0  -500 *  AG    746   4.6     .0  33.0
R. SL           *  1900     0  1800     0 *  AG      0   4.3     .0  33.0
S. WL           *     0     0   500    15 *  AG    108   3.4     .0  33.0
T. EL           *  1900     0  1800     0 *  AG      0   3.4     .0  33.0

III.  RECEPTOR LOCATIONS

             *     COORDINATES (FT)
  RECEPTOR   *     X       Y      Z
-------------*---------------------
1. NE3       *     33      63    6.0
2. SE3       *     33     -63    6.0
3. SW3       *    -33     -63    6.0
4. NW3       *    -33      63    6.0
5. NE7       *     46      76    6.0
6. SE7       *     46     -76    6.0
7. SW7       *    -46     -76    6.0
8. NW7       *    -46      76    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *       * PRED  *                 CONC/LINK
             *  BRG  * CONC  *                   (PPM)
  RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3       *  186. *   1.5 *   .0   .5   .0   .0   .0   .0   .0   .0
2. SE3       *  276. *   1.3 *   .0   .2   .0   .0   .0   .0   .0   .0
3. SW3       *   81. *   1.3 *   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3       *  174. *   1.3 *   .0   .3   .0   .0   .0   .0   .0   .0
5. NE7       *  187. *   1.2 *   .0   .4   .0   .0   .0   .0   .0   .0
6. SE7       *  278. *   1.0 *   .0   .2   .0   .0   .0   .0   .0   .0
7. SW7       *   78. *   1.0 *   .0   .2   .0   .0   .0   .0   .0   .0
8. NW7       *  172. *   1.1 *   .0   .3   .0   .0   .0   .0   .0   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                        CONC/LINK
             *                          (PPM)
  RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*------------------------------------------------------------
1. NE3       *   .0   .3   .0   .0   .0   .0   .1   .0   .4   .0   .0   .0
2. SE3       *   .0   .0   .0   .2   .0   .5   .0   .0   .2   .0   .0   .0
3. SW3       *   .1   .1   .0   .0   .0   .0   .5   .0   .2   .0   .0   .0
4. NW3       *   .0   .0   .3   .0   .0   .1   .0   .0   .4   .0   .0   .0
5. NE7       *   .0   .3   .0   .0   .0   .0   .1   .0   .3   .0   .0   .0
6. SE7       *   .0   .0   .0   .2   .0   .4   .0   .0   .2   .0   .0   .0
7. SW7       *   .0   .2   .0   .0   .0   .0   .4   .0   .2   .0   .0   .0
8. NW7       *   .0   .0   .3   .0   .0   .1   .0   .0   .3   .0   .0   .0
```

```
        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   OLIVE STREET AND 1ST STREET PM WP
            RUN:                   (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE            VD=    .0 CM/S
    CLAS=     7 (G)             VS=    .0 CM/S
    MIXH= 1000. M              AMB=    .0 PPM
   SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                   EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*-------------------------*----------------------------------
 A. NF          *     8 -1500     8  -500 *  AG   1834   2.3     .0  50.0
 B. NA          *     8  -500     8     0 *  AG    964   5.0     .0  33.0
 C. ND          *  1800     0  1900     0 *  AG      0   2.7     .0  33.0
 D. NE          *  1800     0  1900     0 *  AG      0   2.3     .0  50.0
 E. SF          *  1800     0  1900     0 *  AG      0   2.3     .0  35.0
 F. SA          *  1800     0  1900     0 *  AG      0   4.3     .0  33.0
 G. SD          *   -15     0   -15  -500 *  AG    425   2.9     .0  33.0
 H. SE          *   -15  -500   -15 -1500 *  AG    425   2.3     .0  35.0
 I. WF          *  1500    30   500    30 *  AG   1642   2.3     .0  65.0
 J. WA          *   500    30     0    30 *  AG   1460   3.8     .0  45.0
 K. WD          *     0    30  -500    30 *  AG   2330   2.8     .0  45.0
 L. WE          *  -500    30 -1500    30 *  AG   2330   2.3     .0  65.0
 M. EF          * -1500   -30  -500   -30 *  AG   1408   2.3     .0  65.0
 N. EA          *  -500   -30     0   -30 *  AG   1408   3.6     .0  60.0
 O. ED          *     0   -30   500   -30 *  AG   2129   2.6     .0  45.0
 P. EE          *   500   -30  1500   -30 *  AG   2129   2.3     .0  65.0
 Q. NL          *     0     0     0  -500 *  AG    870   4.6     .0  33.0
 R. SL          *  1900     0  1800     0 *  AG      0   4.3     .0  33.0
 S. WL          *     0     0   500    15 *  AG    182   3.5     .0  33.0
 T. EL          *  1900     0  1800     0 *  AG      0   3.5     .0  33.0

III.  RECEPTOR LOCATIONS

               *    COORDINATES (FT)
   RECEPTOR    *   X        Y      Z
---------------*---------------------
 1. NE3        *     33      63    6.0
 2. SE3        *     33     -63    6.0
 3. SW3        *    -33     -63    6.0
 4. NW3        *    -33      63    6.0
 5. NE7        *     46      76    6.0
 6. SE7        *     46     -76    6.0
 7. SW7        *    -46     -76    6.0
 8. NW7        *    -46      76    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                   CONC/LINK
               *  BRG   * CONC  *                     (PPM)
  RECEPTOR     * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
---------------*--------*-------*-------------------------------------------------
 1. NE3        *  186.  *   1.8 *   .0    .6    .0    .0    .0    .0    .0    .0
 2. SE3        *  276.  *   1.6 *   .0    .3    .0    .0    .0    .0    .0    .0
 3. SW3        *   81.  *   1.5 *   .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3        *  174.  *   1.7 *   .1    .4    .0    .0    .0    .0    .2    .0
 5. NE7        *  187.  *   1.4 *   .0    .5    .0    .0    .0    .0    .0    .0
 6. SE7        *  278.  *   1.3 *   .0    .2    .0    .0    .0    .0    .0    .0
 7. SW7        *   78.  *   1.2 *   .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7        *  172.  *   1.3 *   .0    .3    .0    .0    .0    .0    .2    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

               *                              CONC/LINK
               *                                (PPM)
  RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
---------------*----------------------------------------------------------------------
 1. NE3        *   .0    .3    .0    .0    .0    .0    .2    .0    .4    .0    .0    .0
 2. SE3        *   .0    .0    .0    .2    .0    .7    .0    .0    .2    .0    .0    .0
 3. SW3        *   .1    .1    .0    .0    .0    .0    .6    .0    .2    .0    .0    .0
 4. NW3        *   .0    .0    .4    .0    .0    .2    .0    .0    .4    .0    .0    .0
 5. NE7        *   .0    .3    .0    .0    .0    .0    .2    .0    .3    .0    .0    .0
 6. SE7        *   .0    .0    .0    .2    .0    .5    .0    .0    .2    .0    .0    .0
 7. SW7        *   .0    .2    .0    .0    .0    .0    .4    .0    .2    .0    .0    .0
 8. NW7        *   .0    .0    .3    .0    .0    .2    .0    .0    .3    .0    .0    .0
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    CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
             JUNE 1989 VERSION
             PAGE   1

        JOB:   OLIVE STREET AND 4TH STREET AM NP
        RUN:                     (WORST CASE ANGLE)
  POLLUTANT: Carbon Monoxide


 I.  SITE VARIABLES

      U=     .5 M/S             Z0= 100. CM             ALT=      0. (FT)
    BRG= WORST CASE             VD=    .0 CM/S
   CLAS=      7 (G)             VS=    .0 CM/S
   MIXH= 1000. M               AMB=    .0 PPM
  SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


II.  LINK VARIABLES

    LINK        *  LINK COORDINATES (FT)   *                  EF     H     W
 DESCRIPTION    *   X1    Y1    X2    Y2   * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*--------------------------*-------------------------------
A. NF           *    23 -1500    23  -500  *  AG    996   2.3     .0  65.0
B. NA           *    23  -500    23     0  *  AG    996   4.1     .0  45.0
C. ND           *    23     0    23   500  *  AG   1061   2.7     .0  45.0
D. NE           *    23   500    23  1500  *  AG   1061   2.3     .0  65.0
E. SF           *   -38  1500   -38   500  *  AG    188   2.3     .0  35.0
F. SA           *   -38   500   -38     0  *  AG    158   4.0     .0  45.0
G. SD           *   -38     0   -38  -500  *  AG    345   2.7     .0  33.0
H. SE           *   -38  -500   -38 -1500  *  AG    345   2.3     .0  35.0
I. WF           * -1500    -8  -500    -8  *  AG      0   2.3     .0  35.0
J. WA           *  -500    -8     0    -8  *  AG      0   3.8     .0  33.0
K. WD           *     0    -8   500    -8  *  AG      0   2.5     .0  33.0
L. WE           *   500    -8  1500    -8  *  AG      0   2.3     .0  35.0
M. EF           * -1500    -8  -500    -8  *  AG   1464   2.3     .0  80.0
N. EA           *  -500    -8     0    -8  *  AG   1265   3.8     .0  75.0
O. ED           *     0    -8   500    -8  *  AG   1242   2.6     .0  60.0
P. EE           *   500    -8  1500    -8  *  AG   1242   2.3     .0  80.0
Q. NL           *     0 -1900     0 -1800  *  AG      0   4.0     .0  33.0
R. SL           *     0     0   -38   500  *  AG     30   4.0     .0  33.0
S. WL           *     0 -1900     0 -1800  *  AG      0   3.8     .0  33.0
T. EL           *     0     0  -500   -15  *  AG    199   3.8     .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X       Y      Z
-------------*--------------------
1. NE3       *    55      48    6.0
2. SE3       *    55     -48    6.0
3. SW3       *   -55     -48    6.0
4. NW3       *   -55      48    6.0
5. NE7       *    68      61    6.0
6. SE7       *    68     -61    6.0
7. SW7       *   -68     -61    6.0
8. NW7       *   -68      61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                    CONC/LINK
             *  BRG   * CONC  *                      (PPM)
 RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
-------------*--------*-------*-----------------------------------------------
1. NE3       *  186.  *    .7 *   .0    .5    .0    .0    .0    .0    .0    .0
2. SE3       *  275.  *    .9 *   .0    .2    .0    .0    .0    .0    .0    .0
3. SW3       *   84.  *    .7 *   .0    .1    .0    .0    .0    .0    .0    .0
4. NW3       *  173.  *    .7 *   .1    .1    .0    .0    .0    .0    .2    .0
5. NE7       *  260.  *    .6 *   .0    .0    .1    .0    .0    .0    .0    .0
6. SE7       *  277.  *    .7 *   .0    .2    .0    .0    .0    .0    .0    .0
7. SW7       *    7.  *    .5 *   .0    .0    .0    .1    .0    .1    .0    .0
8. NW7       *  169.  *    .6 *   .0    .2    .0    .0    .0    .0    .1    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                          CONC/LINK
             *                            (PPM)
 RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
1. NE3       *   .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .0    .0    .1    .5    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
```

```
         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   OLIVE STREET AND 4TH STREET AM WP
             RUN:                    (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=    .5 M/S              Z0= 100. CM            ALT=     0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=     7 (G)              VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                   EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*-------------------------*------------------------------
A. NF           *    23 -1500    23  -500 *  AG   1122   2.3     .0  65.0
B. NA           *    23  -500    23     0 *  AG   1122   4.1     .0  45.0
C. ND           *    23     0    23   500 *  AG   1255   2.7     .0  45.0
D. NE           *    23   500    23  1500 *  AG   1255   2.3     .0  65.0
E. SF           *   -38  1500   -38   500 *  AG    280   2.3     .0  35.0
F. SA           *   -38   500   -38     0 *  AG    198   4.0     .0  45.0
G. SD           *   -38     0   -38  -500 *  AG    385   2.7     .0  33.0
H. SE           *   -38  -500   -38 -1500 *  AG    385   2.3     .0  35.0
I. WF           * -1500    -8  -500    -8 *  AG      0   2.3     .0  35.0
J. WA           *  -500    -8     0    -8 *  AG      0   3.8     .0  33.0
K. WD           *     0    -8   500    -8 *  AG      0   2.6     .0  33.0
L. WE           *   500    -8  1500    -8 *  AG      0   2.3     .0  35.0
M. EF           * -1500    -8  -500    -8 *  AG   1569   2.3     .0  80.0
N. EA           *  -500    -8     0    -8 *  AG   1302   3.9     .0  75.0
O. ED           *     0    -8   500    -8 *  AG   1331   2.6     .0  60.0
P. EE           *   500    -8  1500    -8 *  AG   1331   2.3     .0  80.0
Q. NL           *     0 -1900     0 -1800 *  AG      0   4.0     .0  33.0
R. SL           *     0     0   -38   500 *  AG     82   4.0     .0  33.0
S. WL           *     0 -1900     0 -1800 *  AG      0   3.8     .0  33.0
T. EL           *     0     0  -500   -15 *  AG    267   3.9     .0  33.0

III.  RECEPTOR LOCATIONS

            *    COORDINATES (FT)
  RECEPTOR  *    X       Y      Z
------------*--------------------
1. NE3      *    55      48    6.0
2. SE3      *    55     -48    6.0
3. SW3      *   -55     -48    6.0
4. NW3      *   -55      48    6.0
5. NE7      *    68      61    6.0
6. SE7      *    68     -61    6.0
7. SW7      *   -68     -61    6.0
8. NW7      *   -68      61    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *       * PRED  *                    CONC/LINK
             *  BRG  * CONC  *                      (PPM)
  RECEPTOR   * (DEG) * (PPM) *   A     B     C     D     E     F     G     H
-------------*-------*-------*-----------------------------------------------
1. NE3       *  261. *    .8 *   .0    .0    .2    .0    .0    .0    .0    .0
2. SE3       *  275. *   1.0 *   .0    .3    .0    .0    .0    .0    .0    .0
3. SW3       *   84. *    .8 *   .0    .2    .0    .0    .0    .0    .0    .0
4. NW3       *  173. *    .7 *   .1    .1    .0    .0    .0    .0    .2    .0
5. NE7       *  259. *    .6 *   .0    .0    .2    .0    .0    .0    .0    .0
6. SE7       *  277. *    .8 *   .0    .2    .0    .0    .0    .0    .0    .0
7. SW7       *    7. *    .6 *   .0    .0    .0    .1    .0    .1    .0    .0
8. NW7       *  169. *    .6 *   .0    .2    .0    .0    .0    .0    .1    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                          CONC/LINK
             *                            (PPM)
  RECEPTOR   *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
1. NE3       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .0    .0    .1    .5    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
```

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      CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
               JUNE 1989 VERSION
               PAGE   1

          JOB:   OLIVE STREET AND 4TH STREET PM NP
          RUN:                     (WORST CASE ANGLE)
    POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE             VD=    .0 CM/S
    CLAS=      7 (G)             VS=    .0 CM/S
    MIXH= 1000. M               AMB=    .0 PPM
   SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)    *                   EF      H      W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 -----------------*---------------------------*-----------------------------------
 A. NF            *     23 -1500     23   -500 *  AG   1789    2.3      .0  65.0
 B. NA            *     23  -500     23      0 *  AG   1789    4.1      .0  45.0
 C. ND            *     23     0     23    500 *  AG   1583    2.6      .0  45.0
 D. NE            *     23   500     23   1500 *  AG   1583    2.3      .0  65.0
 E. SF            *    -38  1500    -38    500 *  AG    216    2.3      .0  35.0
 F. SA            *    -38   500    -38      0 *  AG    152    3.6      .0  45.0
 G. SD            *    -38     0    -38   -500 *  AG    248    2.5      .0  33.0
 H. SE            *    -38  -500    -38  -1500 *  AG    248    2.3      .0  35.0
 I. WF            *  -1500    -8   -500     -8 *  AG      0    2.3      .0  35.0
 J. WA            *   -500    -8      0     -8 *  AG      0    4.1      .0  33.0
 K. WD            *      0    -8    500     -8 *  AG      0    2.6      .0  33.0
 L. WE            *    500    -8   1500     -8 *  AG      0    2.3      .0  35.0
 M. EF            *  -1500    -8   -500     -8 *  AG   1583    2.3      .0  80.0
 N. EA            *   -500    -8      0     -8 *  AG   1477    4.1      .0  75.0
 O. ED            *      0    -8    500     -8 *  AG   1757    2.8      .0  60.0
 P. EE            *    500    -8   1500     -8 *  AG   1757    2.3      .0  80.0
 Q. NL            *      0 -1900      0  -1800 *  AG      0    3.6      .0  33.0
 R. SL            *      0     0    -38    500 *  AG     64    3.6      .0  33.0
 S. WL            *      0 -1900      0  -1800 *  AG      0    4.1      .0  33.0
 T. EL            *      0     0   -500    -15 *  AG    106    4.1      .0  33.0

 III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
   RECEPTOR    *     X        Y      Z
 --------------*---------------------
 1. NE3        *     55       48    6.0
 2. SE3        *     55      -48    6.0
 3. SW3        *    -55      -48    6.0
 4. NW3        *    -55       48    6.0
 5. NE7        *     68       61    6.0
 6. SE7        *     68      -61    6.0
 7. SW7        *    -68      -61    6.0
 8. NW7        *    -68       61    6.0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED   *                 CONC/LINK
               *  BRG   * CONC   *                   (PPM)
   RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
 --------------*--------*--------*-----------------------------------------------
 1. NE3        *  186.  *   1.2  *   .0    .8    .0    .0    .0    .0    .0    .0
 2. SE3        *  275.  *   1.2  *   .0    .4    .0    .0    .0    .0    .0    .0
 3. SW3        *   84.  *   1.0  *   .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3        *  170.  *    .8  *   .0    .3    .0    .0    .0    .0    .0    .0
 5. NE7        *  188.  *    .9  *   .0    .6    .0    .0    .0    .0    .0    .0
 6. SE7        *  277.  *   1.0  *   .0    .3    .0    .0    .0    .0    .0    .0
 7. SW7        *   83.  *    .7  *   .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7        *  167.  *    .7  *   .0    .3    .0    .0    .0    .0    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                            CONC/LINK
               *                              (PPM)
   RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 --------------*-----------------------------------------------------------------------
 1. NE3        *   .0    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
 2. SE3        *   .0    .0    .0    .0    .1    .6    .0    .0    .0    .0    .0    .0
 3. SW3        *   .0    .0    .0    .0    .0    .1    .5    .1    .0    .0    .0    .0
 4. NW3        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
 5. NE7        *   .0    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
 6. SE7        *   .0    .0    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0
 7. SW7        *   .0    .0    .0    .0    .0    .0    .3    .1    .0    .0    .0    .0
 8. NW7        *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
```

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     CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
              JUNE 1989 VERSION
              PAGE   1

         JOB:   OLIVE STREET AND 4TH STREET PM WP
         RUN:                    (WORST CASE ANGLE)
   POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S            Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE            VD=    .0 CM/S
    CLAS=      7 (G)            VS=    .0 CM/S
    MIXH= 1000. M              AMB=    .0 PPM
   SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)   *                  EF      H     W
  DESCRIPTION    *   X1     Y1     X2     Y2   * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*--------------------------*--------------------------------
A. NF            *    23 -1500     23   -500 *  AG   1996   2.3      .0  65.0
B. NA            *    23  -500     23      0 *  AG   1996   4.3      .0  45.0
C. ND            *    23     0     23    500 *  AG   1870   2.6      .0  45.0
D. NE            *    23   500     23   1500 *  AG   1870   2.3      .0  65.0
E. SF            *   -38  1500    -38    500 *  AG    358   2.3      .0  35.0
F. SA            *   -38   500    -38      0 *  AG    192   3.6      .0  45.0
G. SD            *   -38     0    -38   -500 *  AG    288   2.5      .0  33.0
H. SE            *   -38  -500    -38  -1500 *  AG    288   2.3      .0  35.0
I. WF            * -1500    -8   -500     -8 *  AG      0   2.3      .0  35.0
J. WA            *  -500    -8      0     -8 *  AG      0   4.1      .0  33.0
K. WD            *     0    -8    500     -8 *  AG      0   2.7      .0  33.0
L. WE            *   500    -8   1500     -8 *  AG      0   2.3      .0  35.0
M. EF            * -1500    -8   -500     -8 *  AG   1682   2.3      .0  80.0
N. EA            *  -500    -8      0     -8 *  AG   1496   4.3      .0  75.0
O. ED            *     0    -8    500     -8 *  AG   1878   2.9      .0  60.0
P. EE            *   500    -8   1500     -8 *  AG   1878   2.3      .0  80.0
Q. NL            *     0 -1900      0  -1800 *  AG      0   3.6      .0  33.0
R. SL            *     0     0    -38    500 *  AG    166   3.6      .0  33.0
S. WL            *     0 -1900      0  -1800 *  AG      0   4.1      .0  33.0
T. EL            *     0     0   -500    -15 *  AG    186   4.1      .0  33.0

III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
  RECEPTOR    *     X        Y       Z
------------*--------------------
1. NE3        *     55       48     6.0
2. SE3        *     55      -48     6.0
3. SW3        *    -55      -48     6.0
4. NW3        *    -55       48     6.0
5. NE7        *     68       61     6.0
6. SE7        *     68      -61     6.0
7. SW7        *    -68      -61     6.0
8. NW7        *    -68       61     6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                   CONC/LINK
              *  BRG   * CONC   *                     (PPM)
 RECEPTOR     * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
-------------*-------*-------*-------------------------------------------------
1. NE3        *  186.  *   1.3  *   .1    .9    .0    .0    .0    .0    .0    .0
2. SE3        *  275.  *   1.3  *   .0    .5    .0    .0    .0    .0    .0    .0
3. SW3        *   84.  *   1.1  *   .0    .3    .0    .0    .0    .0    .0    .0
4. NW3        *  170.  *    .9  *   .0    .4    .0    .0    .0    .0    .0    .0
5. NE7        *  188.  *   1.0  *   .0    .7    .0    .0    .0    .0    .0    .0
6. SE7        *  277.  *   1.1  *   .0    .4    .0    .0    .0    .0    .0    .0
7. SW7        *   83.  *    .8  *   .0    .3    .0    .0    .0    .0    .0    .0
8. NW7        *  167.  *    .8  *   .0    .4    .0    .0    .0    .0    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                          CONC/LINK
              *                            (PPM)
 RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-------------------------------------------------------------------
1. NE3        *   .0    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
2. SE3        *   .0    .0    .0    .0    .1    .6    .0    .0    .0    .0    .0    .0
3. SW3        *   .0    .0    .0    .0    .0    .1    .5    .1    .0    .0    .0    .0
4. NW3        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
5. NE7        *   .0    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
6. SE7        *   .0    .0    .0    .0    .1    .5    .0    .0    .0    .0    .0    .0
7. SW7        *   .0    .0    .0    .0    .0    .0    .4    .1    .0    .0    .0    .0
8. NW7        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
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       CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                JUNE 1989 VERSION
                PAGE   1

           JOB:   OLIVE STREET AND 5TH STREET AM NP
           RUN:                     (WORST CASE ANGLE)
     POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S            Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE            VD=    .0 CM/S
    CLAS=      7 (G)            VS=    .0 CM/S
    MIXH= 1000. M              AMB=    .0 PPM
   SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)   *                  EF     H     W
   DESCRIPTION   *   X1    Y1    X2    Y2   * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*--------------------------*----------------------------------
A. NF            *    23 -1500    23  -500  *  AG   1499   2.3     .0  65.0
B. NA            *    23  -500    23     0  *  AG   1008   3.9     .0  75.0
C. ND            *    23     0    23   500  *  AG   1135   2.6     ,0  45.0
D. NE            *    23   500    23  1500  *  AG   1135   2.3     .0  65.0
E. SF            *   -38  1500   -38   500  *  AG    267   2.3     .0  35.0
F. SA            *   -38   500   -38     0  *  AG    267   3.9     .0  33.0
G. SD            *  1800     0  1900     0  *  AG      0   2.6     .0  33.0
H. SE            *  1800     0  1900     0  *  AG      0   2.3     .0  35.0
I. WF            *  1500     0   500     0  *  AG   1603   2.3     .0  95.0
J. WA            *   500     0     0     0  *  AG   1603   4.0     .0  75.0
K. WD            *     0     0  -500     0  *  AG   2234   2.7     .0  75.0
L. WE            *  -500     0 -1500     0  *  AG   2234   2.3     .0  95.0
M. EF            *  1500     0   500     0  *  AG      0   2.3     .0  35.0
N. EA            *   500     0     0     0  *  AG      0   4.0     .0  33.0
O. ED            *     0     0  -500     0  *  AG      0   2.6     .0  33.0
P. EE            *  -500     0 -1500     0  *  AG      0   2.3     .0  35.0
Q. NL            *     0     0     8  -500  *  AG    491   3.9     .0  33.0
R. SL            *     0 -1900     0 -1800  *  AG      0   3.9     .0  33.0
S. WL            *     0 -1900     0 -1800  *  AG      0   4.0     .0  33.0
T. EL            *     0 -1900     0 -1800  *  AG      0   4.0     .0  33.0

III.  RECEPTOR LOCATIONS

             *     COORDINATES (FT)
  RECEPTOR   *     X       Y      Z
-------------*---------------------
1. NE3       *     55      48    6.0
2. SE3       *     55     -48    6.0
3. SW3       *    -55     -48    6.0
4. NW3       *    -55      48    6.0
5. NE7       *     68      61    6.0
6. SE7       *     68     -61    6.0
7. SW7       *    -68     -61    6.0
8. NW7       *    -68      61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *       * PRED  *                CONC/LINK
             *  BRG  * CONC  *                  (PPM)
 RECEPTOR    * (DEG) * (PPM) *   A     B     C     D     E     F     G     H
-------------*-------*-------*-------------------------------------------------
1. NE3       *  184. *   1.0 *   .2    .4    .0    .0    .0    .0    .0    .0
2. SE3       *  276. *    .9 *   .0    .2    .0    .0    .0    .0    .0    .0
3. SW3       *   83. *    .9 *   .0    .1    .0    .0    .0    .0    .0    .0
4. NW3       *   97. *    .8 *   .0    .0    .1    .0    .0    .0    .0    .0
5. NE7       *  186. *    .8 *   .1    .4    .0    .0    .0    .0    .0    .0
6. SE7       *  277. *    .8 *   .0    .2    .0    .0    .0    .0    .0    .0
7. SW7       *   81. *    .7 *   .0    .1    .0    .0    .0    .0    .0    .0
8. NW7       *   99. *    .7 *   .0    .0    .0    .0    .0    .0    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                        CONC/LINK
             *                          (PPM)
 RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
1. NE3       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .5    .2    .0    .0    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .4    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .4    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
```

```
           CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                    JUNE 1989 VERSION
                    PAGE   1

               JOB:   OLIVE STREET AND 5TH STREET AM WP
               RUN:                   (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=     .5 M/S            Z0= 100. CM           ALT=      0. (FT)
       BRG= WORST CASE            VD=    .0 CM/S
      CLAS=      7 (G)            VS=    .0 CM/S
      MIXH= 1000. M              AMB=    .0 PPM
     SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)  *                EF     H     W
   DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*-------------------------*-----------------------------
 A. NF           *    23 -1500    23  -500 *  AG   1620   2.3     .0  65.0
 B. NA           *    23  -500    23     0 *  AG   1129   3.8     .0  75.0
 C. ND           *    23     0    23   500 *  AG   1260   2.6     .0  45.0
 D. NE           *    23   500    23  1500 *  AG   1260   2.3     .0  65.0
 E. SF           *   -38  1500   -38   500 *  AG    307   2.3     .0  35.0
 F. SA           *   -38   500   -38     0 *  AG    307   3.8     .0  33.0
 G. SD           *  1800     0  1900     0 *  AG      0   2.6     .0  33.0
 H. SE           *  1800     0  1900     0 *  AG      0   2.3     .0  35.0
 I. WF           *  1500     0   500     0 *  AG   1618   2.3     .0  95.0
 J. WA           *   500     0     0     0 *  AG   1618   4.1     .0  75.0
 K. WD           *     0     0  -500     0 *  AG   2285   2.8     .0  75.0
 L. WE           *  -500     0 -1500     0 *  AG   2285   2.3     .0  95.0
 M. EF           *  1500     0   500     0 *  AG      0   2.3     .0  35.0
 N. EA           *   500     0     0     0 *  AG      0   4.0     .0  33.0
 O. ED           *     0     0  -500     0 *  AG      0   2.6     .0  33.0
 P. EE           *  -500     0 -1500     0 *  AG      0   2.3     .0  35.0
 Q. NL           *     0     0     8  -500 *  AG    491   3.8     .0  33.0
 R. SL           *     0 -1900     0 -1800 *  AG      0   3.8     .0  33.0
 S. WL           *     0 -1900     0 -1800 *  AG      0   4.0     .0  33.0
 T. EL           *     0 -1900     0 -1800 *  AG      0   4.0     .0  33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *     X        Y       Z
 -------------*---------------------------
 1. NE3       *     55      48     6.0
 2. SE3       *     55     -48     6.0
 3. SW3       *    -55     -48     6.0
 4. NW3       *    -55      48     6.0
 5. NE7       *     68      61     6.0
 6. SE7       *     68     -61     6.0
 7. SW7       *    -68     -61     6.0
 8. NW7       *    -68      61     6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *       * PRED  *                CONC/LINK
              *  BRG  * CONC  *                  (PPM)
   RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
 -------------*-------*-------*----------------------------------------
 1. NE3       *  184. *   1.0 *  .2   .5   .0   .0   .0   .0   .0   .0
 2. SE3       *  276. *   1.0 *  .0   .2   .0   .0   .0   .0   .0   .0
 3. SW3       *   83. *    .9 *  .0   .2   .0   .0   .0   .0   .0   .0
 4. NW3       *   97. *    .9 *  .0   .0   .1   .0   .0   .0   .0   .0
 5. NE7       *  186. *    .9 *  .1   .4   .0   .0   .0   .0   .0   .0
 6. SE7       *  278. *    .8 *  .0   .2   .0   .0   .0   .0   .0   .0
 7. SW7       *   81. *    .7 *  .0   .1   .0   .0   .0   .0   .0   .0
 8. NW7       *   99. *    .7 *  .0   .0   .1   .0   .0   .0   .0   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                        CONC/LINK
              *                          (PPM)
   RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
 -------------*------------------------------------------------------------
 1. NE3       *  .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 2. SE3       *  .0   .0   .5   .2   .0   .0   .0   .0   .0   .0   .0   .0
 3. SW3       *  .0   .6   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 4. NW3       *  .0   .6   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 5. NE7       *  .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. SE7       *  .0   .0   .4   .1   .0   .0   .0   .0   .0   .0   .0   .0
 7. SW7       *  .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 8. NW7       *  .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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     CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
              JUNE 1989 VERSION
              PAGE   1

         JOB:   OLIVE STREET AND 5TH STREET PM NP
         RUN:                     (WORST CASE ANGLE)
   POLLUTANT: Carbon Monoxide


 I.  SITE VARIABLES

      U=     .5 M/S            Z0= 100. CM           ALT=      0. (FT)
    BRG= WORST CASE            VD=    .0 CM/S
   CLAS=      7 (G)            VS=    .0 CM/S
   MIXH= 1000. M              AMB=    .0 PPM
  SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

    LINK          *  LINK COORDINATES (FT)   *                 EF     H     W
  DESCRIPTION     *   X1     Y1     X2    Y2  * TYPE  VPH   (G/MI)  (FT)  (FT)
------------------*---------------------------*------------------------------
A. NF             *    23 -1500     23  -500 *  AG   2350    2.3      .0  65.0
B. NA             *    23  -500     23     0 *  AG   1662    3.5      .0  75.0
C. ND             *    23     0     23   500 *  AG   1730    2.6      .0  45.0
D. NE             *    23   500     23  1500 *  AG   1730    2.3      .0  65.0
E. SF             *   -38  1500    -38   500 *  AG    370    2.3      .0  35.0
F. SA             *   -38   500    -38     0 *  AG    370    3.4      .0  33.0
G. SD             *  1800     0   1900     0 *  AG      0    2.5      .0  33.0
H. SE             *  1800     0   1900     0 *  AG      0    2.3      .0  35.0
I. WF             *  1500     0    500     0 *  AG   1543    2.3      .0  95.0
J. WA             *   500     0      0     0 *  AG   1543    4.4      .0  75.0
K. WD             *     0     0   -500     0 *  AG   2533    3.3      .0  75.0
L. WE             *  -500     0  -1500     0 *  AG   2533    2.3      .0  95.0
M. EF             *  1500     0    500     0 *  AG      0    2.3      .0  35.0
N. EA             *   500     0      0     0 *  AG      0    4.3      .0  33.0
O. ED             *     0     0   -500     0 *  AG      0    2.8      .0  33.0
P. EE             *  -500     0  -1500     0 *  AG      0    2.3      .0  35.0
Q. NL             *     0     0      8  -500 *  AG    688    3.5      .0  33.0
R. SL             *     0 -1900      0 -1800 *  AG      0    3.4      .0  33.0
S. WL             *     0 -1900      0 -1800 *  AG      0    4.3      .0  33.0
T. EL             *     0 -1900      0 -1800 *  AG      0    4.3      .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X       Y      Z
-------------*--------------------
1. NE3       *    55      48    6.0
2. SE3       *    55     -48    6.0
3. SW3       *   -55     -48    6.0
4. NW3       *   -55      48    6.0
5. NE7       *    68      61    6.0
6. SE7       *    68     -61    6.0
7. SW7       *   -68     -61    6.0
8. NW7       *   -68      61    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                     CONC/LINK
             *   BRG  * CONC  *                       (PPM)
 RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
-------------*--------*-------*------------------------------------------------
1. NE3       *  263.  *   1.1 *   .0    .0    .2    .0    .0    .0    .0    .0
2. SE3       *  277.  *   1.2 *   .0    .3    .0    .0    .0    .0    .0    .0
3. SW3       *   82.  *   1.0 *   .0    .2    .0    .0    .0    .0    .0    .0
4. NW3       *  170.  *   1.1 *   .0    .3    .0    .0    .0    .0    .0    .0
5. NE7       *  186.  *   1.0 *   .2    .5    .0    .0    .0    .0    .0    .0
6. SE7       *  278.  *   1.0 *   .0    .3    .0    .0    .0    .0    .0    .0
7. SW7       *   81.  *    .8 *   .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *  168.  *    .8 *   .0    .3    .0    .0    .0    .0    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                              CONC/LINK
             *                                (PPM)
 RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*------------------------------------------------------------------------
1. NE3       *   .0    .0    .7    .1    .0    .0    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .7    .1    .0    .0    .0    .0    .1    .0    .0    .0
3. SW3       *   .0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .4    .0    .0    .0    .0    .0    .2    .0    .0    .0
5. NE7       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .5    .1    .0    .0    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .5    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .4    .0    .0    .0    .0    .0    .2    .0    .0    .0
```

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   CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
            JUNE 1989 VERSION
            PAGE   1

       JOB:   OLIVE STREET AND 5TH STREET PM WP
       RUN:                        (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide


I.  SITE VARIABLES

     U=    .5 M/S            Z0= 100. CM            ALT=      0. (FT)
   BRG= WORST CASE           VD=    .0 CM/S
  CLAS=     7 (G)            VS=    .0 CM/S
  MIXH= 1000. M             AMB=    .0 PPM
 SIGTH=     5. DEGREES     TEMP= 15.6 DEGREE (C)


II.  LINK VARIABLES

    LINK       *  LINK COORDINATES (FT)  *                  EF     H     W
 DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
---------------*-------------------------*---------------------------------
A. NF          *    23 -1500    23  -500 *  AG   2541   2.3     .0  65.0
B. NA          *    23  -500    23     0 *  AG   1853   3.5     .0  75.0
C. ND          *    23     0    23   500 *  AG   1937   2.6     .0  45.0
D. NE          *    23   500    23  1500 *  AG   1937   2.3     .0  65.0
E. SF          *   -38  1500   -38   500 *  AG    410   2.3     .0  35.0
F. SA          *   -38   500   -38     0 *  AG    410   3.4     .0  33.0
G. SD          *  1800     0  1900     0 *  AG      0   2.5     .0  33.0
H. SE          *  1800     0  1900     0 *  AG      0   2.3     .0  35.0
I. WF          *  1500     0   500     0 *  AG   1627   2.3     .0  95.0
J. WA          *   500     0     0     0 *  AG   1627   4.4     .0  75.0
K. WD          *     0     0  -500     0 *  AG   2641   3.3     .0  75.0
L. WE          *  -500     0 -1500     0 *  AG   2641   2.3     .0  95.0
M. EF          *  1500     0   500     0 *  AG      0   2.3     .0  35.0
N. EA          *   500     0     0     0 *  AG      0   4.3     .0  33.0
O. ED          *     0     0  -500     0 *  AG      0   2.8     .0  33.0
P. EE          *  -500     0 -1500     0 *  AG      0   2.3     .0  35.0
Q. NL          *     0     0     8  -500 *  AG    688   3.5     .0  33.0
R. SL          *     0 -1900     0 -1800 *  AG      0   3.4     .0  33.0
S. WL          *     0 -1900     0 -1800 *  AG      0   4.3     .0  33.0
T. EL          *     0 -1900     0 -1800 *  AG      0   4.3     .0  33.0

III.  RECEPTOR LOCATIONS

            *    COORDINATES (FT)
  RECEPTOR  *    X        Y       Z
------------*--------------------
1. NE3      *     55      48    6.0
2. SE3      *     55     -48    6.0
3. SW3      *    -55     -48    6.0
4. NW3      *    -55      48    6.0
5. NE7      *     68      61    6.0
6. SE7      *     68     -61    6.0
7. SW7      *    -68     -61    6.0
8. NW7      *    -68      61    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *       * PRED  *                     CONC/LINK
              *  BRG  * CONC  *                       (PPM)
  RECEPTOR    * (DEG) * (PPM) *   A     B     C     D     E     F     G     H
--------------*-------*-------*------------------------------------------------
1. NE3        *  263. *   1.2 *   .0    .0    .3    .0    .0    .0    .0    .0
2. SE3        *  277. *   1.3 *   .0    .3    .0    .0    .0    .0    .0    .0
3. SW3        *   82. *   1.1 *   .0    .2    .0    .0    .0    .0    .0    .0
4. NW3        *  170. *   1.1 *   .0    .3    .0    .0    .0    .1    .0    .0
5. NE7        *  186. *   1.1 *   .2    .6    .0    .0    .0    .0    .0    .0
6. SE7        *  278. *   1.1 *   .0    .3    .0    .0    .0    .0    .0    .0
7. SW7        *   81. *    .9 *   .0    .2    .0    .0    .0    .0    .0    .0
8. NW7        *  168. *    .9 *   .0    .3    .0    .0    .0    .0    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-------------------------------------------------------------------------
1. NE3        *   .0    .0    .7    .1    .0    .0    .0    .0    .0    .0    .0    .0
2. SE3        *   .0    .0    .7    .1    .0    .0    .0    .0    .1    .0    .0    .0
3. SW3        *   .0    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
4. NW3        *   .0    .0    .4    .0    .0    .0    .0    .0    .2    .0    .0    .0
5. NE7        *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7        *   .0    .0    .5    .1    .0    .0    .0    .0    .0    .0    .0    .0
7. SW7        *   .0    .5    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
8. NW7        *   .0    .0    .4    .0    .0    .0    .0    .0    .2    .0    .0    .0
```

```
          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   BROADWAY AND TEMPLE STREET AM NP
              RUN:                     (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=    .5 M/S            Z0= 100. CM           ALT=      0. (FT)
       BRG= WORST CASE           VD=    .0 CM/S
      CLAS=     7 (G)            VS=    .0 CM/S
      MIXH= 1000. M             AMB=    .0 PPM
     SIGTH=     5. DEGREES     TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)  *                   EF     H     W
   DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*-------------------------*---------------------------------
 A. NF           *    23 -1500    23  -500 *  AG    851   2.3      .0  65.0
 B. NA           *    23  -500    23     0 *  AG    773   3.5      .0  60.0
 C. ND           *    23     0    23   500 *  AG    796   2.5      .0  45.0
 D. NE           *    23   500    23  1500 *  AG    796   2.3      .0  65.0
 E. SF           *   -30  1500   -30   500 *  AG   1616   2.3      .0  50.0
 F. SA           *   -30   500   -30     0 *  AG   1549   3.8      .0  45.0
 G. SD           *   -30     0   -30  -500 *  AG   1406   2.6      .0  33.0
 H. SE           *   -30  -500   -30 -1500 *  AG   1406   2.3      .0  50.0
 I. WF           *  1500    23   500    23 *  AG    609   2.3      .0  50.0
 J. WA           *   500    23     0    23 *  AG    579   4.3      .0  45.0
 K. WD           *     0    23  -500    23 *  AG    900   3.1      .0  33.0
 L. WE           *  -500    23 -1500    23 *  AG    900   2.3      .0  50.0
 M. EF           * -1500   -23  -500   -23 *  AG    873   2.3      .0  50.0
 N. EA           *  -500   -23     0   -23 *  AG    813   4.4      .0  45.0
 O. ED           *     0   -23   500   -23 *  AG    847   2.9      .0  33.0
 P. EE           *   500   -23  1500   -23 *  AG    847   2.3      .0  50.0
 Q. NL           *     0     0     8  -500 *  AG     78   3.5      .0  33.0
 R. SL           *     0     0   -23   500 *  AG     67   3.5      .0  33.0
 S. WL           *     0     0   500    15 *  AG     30   4.3      .0  33.0
 T. EL           *     0     0  -500   -15 *  AG     60   4.3      .0  33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *     X       Y       Z
 -------------*---------------------
 1. NE3       *     55      48     6.0
 2. SE3       *     55     -48     6.0
 3. SW3       *    -55     -48     6.0
 4. NW3       *    -55      48     6.0
 5. NE7       *     68      61     6.0
 6. SE7       *     68     -61     6.0
 7. SW7       *    -68     -61     6.0
 8. NW7       *    -68      61     6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *       * PRED  *                  CONC/LINK
              *  BRG  * CONC  *                    (PPM)
  RECEPTOR    * (DEG) * (PPM) *   A     B     C     D     E     F     G     H
 -------------*-------*-------*------------------------------------------------
 1. NE3       *  262. *   1.1 *   .0    .0    .1    .0    .0    .2    .0    .0
 2. SE3       *  275. *   1.1 *   .0    .2    .0    .0    .0    .0    .1    .0
 3. SW3       *    5. *   1.4 *   .0    .0    .0    .1    .1    .8    .0    .0
 4. NW3       *  172. *   1.2 *   .0    .1    .0    .0    .0    .2    .5    .0
 5. NE7       *  260. *    .8 *   .0    .0    .0    .0    .0    .2    .0    .0
 6. SE7       *  277. *    .9 *   .0    .1    .0    .0    .0    .0    .1    .0
 7. SW7       *    7. *   1.1 *   .0    .0    .0    .0    .0    .6    .0    .0
 8. NW7       *  173. *    .8 *   .1    .0    .0    .0    .0    .0    .3    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*----------------------------------------------------------------------
 1. NE3       *   .0    .1    .4    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .0    .0    .1    .0    .5    .0    .0    .0    .0    .0    .0
 3. SW3       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .1    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .0    .1    .0    .0    .1    .0    .0    .0    .0    .0    .0
```

```
         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   BROADWAY AND TEMPLE STREET AM WP
             RUN:                    (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S             Z0= 100. CM             ALT=      0. (FT)
     BRG= WORST CASE             VD=    .0 CM/S
    CLAS=      7 (G)             VS=    .0 CM/S
    MIXH= 1000. M               AMB=    .0 PPM
   SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                  EF      H      W
  DESCRIPTION   *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
----------------*-------------------------*---------------------------------
A. NF           *    23 -1500     23   -500 *  AG    881    2.3       .0  65.0
B. NA           *    23  -500     23      0 *  AG    803    3.4       .0  60.0
C. ND           *    23     0     23    500 *  AG    826    2.5       .0  45.0
D. NE           *    23   500     23   1500 *  AG    826    2.3       .0  65.0
E. SF           *   -30  1500    -30    500 *  AG   1701    2.3       .0  50.0
F. SA           *   -30   500    -30      0 *  AG   1634    3.8       .0  45.0
G. SD           *   -30     0    -30   -500 *  AG   1491    2.6       .0  33.0
H. SE           *   -30  -500    -30  -1500 *  AG   1491    2.3       .0  50.0
I. WF           *  1500    23    500     23 *  AG    654    2.3       .0  50.0
J. WA           *   500    23      0     23 *  AG    624    4.3       .0  45.0
K. WD           *     0    23   -500     23 *  AG    945    3.3       .0  33.0
L. WE           *  -500    23  -1500     23 *  AG    945    2.3       .0  50.0
M. EF           * -1500   -23   -500    -23 *  AG    873    2.3       .0  50.0
N. EA           *  -500   -23      0    -23 *  AG    813    4.4       .0  45.0
O. ED           *     0   -23    500    -23 *  AG    847    2.9       .0  33.0
P. EE           *   500   -23   1500    -23 *  AG    847    2.3       .0  50.0
Q. NL           *     0     0      8   -500 *  AG     78    3.4       .0  33.0
R. SL           *     0     0    -23    500 *  AG     67    3.4       .0  33.0
S. WL           *     0     0    500     15 *  AG     30    4.3       .0  33.0
T. EL           *     0     0   -500    -15 *  AG     60    4.3       .0  33.0

III.  RECEPTOR LOCATIONS

            *     COORDINATES (FT)
  RECEPTOR  *    X       Y      Z
------------*---------------------
1. NE3      *     55      48    6.0
2. SE3      *     55     -48    6.0
3. SW3      *    -55     -48    6.0
4. NW3      *    -55      48    6.0
5. NE7      *     68      61    6.0
6. SE7      *     68     -61    6.0
7. SW7      *    -68     -61    6.0
8. NW7      *    -68      61    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                   CONC/LINK
             *  BRG   * CONC  *                     (PPM)
 RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
-------------*--------*-------*------------------------------------------------
1. NE3       *  262.  *   1.1 *   .0    .0    .1    .0    .0    .2    .0    .0
2. SE3       *  275.  *   1.1 *   .0    .2    .0    .0    .0    .0    .1    .0
3. SW3       *    5.  *   1.5 *   .0    .0    .0    .1    .1    .8    .0    .0
4. NW3       *  172.  *   1.3 *   .0    .1    .0    .0    .0    .2    .5    .0
5. NE7       *  260.  *    .8 *   .0    .0    .0    .0    .0    .2    .0    .0
6. SE7       *  278.  *    .9 *   .0    .1    .0    .0    .0    .0    .1    .0
7. SW7       *    7.  *   1.1 *   .0    .0    .0    .0    .0    .6    .0    .0
8. NW7       *   97.  *    .9 *   .0    .0    .0    .0    .0    .3    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                           CONC/LINK
             *                             (PPM)
 RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
1. NE3       *   .0    .1    .4    .0    .0    .2    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .0    .1    .0    .5    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   BROADWAY AND TEMPLE STREET PM NP
              RUN:                   (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=    .5 M/S               Z0= 100. CM           ALT=      0. (FT)
      BRG= WORST CASE              VD=    .0 CM/S
     CLAS=     7 (G)               VS=    .0 CM/S
     MIXH= 1000. M                AMB=    .0 PPM
    SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

       LINK        *  LINK COORDINATES (FT)  *                   EF      H      W
    DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 ------------------*-------------------------*------------------------------------
  A. NF            *    23 -1500     23   -500 *  AG   1747   2.3      .0   65.0
  B. NA            *    23  -500     23      0 *  AG   1602   3.6      .0   60.0
  C. ND            *    23     0     23    500 *  AG   1718   2.6      .0   45.0
  D. NE            *    23   500     23   1500 *  AG   1718   2.3      .0   65.0
  E. SF            *   -30  1500    -30    500 *  AG   1137   2.3      .0   50.0
  F. SA            *   -30   500    -30      0 *  AG   1083   3.6      .0   45.0
  G. SD            *   -30     0    -30   -500 *  AG    911   2.6      .0   33.0
  H. SE            *   -30  -500    -30  -1500 *  AG    911   2.3      .0   50.0
  I. WF            *  1500    23    500     23 *  AG   1007   2.3      .0   50.0
  J. WA            *   500    23      0     23 *  AG    978   4.3      .0   45.0
  K. WD            *     0    23   -500     23 *  AG   1289   3.5      .0   33.0
  L. WE            *  -500    23  -1500     23 *  AG   1289   2.3      .0   50.0
  M. EF            * -1500   -23   -500    -23 *  AG    847   2.3      .0   50.0
  N. EA            *  -500   -23      0    -23 *  AG    760   4.3      .0   45.0
  O. ED            *     0   -23    500    -23 *  AG    820   2.8      .0   33.0
  P. EE            *   500   -23   1500    -23 *  AG    820   2.3      .0   50.0
  Q. NL            *     0     0      8   -500 *  AG    145   3.5      .0   33.0
  R. SL            *     0     0    -23    500 *  AG     54   3.5      .0   33.0
  S. WL            *     0     0    500     15 *  AG     29   4.3      .0   33.0
  T. EL            *     0     0   -500    -15 *  AG     87   4.3      .0   33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *     X       Y      Z
 -------------*---------------------
  1. NE3      *     55      48    6.0
  2. SE3      *     55     -48    6.0
  3. SW3      *    -55     -48    6.0
  4. NW3      *    -55      48    6.0
  5. NE7      *     68      61    6.0
  6. SE7      *     68     -61    6.0
  7. SW7      *    -68     -61    6.0
  8. NW7      *    -68      61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                     CONC/LINK
              *  BRG   * CONC   *                       (PPM)
  RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
 -------------*--------*--------*------------------------------------------------
 1. NE3       *  262.  *   1.4  *   .0    .0    .3    .0    .0    .1    .0    .0
 2. SE3       *  352.  *   1.2  *   .0    .1    .5    .0    .1    .1    .0    .0
 3. SW3       *    5.  *   1.3  *   .0    .0    .0    .2    .0    .6    .0    .0
 4. NW3       *  171.  *   1.3  *   .1    .2    .0    .0    .0    .2    .3    .0
 5. NE7       *  187.  *   1.0  *   .0    .5    .0    .0    .0    .0    .0    .1
 6. SE7       *  278.  *   1.0  *   .0    .3    .0    .0    .0    .0    .0    .0
 7. SW7       *    7.  *   1.0  *   .0    .0    .0    .2    .0    .4    .0    .0
 8. NW7       *   97.  *   1.0  *   .0    .0    .1    .0    .0    .2    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                         CONC/LINK
              *                           (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*-------------------------------------------------------------------
 1. NE3       *   .0    .2    .6    .0    .0    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .2    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 3. SW3       *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .3    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .1    .1    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .4    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   BROADWAY AND TEMPLE STREET PM WP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
       BRG= WORST CASE              VD=    .0 CM/S
      CLAS=      7 (G)              VS=    .0 CM/S
      MIXH= 1000. M                AMB=    .0 PPM
     SIGTH=      5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                 EF      H     W
   DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -----------------*-------------------------*------------------------------
 A. NF            *    23 -1500    23  -500 *  AG   1807   2.3     .0  65.0
 B. NA            *    23  -500    23     0 *  AG   1662   3.6     .0  60.0
 C. ND            *    23     0    23   500 *  AG   1778   2.6     .0  45.0
 D. NE            *    23   500    23  1500 *  AG   1778   2.3     .0  65.0
 E. SF            *   -30  1500   -30   500 *  AG   1228   2.3     .0  50.0
 F. SA            *   -30   500   -30     0 *  AG   1174   3.6     .0  45.0
 G. SD            *   -30     0   -30  -500 *  AG   1002   2.5     .0  33.0
 H. SE            *   -30  -500   -30 -1500 *  AG   1002   2.3     .0  50.0
 I. WF            *  1500    23   500    23 *  AG   1010   2.3     .0  50.0
 J. WA            *   500    23     0    23 *  AG    981   4.4     .0  45.0
 K. WD            *     0    23  -500    23 *  AG   1292   3.6     .0  33.0
 L. WE            *  -500    23 -1500    23 *  AG   1292   2.3     .0  50.0
 M. EF            * -1500   -23  -500   -23 *  AG    847   2.3     .0  50.0
 N. EA            *  -500   -23     0   -23 *  AG    760   4.4     .0  45.0
 O. ED            *     0   -23   500   -23 *  AG    820   2.9     .0  33.0
 P. EE            *   500   -23  1500   -23 *  AG    820   2.3     .0  50.0
 Q. NL            *     0     0     8  -500 *  AG    145   3.5     .0  33.0
 R. SL            *     0     0   -23   500 *  AG     54   3.5     .0  33.0
 S. WL            *     0     0   500    15 *  AG     29   4.3     .0  33.0
 T. EL            *     0     0  -500   -15 *  AG     87   4.3     .0  33.0

 III.  RECEPTOR LOCATIONS

                *    COORDINATES (FT)
   RECEPTOR     *    X       Y      Z
 ---------------*---------------------
 1. NE3         *     55      48    6.0
 2. SE3         *     55     -48    6.0
 3. SW3         *    -55     -48    6.0
 4. NW3         *    -55      48    6.0
 5. NE7         *     68      61    6.0
 6. SE7         *     68     -61    6.0
 7. SW7         *    -68     -61    6.0
 8. NW7         *    -68      61    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                   CONC/LINK
               *  BRG   * CONC  *                     (PPM)
  RECEPTOR     * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
 --------------*--------*-------*----------------------------------------
 1. NE3        *  262.  *   1.5 *   .0   .0   .3   .0   .0   .1   .0   .0
 2. SE3        *  352.  *   1.3 *   .0   .1   .5   .0   .1   .1   .0   .0
 3. SW3        *    5.  *   1.4 *   .0   .0   .0   .2   .0   .6   .0   .0
 4. NW3        *  171.  *   1.3 *   .1   .3   .0   .0   .0   .2   .3   .0
 5. NE7        *  187.  *   1.1 *   .0   .5   .0   .0   .0   .0   .0   .1
 6. SE7        *  278.  *   1.0 *   .0   .3   .0   .0   .0   .0   .0   .0
 7. SW7        *    7.  *   1.1 *   .0   .0   .0   .2   .0   .4   .0   .0
 8. NW7        *   97.  *   1.0 *   .0   .0   .1   .0   .0   .2   .0   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                          CONC/LINK
               *                            (PPM)
  RECEPTOR     *   I    J    K    L    M    N    O    P    Q    R    S    T
 --------------*-----------------------------------------------------------
 1. NE3        *   .0   .2   .6   .0   .0   .2   .0   .0   .0   .0   .0   .0
 2. SE3        *   .0   .2   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
 3. SW3        *   .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
 4. NW3        *   .0   .0   .3   .0   .0   .1   .0   .0   .0   .0   .0   .0
 5. NE7        *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. SE7        *   .0   .0   .1   .1   .0   .4   .0   .0   .0   .0   .0   .0
 7. SW7        *   .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
 8. NW7        *   .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

             JOB:   HILL STREET AND 1ST STREET AM NP
             RUN:                 (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide

    I.  SITE VARIABLES

          U=     .5 M/S              Z0= 100. CM           ALT=      0. (FT)
        BRG= WORST CASE              VD=    .0 CM/S
       CLAS=      7 (G)              VS=    .0 CM/S
       MIXH= 1000. M                AMB=    .0 PPM
      SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)

   II.  LINK VARIABLES

       LINK        *  LINK COORDINATES (FT)  *                EF     H     W
    DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  -----------------*-------------------------*---------------------------------
  A. NF            *    30 -1500    30  -500 *  AG    370   2.3     .0  50.0
  B. NA            *    30  -500    30     0 *  AG    312   4.1     .0  45.0
  C. ND            *    30     0    30   500 *  AG    438   2.7     .0  33.0
  D. NE            *    30   500    30  1500 *  AG    438   2.3     .0  50.0
  E. SF            *   -23  1500   -23   500 *  AG   1576   2.3     .0  65.0
  F. SA            *   -23   500   -23     0 *  AG   1492   4.4     .0  60.0
  G. SD            *   -23     0   -23  -500 *  AG   1571   2.9     .0  45.0
  H. SE            *   -23  -500   -23 -1500 *  AG   1571   2.3     .0  65.0
  I. WF            *  1500    30   500    30 *  AG   1505   2.3     .0  65.0
  J. WA            *   500    30     0    30 *  AG   1399   3.8     .0  60.0
  K. WD            *     0    30  -500    30 *  AG   1563   2.6     .0  45.0
  L. WE            *  -500    30 -1500    30 *  AG   1563   2.3     .0  65.0
  M. EF            * -1500   -30  -500   -30 *  AG   1193   2.3     .0  65.0
  N. EA            *  -500   -30     0   -30 *  AG   1102   3.8     .0  60.0
  O. ED            *     0   -30   500   -30 *  AG   1072   2.6     .0  45.0
  P. EE            *   500   -30  1500   -30 *  AG   1072   2.3     .0  65.0
  Q. NL            *     0     0    23  -500 *  AG     58   4.1     .0  33.0
  R. SL            *     0     0    -8   500 *  AG     84   4.1     .0  33.0
  S. WL            *     0     0   500    15 *  AG    106   3.6     .0  33.0
  T. EL            *     0     0  -500   -15 *  AG     91   3.6     .0  33.0

  III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
    RECEPTOR   *     X      Y      Z
  -------------*---------------------
  1. NE3       *    55     63    6.0
  2. SE3       *    55    -63    6.0
  3. SW3       *   -55    -63    6.0
  4. NW3       *   -55     63    6.0
  5. NE7       *    68     76    6.0
  6. SE7       *    68    -76    6.0
  7. SW7       *   -68    -76    6.0
  8. NW7       *   -68     76    6.0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

                *        * PRED  *                  CONC/LINK
                *  BRG   * CONC  *                    (PPM)
   RECEPTOR     * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
  --------------*--------*-------*-----------------------------------------------
  1. NE3        *  262.  *   1.2 *   .0    .0    .0    .0    .0    .2    .0    .0
  2. SE3        *  350.  *   1.0 *   .0    .0    .1    .0    .0    .3    .0    .0
  3. SW3        *    5.  *   1.3 *   .0    .0    .0    .0    .1    .7    .0    .0
  4. NW3        *  173.  *   1.3 *   .0    .0    .0    .0    .0    .2    .5    .0
  5. NE7        *  254.  *    .9 *   .0    .0    .0    .0    .0    .2    .0    .0
  6. SE7        *  278.  *    .9 *   .0    .0    .0    .0    .0    .0    .1    .0
  7. SW7        *    7.  *   1.1 *   .0    .0    .0    .0    .0    .6    .0    .0
  8. NW7        *   97.  *   1.1 *   .0    .0    .0    .0    .0    .3    .0    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

                *                          CONC/LINK
                *                            (PPM)
   RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
  --------------*---------------------------------------------------------------------
  1. NE3        *   .0    .2    .5    .0    .1    .0    .0    .0    .0    .0    .0    .0
  2. SE3        *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
  3. SW3        *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
  4. NW3        *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
  5. NE7        *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
  6. SE7        *   .0    .0    .0    .2    .0    .4    .0    .0    .0    .0    .0    .0
  7. SW7        *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
  8. NW7        *   .0    .5    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
```

```
          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 1ST STREET AM WP
              RUN:                     (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=     .5 M/S              Z0= 100. CM             ALT=      0. (FT)
       BRG= WORST CASE              VD=    .0 CM/S
      CLAS=      7 (G)              VS=    .0 CM/S
      MIXH= 1000. M                AMB=    .0 PPM
     SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK          *  LINK COORDINATES (FT)  *                 EF     H     W
   DESCRIPTION      *   X1     Y1    X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -------------------*------------------------*--------------------------------
 A. NF              *     30 -1500     30  -500 *  AG     370   2.3      .0  50.0
 B. NA              *     30  -500     30     0 *  AG     312   4.3      .0  45.0
 C. ND              *     30     0     30   500 *  AG     450   2.7      .0  33.0
 D. NE              *     30   500     30  1500 *  AG     450   2.3      .0  50.0
 E. SF              *    -23  1500    -23   500 *  AG    1599   2.3      .0  65.0
 F. SA              *    -23   500    -23     0 *  AG    1515   4.4      .0  60.0
 G. SD              *    -23     0    -23  -500 *  AG    1800   3.5      .0  45.0
 H. SE              *    -23  -500    -23 -1500 *  AG    1800   2.3      .0  65.0
 I. WF              *   1500    30    500    30 *  AG    1693   2.3      .0  65.0
 J. WA              *    500    30      0    30 *  AG    1426   3.6      .0  60.0
 K. WD              *      0    30   -500    30 *  AG    1592   2.6      .0  45.0
 L. WE              *   -500    30  -1500    30 *  AG    1592   2.3      .0  65.0
 M. EF              *  -1500   -30   -500   -30 *  AG    1346   2.3      .0  65.0
 N. EA              *   -500   -30      0   -30 *  AG    1243   3.6      .0  60.0
 O. ED              *      0   -30    500   -30 *  AG    1166   2.5      .0  45.0
 P. EE              *    500   -30   1500   -30 *  AG    1166   2.3      .0  65.0
 Q. NL              *      0     0     23  -500 *  AG      58   4.3      .0  33.0
 R. SL              *      0     0     -8   500 *  AG      84   4.3      .0  33.0
 S. WL              *      0     0    500    15 *  AG     267   3.6      .0  33.0
 T. EL              *      0     0   -500   -15 *  AG     103   3.5      .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *     X       Y      Z
 -------------*--------------------
 1. NE3       *     55      63    6.0
 2. SE3       *     55     -63    6.0
 3. SW3       *    -55     -63    6.0
 4. NW3       *    -55      63    6.0
 5. NE7       *     68      76    6.0
 6. SE7       *     68     -76    6.0
 7. SW7       *    -68     -76    6.0
 8. NW7       *    -68      76    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                    CONC/LINK
              *  BRG   * CONC   *                      (PPM)
  RECEPTOR    * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
 -------------*--------*--------*------------------------------------------------
 1. NE3       *  262.  *   1.2  *   .0    .0    .0    .0    .0    .2    .0    .0
 2. SE3       *  276.  *   1.2  *   .0    .0    .0    .0    .0    .0    .2    .0
 3. SW3       *   81.  *   1.3  *   .0    .0    .0    .0    .0    .0    .4    .0
 4. NW3       *  173.  *   1.5  *   .0    .0    .0    .0    .0    .2    .7    .0
 5. NE7       *  255.  *    .9  *   .0    .0    .0    .0    .0    .2    .0    .0
 6. SE7       *  278.  *   1.0  *   .0    .0    .0    .0    .0    .0    .2    .0
 7. SW7       *    7.  *   1.1  *   .0    .0    .0    .0    .0    .6    .0    .0
 8. NW7       *   98.  *   1.1  *   .0    .0    .0    .0    .0    .3    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)     (CONT.)

              *                          CONC/LINK
              *                            (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*------------------------------------------------------------------------
 1. NE3       *   .0    .2    .5    .0    .1    .0    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .0    .0    .2    .0    .5    .0    .0    .0    .0    .0    .0
 3. SW3       *   .1    .1    .0    .0    .0    .1    .3    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .2    .0    .4    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .5    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
```

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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   HILL STREET AND 1ST STREET PM NP
            RUN:                    (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE              VD=    .0 CM/S
    CLAS=      7 (G)              VS=    .0 CM/S
    MIXH= 1000. M                AMB=    .0 PPM
   SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK         *  LINK COORDINATES (FT)   *                 EF     H     W
  DESCRIPTION     *   X1     Y1     X2     Y2 * TYPE  VPH  (G/MI)  (FT)  (FT)
------------------*---------------------------*---------------------------------
A. NF             *     30 -1500     30  -500 *  AG    917   2.3     .0  50.0
B. NA             *     30  -500     30     0 *  AG    851   4.3     .0  45.0
C. ND             *     30     0     30   500 *  AG   1261   3.3     .0  33.0
D. NE             *     30   500     30  1500 *  AG   1261   2.3     .0  50.0
E. SF             *    -23  1500    -23   500 *  AG   1395   2.3     .0  65.0
F. SA             *    -23   500    -23     0 *  AG   1312   4.3     .0  60.0
G. SD             *    -23     0    -23  -500 *  AG   1284   2.8     .0  45.0
H. SE             *    -23  -500    -23 -1500 *  AG   1284   2.3     .0  65.0
I. WF             *   1500    30    500    30 *  AG   1525   2.3     .0  65.0
J. WA             *    500    30      0    30 *  AG   1468   3.8     .0  60.0
K. WD             *      0    30   -500    30 *  AG   1559   2.6     .0  45.0
L. WE             *   -500    30  -1500    30 *  AG   1559   2.3     .0  65.0
M. EF             *  -1500   -30   -500   -30 *  AG   1866   2.3     .0  65.0
N. EA             *   -500   -30      0   -30 *  AG   1524   3.8     .0  60.0
O. ED             *      0   -30    500   -30 *  AG   1599   2.6     .0  45.0
P. EE             *    500   -30   1500   -30 *  AG   1599   2.3     .0  65.0
Q. NL             *      0     0     23  -500 *  AG     66   4.1     .0  33.0
R. SL             *      0     0     -8   500 *  AG     83   4.1     .0  33.0
S. WL             *      0     0    500    15 *  AG     57   3.6     .0  33.0
T. EL             *      0     0   -500   -15 *  AG    342   3.6     .0  33.0

III.  RECEPTOR LOCATIONS

             *     COORDINATES (FT)
  RECEPTOR   *     X        Y      Z
-------------*---------------------
1. NE3       *     55       63    6.0
2. SE3       *     55      -63    6.0
3. SW3       *    -55      -63    6.0
4. NW3       *    -55       63    6.0
5. NE7       *     68       76    6.0
6. SE7       *     68      -76    6.0
7. SW7       *    -68      -76    6.0
8. NW7       *    -68       76    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                  CONC/LINK
             *  BRG   * CONC   *                    (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
-------------*--------*--------*------------------------------------------------
1. NE3       *  261.  *   1.5  *   .0    .0    .3    .0    .0    .2    .0    .0
2. SE3       *  352.  *   1.5  *   .0    .2    .5    .0    .1    .2    .0    .0
3. SW3       *    6.  *   1.5  *   .0    .0    .0    .1    .0    .6    .0    .0
4. NW3       *  172.  *   1.3  *   .0    .1    .0    .0    .0    .2    .4    .0
5. NE7       *  255.  *   1.1  *   .0    .0    .2    .0    .0    .2    .0    .0
6. SE7       *  278.  *   1.2  *   .0    .2    .0    .0    .0    .0    .1    .0
7. SW7       *    8.  *   1.2  *   .0    .0    .0    .1    .0    .5    .0    .0
8. NW7       *   97.  *   1.2  *   .0    .0    .1    .0    .0    .3    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                              CONC/LINK
             *                                (PPM)
  RECEPTOR   *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*----------------------------------------------------------------------
1. NE3       *   .0    .2    .5    .0    .1    .2    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .2    .0    .0    .2    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .0    .3    .0    .0    .3    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .2    .0    .5    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .5    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0
```

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      CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
               JUNE 1989 VERSION
               PAGE   1

          JOB:   HILL STREET AND 1ST STREET PM WP
          RUN:                  (WORST CASE ANGLE)
    POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM           ALT=      0. (FT)
     BRG= WORST CASE            VD=    .0 CM/S
    CLAS=     7 (G)             VS=    .0 CM/S
    MIXH= 1000. M              AMB=    .0 PPM
   SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

     LINK       *  LINK COORDINATES (FT)  *                   EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
----------------*-------------------------*---------------------------------
A. NF           *   30 -1500    30  -500 *  AG    917    2.3     .0  50.0
B. NA           *   30  -500    30     0 *  AG    851    4.4     .0  45.0
C. ND           *   30     0    30   500 *  AG   1285    3.6     .0  33.0
D. NE           *   30   500    30  1500 *  AG   1285    2.3     .0  50.0
E. SF           *  -23  1500   -23   500 *  AG   1422    2.3     .0  65.0
F. SA           *  -23   500   -23     0 *  AG   1339    4.4     .0  60.0
G. SD           *  -23     0   -23  -500 *  AG   1425    3.1     .0  45.0
H. SE           *  -23  -500   -23 -1500 *  AG   1425    2.3     .0  65.0
I. WF           * 1500    30   500    30 *  AG   1700    2.3     .0  65.0
J. WA           *  500    30     0    30 *  AG   1552    3.6     .0  60.0
K. WD           *    0    30  -500    30 *  AG   1650    2.6     .0  45.0
L. WE           * -500    30 -1500    30 *  AG   1650    2.3     .0  65.0
M. EF           *-1500   -30  -500   -30 *  AG   2112    2.3     .0  65.0
N. EA           * -500   -30     0   -30 *  AG   1746    3.6     .0  60.0
O. ED           *    0   -30   500   -30 *  AG   1791    2.6     .0  45.0
P. EE           *  500   -30  1500   -30 *  AG   1791    2.3     .0  65.0
Q. NL           *    0     0    23  -500 *  AG     66    4.3     .0  33.0
R. SL           *    0     0    -8   500 *  AG     83    4.3     .0  33.0
S. WL           *    0     0   500    15 *  AG    148    3.5     .0  33.0
T. EL           *    0     0  -500   -15 *  AG    366    3.6     .0  33.0

III.  RECEPTOR LOCATIONS

            *     COORDINATES (FT)
  RECEPTOR  *     X        Y      Z
------------*---------------------
1. NE3      *     55       63    6.0
2. SE3      *     55      -63    6.0
3. SW3      *    -55      -63    6.0
4. NW3      *    -55       63    6.0
5. NE7      *     68       76    6.0
6. SE7      *     68      -76    6.0
7. SW7      *    -68      -76    6.0
8. NW7      *    -68       76    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                   CONC/LINK
             *  BRG   * CONC  *                     (PPM)
 RECEPTOR    * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
-------------*--------*-------*----------------------------------------
1. NE3       *  261.  *   1.6 *   .0   .0   .3   .0   .0   .2   .0   .0
2. SE3       *  352.  *   1.6 *   .0   .2   .6   .0   .1   .2   .0   .0
3. SW3       *   81.  *   1.4 *   .0   .1   .0   .0   .0   .0   .2   .0
4. NW3       *  172.  *   1.5 *   .0   .1   .0   .0   .0   .2   .5   .0
5. NE7       *  255.  *   1.2 *   .0   .0   .2   .0   .0   .2   .0   .0
6. SE7       *  278.  *   1.3 *   .0   .2   .0   .0   .0   .0   .1   .0
7. SW7       *    9.  *   1.3 *   .0   .0   .0   .1   .0   .6   .0   .0
8. NW7       *   98.  *   1.3 *   .0   .0   .1   .0   .0   .3   .0   .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                           CONC/LINK
             *                             (PPM)
 RECEPTOR    *   I    J    K    L    M    N    O    P    Q    R    S    T
-------------*-----------------------------------------------------------
1. NE3       *   .0   .2   .5   .0   .2   .2   .0   .0   .0   .0   .0   .0
2. SE3       *   .0   .2   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0
3. SW3       *   .1   .2   .0   .0   .0   .2   .5   .0   .0   .0   .0   .0
4. NW3       *   .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
5. NE7       *   .0   .0   .3   .0   .0   .3   .0   .0   .0   .0   .0   .0
6. SE7       *   .0   .0   .0   .2   .0   .6   .0   .0   .0   .0   .0   .0
7. SW7       *   .0   .0   .1   .0   .0   .3   .0   .0   .0   .0   .0   .0
8. NW7       *   .0   .5   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0
```

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            CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                     JUNE 1989 VERSION
                     PAGE   1

                 JOB:   HILL STREET AND 2ND STREET AM NP
                 RUN:                     (WORST CASE ANGLE)
           POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

          U=     .5 M/S              Z0= 100. CM              ALT=      0. (FT)
        BRG= WORST CASE              VD=    .0 CM/S
       CLAS=      7 (G)              VS=    .0 CM/S
       MIXH= 1000. M                AMB=    .0 PPM
      SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                    EF     H     W
   DESCRIPTION    *   X1     Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*------------------------*-------------------------------
 A. NF            *    30 -1500    30  -500 *  AG     438   2.3     .0  50.0
 B. NA            *    30  -500    30     0 *  AG     379   3.8     .0  45.0
 C. ND            *    30     0    30   500 *  AG     358   2.6     .0  33.0
 D. NE            *    30   500    30  1500 *  AG     358   2.3     .0  50.0
 E. SF            *   -23  1500   -23   500 *  AG    1582   2.3     .0  65.0
 F. SA            *   -23   500   -23     0 *  AG    1537   4.0     .0  60.0
 G. SD            *   -23     0   -23  -500 *  AG    1979   2.9     .0  45.0
 H. SE            *   -23  -500   -23 -1500 *  AG    1979   2.3     .0  65.0
 I. WF            *  1500    15   500    15 *  AG     526   2.3     .0  50.0
 J. WA            *   500    15     0    15 *  AG     456   4.0     .0  33.0
 K. WD            *     0    15  -500    15 *  AG     631   2.7     .0  33.0
 L. WE            *  -500    15 -1500    15 *  AG     631   2.3     .0  50.0
 M. EF            * -1500   -15  -500   -15 *  AG    1175   2.3     .0  50.0
 N. EA            *  -500   -15     0   -15 *  AG    1175   4.8     .0  33.0
 O. ED            *     0   -15   500   -15 *  AG     753   2.7     .0  33.0
 P. EE            *   500   -15  1500   -15 *  AG     753   2.3     .0  50.0
 Q. NL            *     0     0    23  -500 *  AG      59   3.8     .0  33.0
 R. SL            *     0     0    -8   500 *  AG      45   3.8     .0  33.0
 S. WL            *     0     0   500     8 *  AG      70   4.0     .0  33.0
 T. EL            *     0     0  -500    -8 *  AG       0   4.0     .0  33.0

 III.  RECEPTOR LOCATIONS

                *     COORDINATES (FT)
   RECEPTOR     *     X        Y       Z
 ------------*---------------------
 1. NE3         *     55       40     6.0
 2. SE3         *     55      -40     6.0
 3. SW3         *    -55      -40     6.0
 4. NW3         *    -55       40     6.0
 5. NE7         *     68       53     6.0
 6. SE7         *     68      -53     6.0
 7. SW7         *    -68      -53     6.0
 8. NW7         *    -68       53     6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

                *         * PRED   *                 CONC/LINK
                *   BRG   * CONC   *                   (PPM)
   RECEPTOR     * (DEG)   * (PPM)  *   A     B     C     D     E     F     G     H
 ------------*-------*-------*----------------------------------------------
 1. NE3         *  262.  *     .9 *   .0    .0    .0    .0    .0    .2    .0    .0
 2. SE3         *  275.  *    1.2 *   .0    .0    .0    .0    .0    .0    .2    .0
 3. SW3         *    5.  *    1.4 *   .0    .0    .0    .0    .1    .7    .0    .0
 4. NW3         *  173.  *    1.2 *   .0    .0    .0    .0    .0    .1    .6    .0
 5. NE7         *  261.  *     .8 *   .0    .0    .0    .0    .0    .2    .0    .0
 6. SE7         *  277.  *    1.0 *   .0    .0    .0    .0    .0    .0    .2    .0
 7. SW7         *    7.  *    1.0 *   .0    .0    .0    .0    .0    .5    .0    .0
 8. NW7         *  172.  *     .9 *   .0    .0    .0    .0    .0    .0    .4    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

                *                          CONC/LINK
                *                            (PPM)
   RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
 ------------*-----------------------------------------------------------------
 1. NE3         *   .0    .0    .2    .0    .0    .4    .0    .0    .0    .0    .0    .0
 2. SE3         *   .0    .0    .0    .0    .0    .7    .0    .0    .0    .0    .0    .0
 3. SW3         *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
 4. NW3         *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
 5. NE7         *   .0    .0    .2    .0    .0    .3    .0    .0    .0    .0    .0    .0
 6. SE7         *   .0    .0    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0
 7. SW7         *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
 8. NW7         *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 2ND STREET AM WP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE              VD=    .0 CM/S
     CLAS=      7 (G)              VS=    .0 CM/S
     MIXH= 1000. M                AMB=    .0 PPM
    SIGTH=     5. DEGREES         TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)   *                 EF      H     W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
------------------*--------------------------*------------------------------------
A. NF             *    30 -1500     30   -500 *  AG    509    2.3      .0  50.0
B. NA             *    30  -500     30      0 *  AG    434    3.8      .0  45.0
C. ND             *    30     0     30    500 *  AG    452    2.5      .0  33.0
D. NE             *    30   500     30   1500 *  AG    452    2.3      .0  50.0
E. SF             *   -23  1500    -23    500 *  AG   1658    2.3      .0  65.0
F. SA             *   -23   500    -23      0 *  AG   1613    3.9      .0  60.0
G. SD             *   -23     0    -23   -500 *  AG   2048    2.9      .0  45.0
H. SE             *   -23  -500    -23  -1500 *  AG   2048    2.3      .0  65.0
I. WF             *  1500    15    500     15 *  AG    620    2.3      .0  50.0
J. WA             *   500    15      0     15 *  AG    550    4.1      .0  33.0
K. WD             *     0    15   -500     15 *  AG    709    2.7      .0  33.0
L. WE             *  -500    15  -1500     15 *  AG    709    2.3      .0  50.0
M. EF             * -1500   -15   -500    -15 *  AG   1175    2.3      .0  50.0
N. EA             *  -500   -15      0    -15 *  AG   1175    4.8      .0  33.0
O. ED             *     0   -15    500    -15 *  AG    753    2.7      .0  33.0
P. EE             *   500   -15   1500    -15 *  AG    753    2.3      .0  50.0
Q. NL             *     0     0     23   -500 *  AG     75    3.8      .0  33.0
R. SL             *     0     0     -8    500 *  AG     45    3.8      .0  33.0
S. WL             *     0     0    500      8 *  AG     70    4.0      .0  33.0
T. EL             *     0     0   -500     -8 *  AG      0    4.0      .0  33.0

III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
  RECEPTOR    *     X        Y       Z
-------------*----------------------
1. NE3        *     55       40     6.0
2. SE3        *     55      -40     6.0
3. SW3        *    -55      -40     6.0
4. NW3        *    -55       40     6.0
5. NE7        *     68       53     6.0
6. SE7        *     68      -53     6.0
7. SW7        *    -68      -53     6.0
8. NW7        *    -68       53     6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                     CONC/LINK
             *   BRG  * CONC   *                       (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *    A     B     C     D     E     F     G     H
-------------*--------*--------*------------------------------------------------
1. NE3       *  262.  *   1.0  *   .0    .0    .0    .0    .0    .2    .0    .0
2. SE3       *  275.  *   1.3  *   .0    .1    .0    .0    .0    .0    .2    .0
3. SW3       *    5.  *   1.4  *   .0    .0    .0    .0    .1    .8    .0    .0
4. NW3       *  173.  *   1.3  *   .0    .0    .0    .0    .0    .1    .6    .0
5. NE7       *  261.  *    .8  *   .0    .0    .0    .0    .0    .2    .0    .0
6. SE7       *  277.  *   1.0  *   .0    .0    .0    .0    .0    .0    .2    .0
7. SW7       *    7.  *   1.1  *   .0    .0    .0    .0    .0    .5    .0    .0
8. NW7       *  172.  *    .9  *   .0    .0    .0    .0    .0    .0    .5    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

             *                             CONC/LINK
             *                               (PPM)
  RECEPTOR   *    I     J     K     L     M     N     O     P     Q     R     S     T
-------------*---------------------------------------------------------------------------
1. NE3       *   .0    .0    .3    .0    .0    .4    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .0    .0    .0    .7    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .0    .2    .0    .0    .3    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 2ND STREET PM NP
              RUN:                    (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=    .5 M/S             Z0= 100. CM            ALT=     0. (FT)
      BRG= WORST CASE            VD=    .0 CM/S
     CLAS=     7 (G)             VS=    .0 CM/S
     MIXH= 1000. M              AMB=    .0 PPM
    SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)   *                   EF     H     W
  DESCRIPTION    *   X1    Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*--------------------------*--------------------------------
A. NF            *    30 -1500     30  -500 *  AG   1132   2.3     .0  50.0
B. NA            *    30  -500     30     0 *  AG    971   3.6     .0  45.0
C. ND            *    30     0     30   500 *  AG    901   2.6     .0  33.0
D. NE            *    30   500     30  1500 *  AG    901   2.3     .0  50.0
E. SF            *   -23  1500    -23   500 *  AG   1295   2.3     .0  65.0
F. SA            *   -23   500    -23     0 *  AG   1246   3.6     .0  60.0
G. SD            *   -23     0    -23  -500 *  AG   1470   2.6     .0  45.0
H. SE            *   -23  -500    -23 -1500 *  AG   1470   2.3     .0  65.0
I. WF            *  1500    15    500    15 *  AG    879   2.3     .0  50.0
J. WA            *   500    15      0    15 *  AG    830   4.4     .0  33.0
K. WD            *     0    15   -500    15 *  AG    984   2.9     .0  33.0
L. WE            *  -500    15  -1500    15 *  AG    984   2.3     .0  50.0
M. EF            * -1500   -15   -500   -15 *  AG    715   2.3     .0  50.0
N. EA            *  -500   -15      0   -15 *  AG    715   4.4     .0  33.0
O. ED            *     0   -15    500   -15 *  AG    666   2.8     .0  33.0
P. EE            *   500   -15   1500   -15 *  AG    666   2.3     .0  50.0
Q. NL            *     0     0     23  -500 *  AG    161   3.5     .0  33.0
R. SL            *     0     0     -8   500 *  AG     49   3.5     .0  33.0
S. WL            *     0     0    500     8 *  AG     49   4.1     .0  33.0
T. EL            *     0     0   -500    -8 *  AG      0   4.1     .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X        Y       Z
-------------*---------------------
1. NE3       *     55       40    6.0
2. SE3       *     55      -40    6.0
3. SW3       *    -55      -40    6.0
4. NW3       *    -55       40    6.0
5. NE7       *     68       53    6.0
6. SE7       *     68      -53    6.0
7. SW7       *    -68      -53    6.0
8. NW7       *    -68       53    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                    CONC/LINK
             *  BRG   * CONC  *                      (PPM)
  RECEPTOR   * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
-------------*--------*-------*-----------------------------------------------
1. NE3       *  185.  *   1.2 *   .0    .5    .0    .0    .0    .0    .0    .2
2. SE3       *  276.  *   1.1 *   .0    .2    .0    .0    .0    .0    .1    .0
3. SW3       *    5.  *   1.1 *   .0    .0    .0    .1    .1    .6    .0    .0
4. NW3       *  172.  *   1.1 *   .1    .0    .0    .0    .0    .0    .4    .0
5. NE7       *  187.  *    .9 *   .0    .4    .0    .0    .0    .0    .0    .2
6. SE7       *  277.  *    .9 *   .0    .2    .0    .0    .0    .0    .1    .0
7. SW7       *    7.  *    .9 *   .0    .0    .0    .1    .0    .4    .0    .0
8. NW7       *  171.  *    .8 *   .1    .0    .0    .0    .0    .0    .3    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                         CONC/LINK
             *                           (PPM)
  RECEPTOR   *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
1. NE3       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .1    .0    .0    .5    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .1    .0    .0    .1    .0    .0    .0    .0    .0    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 2ND STREET PM WP
              RUN:                  (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=    .5 M/S             Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE            VD=    .0 CM/S
     CLAS=     7 (G)             VS=    .0 CM/S
     MIXH= 1000. M              AMB=    .0 PPM
    SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

       LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
    DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  -----------------*-------------------------*--------------------------------
  A. NF            *    30 -1500    30  -500 *  AG   1204   2.3     .0  50.0
  B. NA            *    30  -500    30     0 *  AG    993   3.6     .0  45.0
  C. ND            *    30     0    30   500 *  AG    939   2.6     .0  33.0
  D. NE            *    30   500    30  1500 *  AG    939   2.3     .0  50.0
  E. SF            *   -23  1500   -23   500 *  AG   1571   2.3     .0  65.0
  F. SA            *   -23   500   -23     0 *  AG   1522   3.6     .0  60.0
  G. SD            *   -23     0   -23  -500 *  AG   1725   2.6     .0  45.0
  H. SE            *   -23  -500   -23 -1500 *  AG   1725   2.3     .0  65.0
  I. WF            *  1500    15   500    15 *  AG   1066   2.3     .0  50.0
  J. WA            *   500    15     0    15 *  AG   1017   4.8     .0  33.0
  K. WD            *     0    15  -500    15 *  AG   1226   3.5     .0  33.0
  L. WE            *  -500    15 -1500    15 *  AG   1226   2.3     .0  50.0
  M. EF            * -1500   -15  -500   -15 *  AG    715   2.3     .0  50.0
  N. EA            *  -500   -15     0   -15 *  AG    715   4.4     .0  33.0
  O. ED            *     0   -15   500   -15 *  AG    666   2.8     .0  33.0
  P. EE            *   500   -15  1500   -15 *  AG    666   2.3     .0  50.0
  Q. NL            *     0     0    23  -500 *  AG    211   3.5     .0  33.0
  R. SL            *     0     0    -8   500 *  AG     49   3.5     .0  33.0
  S. WL            *     0     0   500     8 *  AG     49   4.3     .0  33.0
  T. EL            *     0     0  -500    -8 *  AG      0   4.3     .0  33.0

  III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
    RECEPTOR   *     X        Y      Z
  -------------*---------------------
  1. NE3       *     55      40    6.0
  2. SE3       *     55     -40    6.0
  3. SW3       *    -55     -40    6.0
  4. NW3       *    -55      40    6.0
  5. NE7       *     68      53    6.0
  6. SE7       *     68     -53    6.0
  7. SW7       *    -68     -53    6.0
  8. NW7       *    -68      53    6.0


   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED   *                CONC/LINK
               *  BRG   * CONC   *                  (PPM)
    RECEPTOR   * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
  -------------*--------*--------*------------------------------------------------
  1. NE3       *  264.  *   1.2  *   .0    .0    .1    .0    .0    .2    .0    .0
  2. SE3       *  276.  *   1.2  *   .0    .2    .0    .0    .0    .0    .2    .0
  3. SW3       *    5.  *   1.3  *   .0    .0    .0    .1    .1    .7    .0    .0
  4. NW3       *  172.  *   1.3  *   .1    .0    .0    .0    .0    .1    .5    .0
  5. NE7       *  188.  *   1.0  *   .0    .4    .0    .0    .0    .0    .0    .2
  6. SE7       *  278.  *   1.0  *   .0    .2    .0    .0    .0    .0    .1    .0
  7. SW7       *    7.  *   1.0  *   .0    .0    .0    .1    .0    .5    .0    .0
  8. NW7       *   97.  *   1.0  *   .0    .0    .0    .0    .0    .3    .0    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                         CONC/LINK
               *                           (PPM)
    RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
  -------------*-------------------------------------------------------------
  1. NE3       *   .0   .0   .6   .0   .0   .2   .0   .0   .0   .0   .0   .0
  2. SE3       *   .0   .0   .2   .1   .0   .5   .0   .0   .0   .0   .0   .0
  3. SW3       *   .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
  4. NW3       *   .0   .0   .3   .0   .0   .1   .0   .0   .0   .0   .0   .0
  5. NE7       *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  6. SE7       *   .0   .0   .2   .0   .0   .3   .0   .0   .0   .0   .0   .0
  7. SW7       *   .0   .0   .2   .0   .0   .2   .0   .0   .0   .0   .0   .0
  8. NW7       *   .0   .5   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 3RD STREET AM NP
              RUN:                    (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=      7 (G)             VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)   *                EF      H     W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -----------------*-------------------------*---------------------------------
 A. NF            *    30  -1500     30   -500 *  AG    465    2.3      .0  50.0
 B. NA            *    30   -500     30      0 *  AG    422    3.8      .0  45.0
 C. ND            *    30      0     30    500 *  AG    541    2.6      .0  33.0
 D. NE            *    30    500     30   1500 *  AG    541    2.3      .0  50.0
 E. SF            *   -23   1500    -23    500 *  AG   1758    2.3      .0  65.0
 F. SA            *   -23    500    -23      0 *  AG   1758    4.3      .0  45.0
 G. SD            *   -23      0    -23   -500 *  AG   1766    2.8      .0  45.0
 H. SE            *   -23   -500    -23  -1500 *  AG   1766    2.3      .0  65.0
 I. WF            *  1500      0    500      0 *  AG   2011    2.3      .0  50.0
 J. WA            *   500      0      0      0 *  AG   1750    4.6      .0  45.0
 K. WD            *     0      0   -500      0 *  AG   1927    5.0      .0  33.0
 L. WE            *  -500      0  -1500      0 *  AG   1927    2.3      .0  50.0
 M. EF            *  1500      0    500      0 *  AG      0    2.3      .0  35.0
 N. EA            *   500      0      0      0 *  AG      0    4.0      .0  33.0
 O. ED            *     0      0   -500      0 *  AG      0    2.6      .0  33.0
 P. EE            *  -500      0  -1500      0 *  AG      0    2.3      .0  35.0
 Q. NL            *     0      0     23   -500 *  AG     43    3.8      .0  33.0
 R. SL            *     0  -1900      0  -1800 *  AG      0    3.8      .0  33.0
 S. WL            *     0      0    500      8 *  AG    261    4.1      .0  33.0
 T. EL            *     0  -1900      0  -1800 *  AG      0    4.0      .0  33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *    X        Y       Z
 -------------*---------------------
 1. NE3       *     55       25    6.0
 2. SE3       *     55      -25    6.0
 3. SW3       *    -55      -25    6.0
 4. NW3       *    -55       25    6.0
 5. NE7       *     68       38    6.0
 6. SE7       *     68      -38    6.0
 7. SW7       *    -68      -38    6.0
 8. NW7       *    -68       38    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                    CONC/LINK
              *   BRG  * CONC   *                      (PPM)
   RECEPTOR   *  (DEG) * (PPM)  *   A     B     C     D     E     F     G     H
 -------------*--------*--------*-------------------------------------------------
 1. NE3       *   263. *    1.8 *   .0    .0    .0    .0    .0    .3    .0    .0
 2. SE3       *   277. *    1.8 *   .0    .1    .0    .0    .0    .0    .2    .0
 3. SW3       *     7. *    1.6 *   .0    .0    .0    .0    .0    .8    .0    .0
 4. NW3       *    94. *    1.8 *   .0    .0    .0    .0    .0    .4    .0    .0
 5. NE7       *   263. *    1.1 *   .0    .0    .0    .0    .0    .2    .0    .0
 6. SE7       *   277. *    1.1 *   .0    .0    .0    .0    .0    .0    .2    .0
 7. SW7       *    83. *    1.2 *   .0    .0    .0    .0    .0    .0    .2    .0
 8. NW7       *    97. *    1.3 *   .0    .0    .0    .0    .0    .3    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                               CONC/LINK
              *                                 (PPM)
   RECEPTOR   *    I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*-------------------------------------------------------------------------
 1. NE3       *   .0    .3   1.1    .0    .0    .0    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .3   1.1    .0    .0    .0    .0    .0    .0    .0    .0    .0
 3. SW3       *   .0    .0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0
 4. NW3       *   .2   1.0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .0
 5. NE7       *   .0    .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
 8. NW7       *   .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   HILL STREET AND 3RD STREET AM WP
            RUN:                   (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=      7 (G)             VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=      5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK          *  LINK COORDINATES (FT)   *                 EF     H     W
  DESCRIPTION      *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-------------------*--------------------------*--------------------------------
A. NF              *    30 -1500     30   -500 *  AG    511    2.3      .0  50.0
B. NA              *    30  -500     30      0 *  AG    468    3.8      .0  45.0
C. ND              *    30     0     30    500 *  AG    612    2.6      .0  33.0
D. NE              *    30   500     30   1500 *  AG    612    2.3      .0  50.0
E. SF              *   -23  1500    -23    500 *  AG   1826    2.3      .0  65.0
F. SA              *   -23   500    -23      0 *  AG   1826    4.3      .0  45.0
G. SD              *   -23     0    -23   -500 *  AG   1820    2.8      .0  45.0
H. SE              *   -23  -500    -23  -1500 *  AG   1820    2.3      .0  65.0
I. WF              *  1500     0    500      0 *  AG   2040    2.3      .0  50.0
J. WA              *   500     0      0      0 *  AG   1779    4.6      .0  45.0
K. WD              *     0     0   -500      0 *  AG   1945    5.0      .0  33.0
L. WE              *  -500     0  -1500      0 *  AG   1945    2.3      .0  50.0
M. EF              *  1500     0    500      0 *  AG      0    2.3      .0  35.0
N. EA              *   500     0      0      0 *  AG      0    4.0      .0  33.0
O. ED              *     0     0   -500      0 *  AG      0    2.6      .0  33.0
P. EE              *  -500     0  -1500      0 *  AG      0    2.3      .0  35.0
Q. NL              *     0     0     23   -500 *  AG     43    3.8      .0  33.0
R. SL              *     0 -1900      0  -1800 *  AG      0    3.8      .0  33.0
S. WL              *     0     0    500      8 *  AG    261    4.1      .0  33.0
T. EL              *     0 -1900      0  -1800 *  AG      0    4.0      .0  33.0

III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
  RECEPTOR    *     X         Y       Z
--------------*--------------------
1. NE3        *     55       25     6.0
2. SE3        *     55      -25     6.0
3. SW3        *    -55      -25     6.0
4. NW3        *    -55       25     6.0
5. NE7        *     68       38     6.0
6. SE7        *     68      -38     6.0
7. SW7        *    -68      -38     6.0
8. NW7        *    -68       38     6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                    CONC/LINK
              *  BRG   * CONC  *                      (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
--------------*--------*-------*------------------------------------------------
1. NE3        *  263.  *   1.9 *   .0    .0    .0    .0    .0    .3    .0    .0
2. SE3        *  277.  *   1.8 *   .0    .1    .0    .0    .0    .0    .2    .0
3. SW3        *    7.  *   1.6 *   .0    .0    .0    .0    .0    .9    .0    .0
4. NW3        *   94.  *   1.9 *   .0    .0    .0    .0    .0    .4    .0    .0
5. NE7        *  263.  *   1.2 *   .0    .0    .0    .0    .0    .2    .0    .0
6. SE7        *  277.  *   1.1 *   .0    .0    .0    .0    .0    .0    .2    .0
7. SW7        *   83.  *   1.3 *   .0    .0    .0    .0    .0    .0    .2    .0
8. NW7        *   97.  *   1.4 *   .0    .0    .0    .0    .0    .4    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                              CONC/LINK
              *                                (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
--------------*--------------------------------------------------------------------
1. NE3        *   .0    .3   1.1    .0    .0    .0    .0    .0    .0    .0    .0    .0
2. SE3        *   .0    .3   1.1    .0    .0    .0    .0    .0    .0    .0    .0    .0
3. SW3        *   .0    .0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0
4. NW3        *   .2   1.0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .0
5. NE7        *   .0    .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7        *   .0    .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .0
7. SW7        *   .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
8. NW7        *   .0    .8    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 3RD STREET PM NP
              RUN:                   (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
       BRG= WORST CASE             VD=    .0 CM/S
      CLAS=      7 (G)             VS=    .0 CM/S
      MIXH= 1000. M               AMB=    .0 PPM
     SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                EF     H     W
   DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  ----------------*-------------------------*-------------------------------
  A. NF           *     30 -1500    30  -500 *  AG   1010   2.3      .0  50.0
  B. NA           *     30  -500    30     0 *  AG    915   3.8      .0  45.0
  C. ND           *     30     0    30   500 *  AG   1071   2.6      .0  33.0
  D. NE           *     30   500    30  1500 *  AG   1071   2.3      .0  50.0
  E. SF           *    -23  1500   -23   500 *  AG   1560   2.3      .0  65.0
  F. SA           *    -23   500   -23     0 *  AG   1560   4.0      .0  45.0
  G. SD           *    -23     0   -23  -500 *  AG   1406   2.6      .0  45.0
  H. SE           *    -23  -500   -23 -1500 *  AG   1406   2.3      .0  65.0
  I. WF           *   1500     0   500     0 *  AG   2060   2.3      .0  50.0
  J. WA           *    500     0     0     0 *  AG   1856   5.0      .0  45.0
  K. WD           *      0     0  -500     0 *  AG   2153   5.2      .0  33.0
  L. WE           *   -500     0 -1500     0 *  AG   2153   2.3      .0  50.0
  M. EF           *   1500     0   500     0 *  AG      0   2.3      .0  35.0
  N. EA           *    500     0     0     0 *  AG      0   4.1      .0  33.0
  O. ED           *      0     0  -500     0 *  AG      0   2.6      .0  33.0
  P. EE           *   -500     0 -1500     0 *  AG      0   2.3      .0  35.0
  Q. NL           *      0     0    23  -500 *  AG     95   3.6      .0  33.0
  R. SL           *      0 -1900     0 -1800 *  AG      0   3.6      .0  33.0
  S. WL           *      0     0   500     8 *  AG    204   4.1      .0  33.0
  T. EL           *      0 -1900     0 -1800 *  AG      0   4.1      .0  33.0

  III.  RECEPTOR LOCATIONS

               *    COORDINATES (FT)
    RECEPTOR   *     X        Y      Z
  -------------*--------------------
  1. NE3       *     55       25    6.0
  2. SE3       *     55      -25    6.0
  3. SW3       *    -55      -25    6.0
  4. NW3       *    -55       25    6.0
  5. NE7       *     68       38    6.0
  6. SE7       *     68      -38    6.0
  7. SW7       *    -68      -38    6.0
  8. NW7       *    -68       38    6.0


   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                  CONC/LINK
               *   BRG  * CONC  *                    (PPM)
   RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
  -------------*--------*-------*------------------------------------------------
  1. NE3       *  263.  *   2.1 *   .0    .0    .2    .0    .0    .2    .0    .0
  2. SE3       *  277.  *   2.0 *   .0    .2    .0    .0    .0    .0    .1    .0
  3. SW3       *   85.  *   1.8 *   .0    .1    .0    .0    .0    .0    .2    .0
  4. NW3       *   95.  *   1.9 *   .0    .0    .0    .0    .0    .3    .0    .0
  5. NE7       *  261.  *   1.3 *   .0    .0    .1    .0    .0    .2    .0    .0
  6. SE7       *  279.  *   1.2 *   .0    .2    .0    .0    .0    .0    .1    .0
  7. SW7       *   83.  *   1.3 *   .0    .1    .0    .0    .0    .0    .2    .0
  8. NW7       *   97.  *   1.4 *   .0    .0    .0    .0    .0    .3    .0    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                          CONC/LINK
               *                            (PPM)
   RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
  -------------*-------------------------------------------------------------------
  1. NE3       *   .0    .4   1.3    .0    .0    .0    .0    .0    .0    .0    .0    .0
  2. SE3       *   .0    .4   1.3    .0    .0    .0    .0    .0    .0    .0    .0    .0
  3. SW3       *   .1   1.2    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
  4. NW3       *   .1   1.2    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
  5. NE7       *   .0    .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .0
  6. SE7       *   .0    .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .0
  7. SW7       *   .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
  8. NW7       *   .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 3RD STREET PM WP
              RUN:                    (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

   I.  SITE VARIABLES

         U=     .5 M/S            Z0= 100. CM             ALT=      0. (FT)
       BRG= WORST CASE            VD=    .0 CM/S
      CLAS=      7 (G)            VS=    .0 CM/S
      MIXH= 1000. M              AMB=    .0 PPM
     SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)

  II.  LINK VARIABLES

     LINK         *  LINK COORDINATES (FT)  *                  EF     H      W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 -----------------*--------------------------*------------------------------
 A. NF            *     30 -1500     30   -500 *  AG   1052   2.3     .0   50.0
 B. NA            *     30  -500     30      0 *  AG    957   3.8     .0   45.0
 C. ND            *     30     0     30    500 *  AG   1144   2.6     .0   33.0
 D. NE            *     30   500     30   1500 *  AG   1144   2.3     .0   50.0
 E. SF            *    -23  1500    -23    500 *  AG   1816   2.3     .0   65.0
 F. SA            *    -23   500    -23      0 *  AG   1816   4.0     .0   45.0
 G. SD            *    -23     0    -23   -500 *  AG   1626   2.6     .0   45.0
 H. SE            *    -23  -500    -23  -1500 *  AG   1626   2.3     .0   65.0
 I. WF            *   1500     0    500      0 *  AG   2107   2.3     .0   50.0
 J. WA            *    500     0      0      0 *  AG   1903   5.2     .0   45.0
 K. WD            *      0     0   -500      0 *  AG   2205   5.2     .0   33.0
 L. WE            *   -500     0  -1500      0 *  AG   2205   2.3     .0   50.0
 M. EF            *   1500     0    500      0 *  AG      0   2.3     .0   35.0
 N. EA            *    500     0      0      0 *  AG      0   4.1     .0   33.0
 O. ED            *      0     0   -500      0 *  AG      0   2.7     .0   33.0
 P. EE            *   -500     0  -1500      0 *  AG      0   2.3     .0   35.0
 Q. NL            *      0     0     23   -500 *  AG     95   3.6     .0   33.0
 R. SL            *      0 -1900      0  -1800 *  AG      0   3.6     .0   33.0
 S. WL            *      0     0    500      8 *  AG    204   4.1     .0   33.0
 T. EL            *      0 -1900      0  -1800 *  AG      0   4.1     .0   33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *     X        Y       Z
 -------------*---------------------
 1. NE3       *     55       25     6.0
 2. SE3       *     55      -25     6.0
 3. SW3       *    -55      -25     6.0
 4. NW3       *    -55       25     6.0
 5. NE7       *     68       38     6.0
 6. SE7       *     68      -38     6.0
 7. SW7       *    -68      -38     6.0
 8. NW7       *    -68       38     6.0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                CONC/LINK
              *  BRG   * CONC  *                  (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 -------------*--------*-------*------------------------------------------------
 1. NE3       *  263.  *   2.2 *   .0    .0    .2    .0    .0    .2    .0    .0
 2. SE3       *  277.  *   2.1 *   .0    .2    .0    .0    .0    .0    .1    .0
 3. SW3       *   85.  *   1.9 *   .0    .1    .0    .0    .0    .0    .2    .0
 4. NW3       *   95.  *   2.0 *   .0    .0    .0    .0    .0    .4    .0    .0
 5. NE7       *  261.  *   1.3 *   .0    .0    .1    .0    .0    .2    .0    .0
 6. SE7       *  279.  *   1.3 *   .0    .2    .0    .0    .0    .0    .1    .0
 7. SW7       *   83.  *   1.4 *   .0    .1    .0    .0    .0    .0    .2    .0
 8. NW7       *   97.  *   1.5 *   .0    .0    .0    .0    .0    .3    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*--------------------------------------------------------------------
 1. NE3       *   .0    .4   1.3    .0    .0    .0    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .4   1.3    .0    .0    .0    .0    .0    .0    .0    .0    .0
 3. SW3       *   .1   1.3    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
 4. NW3       *   .1   1.3    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
 5. NE7       *   .0    .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
 8. NW7       *   .0    .9    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   HILL STREET AND 4TH STREET AM NP
              RUN:                    (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE             VD=    .0 CM/S
    CLAS=      7 (G)             VS=    .0 CM/S
    MIXH= 1000. M               AMB=    .0 PPM
   SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*---------------------------------
A. NF            *    30 -1500    30  -500 *  AG    525   2.3     .0  50.0
B. NA            *    30  -500    30     0 *  AG    525   3.4     .0  33.0
C. ND            *    30     0    30   500 *  AG    438   2.5     .0  33.0
D. NE            *    30   500    30  1500 *  AG    438   2.3     .0  50.0
E. SF            *   -23  1500   -23   500 *  AG   1704   2.3     .0  65.0
F. SA            *   -23   500   -23     0 *  AG   1577   3.5     .0  60.0
G. SD            *   -23     0   -23  -500 *  AG   1701   2.6     .0  45.0
H. SE            *   -23  -500   -23 -1500 *  AG   1701   2.3     .0  65.0
I. WF            * -1500     0  -500     0 *  AG      0   2.3     .0  35.0
J. WA            *  -500     0     0     0 *  AG      0   4.3     .0  33.0
K. WD            *     0     0   500     0 *  AG      0   2.8     .0  33.0
L. WE            *   500     0  1500     0 *  AG      0   2.3     .0  35.0
M. EF            * -1500     0  -500     0 *  AG   1210   2.3     .0  80.0
N. EA            *  -500     0     0     0 *  AG   1210   4.4     .0  60.0
O. ED            *     0     0   500     0 *  AG   1300   2.8     .0  60.0
P. EE            *   500     0  1500     0 *  AG   1300   2.3     .0  80.0
Q. NL            *     0 -1900     0 -1800 *  AG      0   3.4     .0  33.0
R. SL            *     0     0    -8   500 *  AG    127   3.4     .0  33.0
S. WL            *     0 -1900     0 -1800 *  AG      0   4.3     .0  33.0
T. EL            *     0     0  -500   -23 *  AG      0   4.3     .0  33.0

III.  RECEPTOR LOCATIONS

             *     COORDINATES (FT)
  RECEPTOR   *    X        Y      Z
-------------*---------------------
1. NE3       *     55      40    6.0
2. SE3       *     55     -40    6.0
3. SW3       *    -55     -40    6.0
4. NW3       *    -55      40    6.0
5. NE7       *     68      53    6.0
6. SE7       *     68     -53    6.0
7. SW7       *    -68     -53    6.0
8. NW7       *    -68      53    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                  CONC/LINK
             *  BRG   * CONC   *                    (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
-------------*--------*--------*-----------------------------------------------
1. NE3       *  263.  *     .9 *   .0    .0    .0    .0    .0    .2    .0    .0
2. SE3       *  277.  *     .9 *   .0    .1    .0    .0    .0    .0    .1    .0
3. SW3       *    5.  *    1.2 *   .0    .0    .0    .0    .1    .7    .0    .0
4. NW3       *  173.  *    1.0 *   .0    .0    .0    .0    .0    .0    .5    .0
5. NE7       *  262.  *     .7 *   .0    .0    .0    .0    .0    .2    .0    .0
6. SE7       *  278.  *     .7 *   .0    .0    .0    .0    .0    .0    .1    .0
7. SW7       *    7.  *     .9 *   .0    .0    .0    .0    .0    .5    .0    .0
8. NW7       *  173.  *     .7 *   .0    .0    .0    .0    .0    .0    .3    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                         CONC/LINK
             *                           (PPM)
  RECEPTOR   *    I     J     K     L     M     N     O     P     Q     R     S     T
-------------*-----------------------------------------------------------------------
1. NE3       *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
3. SW3       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
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     CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
              JUNE 1989 VERSION
              PAGE   1

         JOB:   HILL STREET AND 4TH STREET AM WP
         RUN:                     (WORST CASE ANGLE)
   POLLUTANT: Carbon Monoxide


 I.  SITE VARIABLES

      U=     .5 M/S            Z0= 100. CM           ALT=      0. (FT)
    BRG= WORST CASE            VD=    .0 CM/S
   CLAS=      7 (G)            VS=    .0 CM/S
   MIXH= 1000. M              AMB=    .0 PPM
  SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)

II.  LINK VARIABLES

    LINK       *  LINK COORDINATES (FT)   *                  EF     H     W
 DESCRIPTION   *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
---------------*--------------------------*---------------------------------
A. NF          *    30 -1500     30   -500 *  AG     572   2.3      .0  50.0
B. NA          *    30  -500     30      0 *  AG     572   3.5      .0  33.0
C. ND          *    30     0     30    500 *  AG     485   2.5      .0  33.0
D. NE          *    30   500     30   1500 *  AG     485   2.3      .0  50.0
E. SF          *   -23  1500    -23    500 *  AG    1758   2.3      .0  65.0
F. SA          *   -23   500    -23      0 *  AG    1620   3.5      .0  60.0
G. SD          *   -23     0    -23   -500 *  AG    1750   2.6      .0  45.0
H. SE          *   -23  -500    -23  -1500 *  AG    1750   2.3      .0  65.0
I. WF          * -1500     0   -500      0 *  AG       0   2.3      .0  35.0
J. WA          *  -500     0      0      0 *  AG       0   4.3      .0  33.0
K. WD          *     0     0    500      0 *  AG       0   2.8      .0  33.0
L. WE          *   500     0   1500      0 *  AG       0   2.3      .0  35.0
M. EF          * -1500     0   -500      0 *  AG    1297   2.3      .0  80.0
N. EA          *  -500     0      0      0 *  AG    1297   4.4      .0  60.0
O. ED          *     0     0    500      0 *  AG    1392   2.8      .0  60.0
P. EE          *   500     0   1500      0 *  AG    1392   2.3      .0  80.0
Q. NL          *     0 -1900      0  -1800 *  AG       0   3.4      .0  33.0
R. SL          *     0     0     -8    500 *  AG     138   3.4      .0  33.0
S. WL          *     0 -1900      0  -1800 *  AG       0   4.3      .0  33.0
T. EL          *     0     0   -500    -23 *  AG       0   4.3      .0  33.0

III.  RECEPTOR LOCATIONS

            *     COORDINATES (FT)
  RECEPTOR  *    X        Y      Z
------------*---------------------
1. NE3      *     55      40    6.0
2. SE3      *     55     -40    6.0
3. SW3      *    -55     -40    6.0
4. NW3      *    -55      40    6.0
5. NE7      *     68      53    6.0
6. SE7      *     68     -53    6.0
7. SW7      *    -68     -53    6.0
8. NW7      *    -68      53    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *        * PRED   *                 CONC/LINK
            *  BRG   * CONC   *                   (PPM)
 RECEPTOR   * (DEG)  * (PPM)  *   A     B     C     D     E     F     G     H
------------*--------*--------*------------------------------------------------
1. NE3      *  263.  *   1.0  *   .0    .0    .0    .0    .0    .2    .0    .0
2. SE3      *  277.  *    .9  *   .0    .1    .0    .0    .0    .0    .2    .0
3. SW3      *    5.  *   1.2  *   .0    .0    .0    .0    .1    .7    .0    .0
4. NW3      *  173.  *   1.1  *   .0    .0    .0    .0    .0    .0    .5    .0
5. NE7      *  262.  *    .8  *   .0    .0    .0    .0    .0    .2    .0    .0
6. SE7      *  278.  *    .7  *   .0    .1    .0    .0    .0    .0    .1    .0
7. SW7      *    7.  *    .9  *   .0    .0    .0    .0    .0    .5    .0    .0
8. NW7      *  173.  *    .8  *   .0    .0    .0    .0    .0    .0    .3    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)     (CONT.)

            *                            CONC/LINK
            *                              (PPM)
 RECEPTOR   *   I     J     K     L     M     N     O     P     Q     R     S     T
------------*---------------------------------------------------------------------
1. NE3      *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
2. SE3      *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
3. SW3      *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
4. NW3      *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
5. NE7      *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
6. SE7      *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
7. SW7      *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
8. NW7      *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
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        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   HILL STREET AND 4TH STREET PM NP
            RUN:                  (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S              Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE              VD=    .0 CM/S
    CLAS=      7 (G)              VS=    .0 CM/S
    MIXH= 1000. M                AMB=    .0 PPM
   SIGTH=     5. DEGREES        TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                  EF      H      W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 -----------------*-------------------------*-------------------------------
 A. NF            *     30 -1500     30   -500 *  AG   1010    2.3      .0   50.0
 B. NA            *     30  -500     30      0 *  AG   1010    3.9      .0   33.0
 C. ND            *     30     0     30    500 *  AG    864    2.6      .0   33.0
 D. NE            *     30   500     30   1500 *  AG    864    2.3      .0   50.0
 E. SF            *    -23  1500    -23    500 *  AG   1434    2.3      .0   65.0
 F. SA            *    -23   500    -23      0 *  AG   1309    3.8      .0   60.0
 G. SD            *    -23     0    -23   -500 *  AG   1450    2.6      .0   45.0
 H. SE            *    -23  -500    -23  -1500 *  AG   1450    2.3      .0   65.0
 I. WF            *  -1500     0   -500      0 *  AG      0    2.3      .0   35.0
 J. WA            *   -500     0      0      0 *  AG      0    4.1      .0   33.0
 K. WD            *      0     0    500      0 *  AG      0    2.7      .0   33.0
 L. WE            *    500     0   1500      0 *  AG      0    2.3      .0   35.0
 M. EF            *  -1500     0   -500      0 *  AG   1782    2.3      .0   80.0
 N. EA            *   -500     0      0      0 *  AG   1782    4.4      .0   60.0
 O. ED            *      0     0    500      0 *  AG   1912    2.9      .0   60.0
 P. EE            *    500     0   1500      0 *  AG   1912    2.3      .0   80.0
 Q. NL            *      0 -1900      0  -1800 *  AG      0    3.6      .0   33.0
 R. SL            *      0     0     -8    500 *  AG    125    3.6      .0   33.0
 S. WL            *      0 -1900      0  -1800 *  AG      0    4.1      .0   33.0
 T. EL            *      0     0   -500    -23 *  AG      0    4.1      .0   33.0

 III.  RECEPTOR LOCATIONS

               *    COORDINATES (FT)
   RECEPTOR    *    X        Y      Z
 --------------*--------------------
 1. NE3        *     55      40    6.0
 2. SE3        *     55     -40    6.0
 3. SW3        *    -55     -40    6.0
 4. NW3        *    -55      40    6.0
 5. NE7        *     68      53    6.0
 6. SE7        *     68     -53    6.0
 7. SW7        *    -68     -53    6.0
 8. NW7        *    -68      53    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                     CONC/LINK
               *  BRG   * CONC  *                       (PPM)
  RECEPTOR     * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 --------------*--------*-------*------------------------------------------------
 1. NE3        *  263.  *   1.2 *   .0    .0    .1    .0    .0    .2    .0    .0
 2. SE3        *  277.  *   1.2 *   .0    .2    .0    .0    .0    .0    .1    .0
 3. SW3        *    5.  *   1.3 *   .0    .0    .0    .1    .1    .6    .0    .0
 4. NW3        *  172.  *   1.2 *   .1    .0    .0    .0    .0    .0    .4    .0
 5. NE7        *  262.  *    .9 *   .0    .0    .1    .0    .0    .2    .0    .0
 6. SE7        *  278.  *   1.0 *   .0    .2    .0    .0    .0    .0    .1    .0
 7. SW7        *    8.  *   1.0 *   .0    .0    .0    .0    .0    .5    .0    .0
 8. NW7        *  172.  *    .9 *   .1    .0    .0    .0    .0    .0    .3    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                            CONC/LINK
               *                              (PPM)
  RECEPTOR     *   I     J     K     L     M     N     O     P     Q     R     S     T
 --------------*------------------------------------------------------------------------
 1. NE3        *   .0    .0    .0    .0    .0    .8    .0    .0    .0    .0    .0    .0
 2. SE3        *   .0    .0    .0    .0    .0    .8    .0    .0    .0    .0    .0    .0
 3. SW3        *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
 4. NW3        *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
 5. NE7        *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
 6. SE7        *   .0    .0    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0
 7. SW7        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
 8. NW7        *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
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         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

              JOB:   HILL STREET AND 4TH STREET PM WP
              RUN:                     (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=      7 (G)             VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *              EF     H     W
   DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  ----------------*-------------------------*-------------------------------
  A. NF           *    30 -1500    30  -500 *  AG   1052   2.3     .0  50.0
  B. NA           *    30  -500    30     0 *  AG   1052   3.9     .0  33.0
  C. ND           *    30     0    30   500 *  AG    906   2.6     .0  33.0
  D. NE           *    30   500    30  1500 *  AG    906   2.3     .0  50.0
  E. SF           *   -23  1500   -23   500 *  AG   1654   2.3     .0  65.0
  F. SA           *   -23   500   -23     0 *  AG   1458   3.8     .0  60.0
  G. SD           *   -23     0   -23  -500 *  AG   1610   2.6     .0  45.0
  H. SE           *   -23  -500   -23 -1500 *  AG   1610   2.3     .0  65.0
  I. WF           * -1500     0  -500     0 *  AG      0   2.3     .0  35.0
  J. WA           *  -500     0     0     0 *  AG      0   4.1     .0  33.0
  K. WD           *     0     0   500     0 *  AG      0   2.7     .0  33.0
  L. WE           *   500     0  1500     0 *  AG      0   2.3     .0  35.0
  M. EF           * -1500     0  -500     0 *  AG   1903   2.3     .0  80.0
  N. EA           *  -500     0     0     0 *  AG   1903   4.6     .0  60.0
  O. ED           *     0     0   500     0 *  AG   2093   2.9     .0  60.0
  P. EE           *   500     0  1500     0 *  AG   2093   2.3     .0  80.0
  Q. NL           *     0 -1900     0 -1800 *  AG      0   3.6     .0  33.0
  R. SL           *     0     0    -8   500 *  AG    196   3.6     .0  33.0
  S. WL           *     0 -1900     0 -1800 *  AG      0   4.1     .0  33.0
  T. EL           *     0     0  -500   -23 *  AG      0   4.1     .0  33.0

  III.  RECEPTOR LOCATIONS

                *    COORDINATES (FT)
    RECEPTOR    *    X      Y      Z
  --------------*---------------------
  1. NE3        *    55     40    6.0
  2. SE3        *    55    -40    6.0
  3. SW3        *   -55    -40    6.0
  4. NW3        *   -55     40    6.0
  5. NE7        *    68     53    6.0
  6. SE7        *    68    -53    6.0
  7. SW7        *   -68    -53    6.0
  8. NW7        *   -68     53    6.0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED   *                  CONC/LINK
               *  BRG   * CONC   *                    (PPM)
   RECEPTOR    * (DEG)  * (PPM)  *    A     B     C     D     E     F     G     H
  -------------*--------*--------*------------------------------------------------
   1. NE3      *  263.  *   1.3  *   .0    .0    .1    .0    .0    .2    .0    .0
   2. SE3      *  277.  *   1.3  *   .0    .2    .0    .0    .0    .0    .1    .0
   3. SW3      *    5.  *   1.4  *   .0    .0    .0    .1    .1    .7    .0    .0
   4. NW3      *  172.  *   1.3  *   .1    .0    .0    .0    .0    .1    .5    .0
   5. NE7      *  261.  *   1.0  *   .0    .0    .1    .0    .0    .2    .0    .0
   6. SE7      *  279.  *   1.0  *   .0    .2    .0    .0    .0    .0    .1    .0
   7. SW7      *    8.  *   1.1  *   .0    .0    .0    .1    .0    .5    .0    .0
   8. NW7      *  172.  *    .9  *   .1    .0    .0    .0    .0    .0    .3    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                            CONC/LINK
               *                              (PPM)
   RECEPTOR    *    I     J     K     L     M     N     O     P     Q     R     S     T
  -------------*---------------------------------------------------------------------------
  1. NE3       *   .0    .0    .0    .0    .0    .9    .0    .0    .0    .0    .0    .0
  2. SE3       *   .0    .0    .0    .0    .0    .9    .0    .0    .0    .0    .0    .0
  3. SW3       *   .0    .0    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0
  4. NW3       *   .0    .0    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0
  5. NE7       *   .0    .0    .0    .0    .0    .7    .0    .0    .0    .0    .0    .0
  6. SE7       *   .0    .0    .0    .0    .0    .7    .0    .0    .0    .0    .0    .0
  7. SW7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
  8. NW7       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   BROADWAY AND 1ST STREET AM NP
              RUN:                      (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

       U=     .5 M/S             Z0= 100. CM            ALT=      0. (FT)
     BRG= WORST CASE             VD=    .0 CM/S
    CLAS=      7 (G)             VS=    .0 CM/S
    MIXH= 1000. M               AMB=    .0 PPM
   SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
-----------------*-------------------------*----------------------------------
A. NF            *     23 -1500     23   -500 *  AG    920    2.3     .0  65.0
B. NA            *     23  -500     23      0 *  AG    836    4.0     .0  60.0
C. ND            *     23     0     23    500 *  AG   1008    2.7     .0  45.0
D. NE            *     23   500     23   1500 *  AG   1008    2.3     .0  65.0
E. SF            *    -30  1500    -30    500 *  AG   1207    2.3     .0  50.0
F. SA            *    -30   500    -30      0 *  AG   1133    4.3     .0  45.0
G. SD            *    -30     0    -30   -500 *  AG   1102    3.1     .0  33.0
H. SE            *    -30  -500    -30  -1500 *  AG   1102    2.3     .0  50.0
I. WF            *   1500    30    500     30 *  AG   1505    2.3     .0  65.0
J. WA            *    500    30      0     30 *  AG   1399    3.8     .0  60.0
K. WD            *      0    30   -500     30 *  AG   1505    2.6     .0  45.0
L. WE            *   -500    30  -1500     30 *  AG   1505    2.3     .0  65.0
M. EF            *  -1500   -30   -500    -30 *  AG   1084    2.3     .0  65.0
N. EA            *   -500   -30      0    -30 *  AG    971    3.8     .0  60.0
O. ED            *      0   -30    500    -30 *  AG   1101    2.6     .0  45.0
P. EE            *    500   -30   1500    -30 *  AG   1101    2.3     .0  65.0
Q. NL            *      0     0      8   -500 *  AG     84    4.0     .0  33.0
R. SL            *      0     0    -23    500 *  AG     74    4.0     .0  33.0
S. WL            *      0     0    500     15 *  AG    106    3.8     .0  33.0
T. EL            *      0     0   -500    -15 *  AG    113    3.8     .0  33.0

III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
  RECEPTOR   *    X        Y      Z
-------------*--------------------
1. NE3       *     55      63    6.0
2. SE3       *     55     -63    6.0
3. SW3       *    -55     -63    6.0
4. NW3       *    -55      63    6.0
5. NE7       *     68      76    6.0
6. SE7       *     68     -76    6.0
7. SW7       *    -68     -76    6.0
8. NW7       *    -68      76    6.0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                    CONC/LINK
             *  BRG   * CONC  *                      (PPM)
 RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
-------------*--------*-------*------------------------------------------------
1. NE3       *  262.  *   1.2 *   .0    .0    .2    .0    .0    .2    .0    .0
2. SE3       *  350.  *   1.1 *   .0    .1    .3    .0    .0    .2    .0    .0
3. SW3       *   81.  *   1.1 *   .0    .1    .0    .0    .0    .0    .2    .0
4. NW3       *  172.  *   1.3 *   .0    .1    .0    .0    .0    .2    .4    .0
5. NE7       *  188.  *    .9 *   .0    .3    .0    .0    .0    .0    .0    .1
6. SE7       *  278.  *    .9 *   .0    .2    .0    .0    .0    .0    .0    .0
7. SW7       *    7.  *   1.0 *   .0    .0    .0    .1    .0    .5    .0    .0
8. NW7       *   97.  *   1.1 *   .0    .0    .0    .0    .0    .3    .0    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                              CONC/LINK
             *                                (PPM)
 RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*--------------------------------------------------------------------
1. NE3       *   .0    .2    .5    .0    .1    .0    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
3. SW3       *   .1    .1    .0    .0    .0    .1    .3    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .0    .2    .0    .3    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .0    .1    .0    .0    .2    .0    .0    .0    .0    .0    .0
8. NW7       *   .0    .5    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
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           CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                    JUNE 1989 VERSION
                    PAGE   1

               JOB:   BROADWAY AND 1ST STREET AM WP
               RUN:                        (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

          U=     .5 M/S             Z0= 100. CM             ALT=      0. (FT)
        BRG= WORST CASE             VD=    .0 CM/S
       CLAS=      7 (G)             VS=    .0 CM/S
       MIXH= 1000. M               AMB=    .0 PPM
      SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK       *  LINK COORDINATES (FT)  *               EF     H     W
   DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*-------------------------*----------------------------
 A. NF           *    23 -1500    23  -500 *  AG    920   2.3     .0  65.0
 B. NA           *    23  -500    23     0 *  AG    836   4.1     .0  60.0
 C. ND           *    23     0    23   500 *  AG   1038   2.7     .0  45.0
 D. NE           *    23   500    23  1500 *  AG   1038   2.3     .0  65.0
 E. SF           *   -30  1500   -30   500 *  AG   1292   2.3     .0  50.0
 F. SA           *   -30   500   -30     0 *  AG   1218   4.3     .0  45.0
 G. SD           *   -30     0   -30  -500 *  AG   1114   3.2     .0  33.0
 H. SE           *   -30  -500   -30 -1500 *  AG   1114   2.3     .0  50.0
 I. WF           *  1500    30   500    30 *  AG   1620   2.3     .0  65.0
 J. WA           *   500    30     0    30 *  AG   1514   3.9     .0  60.0
 K. WD           *     0    30  -500    30 *  AG   1693   2.7     .0  45.0
 L. WE           *  -500    30 -1500    30 *  AG   1693   2.3     .0  65.0
 M. EF           * -1500   -30  -500   -30 *  AG   1179   2.3     .0  65.0
 N. EA           *  -500   -30     0   -30 *  AG   1036   3.8     .0  60.0
 O. ED           *     0   -30   500   -30 *  AG   1166   2.6     .0  45.0
 P. EE           *   500   -30  1500   -30 *  AG   1166   2.3     .0  65.0
 Q. NL           *     0     0     8  -500 *  AG     84   4.1     .0  33.0
 R. SL           *     0     0   -23   500 *  AG     74   4.1     .0  33.0
 S. WL           *     0     0   500    15 *  AG    106   3.6     .0  33.0
 T. EL           *     0     0  -500   -15 *  AG    143   3.6     .0  33.0

 III.  RECEPTOR LOCATIONS

               *     COORDINATES (FT)
   RECEPTOR    *    X       Y      Z
 --------------*---------------------
 1. NE3        *     55      63    6.0
 2. SE3        *     55     -63    6.0
 3. SW3        *    -55     -63    6.0
 4. NW3        *    -55      63    6.0
 5. NE7        *     68      76    6.0
 6. SE7        *     68     -76    6.0
 7. SW7        *    -68     -76    6.0
 8. NW7        *    -68      76    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                 CONC/LINK
               *  BRG   * CONC  *                   (PPM)
   RECEPTOR    * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
 --------------*--------*-------*-----------------------------------------
 1. NE3        *  262.  *   1.3 *  .0   .0   .2   .0   .0   .2   .0   .0
 2. SE3        *  350.  *   1.1 *  .0   .1   .3   .0   .0   .2   .0   .0
 3. SW3        *    5.  *   1.4 *  .0   .0   .0   .1   .0   .7   .0   .0
 4. NW3        *  172.  *   1.4 *  .0   .1   .0   .0   .0   .3   .4   .0
 5. NE7        *  254.  *    .9 *  .0   .0   .1   .0   .0   .2   .0   .0
 6. SE7        *  278.  *    .9 *  .0   .2   .0   .0   .0   .0   .1   .0
 7. SW7        *    7.  *   1.1 *  .0   .0   .0   .1   .0   .5   .0   .0
 8. NW7        *   97.  *   1.1 *  .0   .0   .0   .0   .0   .3   .0   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                          CONC/LINK
               *                            (PPM)
   RECEPTOR    *   I    J    K    L    M    N    O    P    Q    R    S    T
 --------------*------------------------------------------------------------
 1. NE3        *  .0   .2   .5   .0   .1   .0   .0   .0   .0   .0   .0   .0
 2. SE3        *  .0   .2   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
 3. SW3        *  .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
 4. NW3        *  .0   .0   .3   .0   .0   .1   .0   .0   .0   .0   .0   .0
 5. NE7        *  .0   .0   .3   .0   .0   .2   .0   .0   .0   .0   .0   .0
 6. SE7        *  .0   .0   .0   .2   .0   .4   .0   .0   .0   .0   .0   .0
 7. SW7        *  .0   .0   .1   .0   .0   .2   .0   .0   .0   .0   .0   .0
 8. NW7        *  .0   .5   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

               JOB:   BROADWAY AND 1ST STREET PM NP
               RUN:                      (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

          U=    .5 M/S              Z0= 100. CM            ALT=      0. (FT)
        BRG= WORST CASE             VD=    .0 CM/S
       CLAS=     7 (G)              VS=    .0 CM/S
       MIXH= 1000. M               AMB=    .0 PPM
      SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                 EF      H      W
   DESCRIPTION    *   X1     Y1     X2     Y2  * TYPE  VPH  (G/MI)  (FT)   (FT)
 ----------------*------------------------*----------------------------------
 A. NF            *     23 -1500     23   -500 *  AG   1574    2.3      .0   65.0
 B. NA            *     23  -500     23      0 *  AG   1493    4.3      .0   60.0
 C. ND            *     23     0     23    500 *  AG   1659    3.1      .0   45.0
 D. NE            *     23   500     23   1500 *  AG   1659    2.3      .0   65.0
 E. SF            *    -30  1500    -30    500 *  AG    943    2.3      .0   50.0
 F. SA            *    -30   500    -30      0 *  AG    904    4.1      .0   45.0
 G. SD            *    -30     0    -30   -500 *  AG    948    2.8      .0   33.0
 H. SE            *    -30  -500    -30  -1500 *  AG    948    2.3      .0   50.0
 I. WF            *   1500    30    500     30 *  AG   1494    2.3      .0   65.0
 J. WA            *    500    30      0     30 *  AG   1352    3.8      .0   60.0
 K. WD            *      0    30   -500     30 *  AG   1493    2.6      .0   45.0
 L. WE            *   -500    30  -1500     30 *  AG   1493    2.3      .0   65.0
 M. EF            *  -1500   -30   -500    -30 *  AG   1612    2.3      .0   65.0
 N. EA            *   -500   -30      0    -30 *  AG   1337    3.8      .0   60.0
 O. ED            *      0   -30    500    -30 *  AG   1523    2.6      .0   45.0
 P. EE            *    500   -30   1500    -30 *  AG   1523    2.3      .0   65.0
 Q. NL            *      0     0      8   -500 *  AG     81    4.0      .0   33.0
 R. SL            *      0     0    -23    500 *  AG     39    4.0      .0   33.0
 S. WL            *      0     0    500     15 *  AG    142    3.8      .0   33.0
 T. EL            *      0     0   -500    -15 *  AG    275    3.8      .0   33.0

 III.  RECEPTOR LOCATIONS

              *     COORDINATES (FT)
   RECEPTOR   *     X       Y       Z
 ------------*--------------------
 1. NE3       *      55      63    6.0
 2. SE3       *      55     -63    6.0
 3. SW3       *     -55     -63    6.0
 4. NW3       *     -55      63    6.0
 5. NE7       *      68      76    6.0
 6. SE7       *      68     -76    6.0
 7. SW7       *     -68     -76    6.0
 8. NW7       *     -68      76    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED   *                        CONC/LINK
              *  BRG   * CONC   *                          (PPM)
  RECEPTOR    * (DEG)  * (PPM)  *    A      B      C      D      E      F      G      H
 ------------*-------*-------*-----------------------------------------------------
 1. NE3       *  261.  *   1.4  *   .0     .0     .3     .0     .0     .1     .0     .0
 2. SE3       *  352.  *   1.5  *   .0     .2     .6     .0     .0     .1     .0     .0
 3. SW3       *   81.  *   1.3  *   .0     .2     .0     .0     .0     .0     .2     .0
 4. NW3       *  171.  *   1.4  *   .0     .3     .0     .0     .0     .2     .3     .0
 5. NE7       *  187.  *   1.2  *   .0     .6     .0     .0     .0     .0     .0     .1
 6. SE7       *  278.  *   1.2  *   .0     .3     .0     .0     .0     .0     .0     .0
 7. SW7       *    8.  *   1.1  *   .0     .0     .1     .1     .0     .4     .0     .0
 8. NW7       *   98.  *   1.1  *   .0     .0     .2     .0     .0     .2     .0     .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)       (CONT.)

              *                                  CONC/LINK
              *                                    (PPM)
  RECEPTOR    *    I      J      K      L      M      N      O      P      Q      R      S      T
 ------------*------------------------------------------------------------------------------
 1. NE3       *   .0     .2     .4     .0     .1     .1     .0     .0     .0     .0     .0     .0
 2. SE3       *   .0     .2     .0     .0     .0     .0     .2     .0     .0     .0     .0     .0
 3. SW3       *   .1     .1     .0     .0     .0     .2     .5     .0     .0     .0     .0     .0
 4. NW3       *   .0     .0     .2     .0     .0     .2     .0     .0     .0     .0     .0     .0
 5. NE7       *   .0     .2     .0     .0     .0     .0     .1     .0     .0     .0     .0     .0
 6. SE7       *   .0     .0     .0     .2     .0     .5     .0     .0     .0     .0     .0     .0
 7. SW7       *   .0     .0     .1     .0     .0     .2     .0     .0     .0     .0     .0     .0
 8. NW7       *   .0     .5     .0     .0     .0     .0     .0     .2     .0     .0     .0     .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   BROADWAY AND 1ST STREET PM WP
              RUN:                         (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

        U=    .5 M/S             Z0= 100. CM            ALT=      0. (FT)
      BRG= WORST CASE            VD=    .0 CM/S
     CLAS=     7 (G)             VS=    .0 CM/S
     MIXH= 1000. M              AMB=    .0 PPM
    SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK        *  LINK COORDINATES (FT)  *                EF      H     W
   DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 -----------------*-------------------------*-------------------------------
 A. NF            *     23 -1500    23  -500 *  AG   1574   2.3     .0  65.0
 B. NA            *     23  -500    23     0 *  AG   1493   4.3     .0  60.0
 C. ND            *     23     0    23   500 *  AG   1719   3.3     .0  45.0
 D. NE            *     23   500    23  1500 *  AG   1719   2.3     .0  65.0
 E. SF            *    -30  1500   -30   500 *  AG   1034   2.3     .0  50.0
 F. SA            *    -30   500   -30     0 *  AG    995   4.1     .0  45.0
 G. SD            *    -30     0   -30  -500 *  AG    985   2.9     .0  33.0
 H. SE            *    -30  -500   -30 -1500 *  AG    985   2.3     .0  50.0
 I. WF            *   1500    30   500    30 *  AG   1616   2.3     .0  65.0
 J. WA            *    500    30     0    30 *  AG   1474   3.9     .0  60.0
 K. WD            *      0    30  -500    30 *  AG   1669   2.7     .0  45.0
 L. WE            *   -500    30 -1500    30 *  AG   1669   2.3     .0  65.0
 M. EF            *  -1500   -30  -500   -30 *  AG   1804   2.3     .0  65.0
 N. EA            *   -500   -30     0   -30 *  AG   1469   3.9     .0  60.0
 O. ED            *      0   -30   500   -30 *  AG   1655   2.7     .0  45.0
 P. EE            *    500   -30  1500   -30 *  AG   1655   2.3     .0  65.0
 Q. NL            *      0     0     8  -500 *  AG     81   4.1     .0  33.0
 R. SL            *      0     0   -23   500 *  AG     39   4.1     .0  33.0
 S. WL            *      0     0   500    15 *  AG    142   3.6     .0  33.0
 T. EL            *      0     0  -500   -15 *  AG    335   3.8     .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
   RECEPTOR   *    X       Y      Z
 -------------*---------------------
 1. NE3       *     55      63    6.0
 2. SE3       *     55     -63    6.0
 3. SW3       *    -55     -63    6.0
 4. NW3       *    -55      63    6.0
 5. NE7       *     68      76    6.0
 6. SE7       *     68     -76    6.0
 7. SW7       *    -68     -76    6.0
 8. NW7       *    -68      76    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *       * PRED  *                    CONC/LINK
              *  BRG  * CONC  *                      (PPM)
  RECEPTOR    * (DEG) * (PPM) *   A     B     C     D     E     F     G     H
 -------------*-------*-------*------------------------------------------------
 1. NE3       *  261. *   1.5 *   .0    .0    .3    .0    .0    .1    .0    .0
 2. SE3       *  352. *   1.6 *   .0    .2    .6    .0    .0    .1    .0    .0
 3. SW3       *   81. *   1.4 *   .0    .2    .0    .0    .0    .0    .2    .0
 4. NW3       *  171. *   1.5 *   .0    .3    .0    .0    .0    .2    .3    .0
 5. NE7       *  188. *   1.2 *   .0    .6    .0    .0    .0    .0    .0    .1
 6. SE7       *  278. *   1.3 *   .0    .3    .0    .0    .0    .0    .0    .0
 7. SW7       *    8. *   1.2 *   .0    .0    .1    .1    .0    .4    .0    .0
 8. NW7       *   98. *   1.2 *   .0    .0    .2    .0    .0    .2    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                           CONC/LINK
              *                             (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*------------------------------------------------------------------------
 1. NE3       *   .0    .2    .5    .0    .1    .2    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
 3. SW3       *   .1    .2    .0    .0    .0    .2    .5    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .3    .0    .0    .2    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .3    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .2    .0    .5    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .5    .0    .0    .0    .0    .0    .2    .0    .0    .0    .0
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    CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
             JUNE 1989 VERSION
             PAGE   1

        JOB:   BROADWAY AND 2ND STREET AM NP
        RUN:                    (WORST CASE ANGLE)
  POLLUTANT: Carbon Monoxide


 I.  SITE VARIABLES

     U=    .5 M/S             Z0= 100. CM            ALT=     0. (FT)
   BRG= WORST CASE            VD=    .0 CM/S
  CLAS=     7 (G)             VS=    .0 CM/S
  MIXH= 1000. M              AMB=    .0 PPM
 SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                   EF     H     W
  DESCRIPTION    *   X1     Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*-------------------------*---------------------------------
 A. NF           *    23 -1500     23  -500 *  AG    984    2.3     .0  65.0
 B. NA           *    23  -500     23     0 *  AG    947    3.5     .0  60.0
 C. ND           *    23     0     23   500 *  AG    911    2.5     .0  45.0
 D. NE           *    23   500     23  1500 *  AG    911    2.3     .0  65.0
 E. SF           *   -30  1500    -30   500 *  AG   1001    2.3     .0  50.0
 F. SA           *   -30   500    -30     0 *  AG    955    3.5     .0  45.0
 G. SD           *   -30     0    -30  -500 *  AG   1002    2.5     .0  33.0
 H. SE           *   -30  -500    -30 -1500 *  AG   1002    2.3     .0  50.0
 I. WF           *  1500    15    500    15 *  AG    523    2.3     .0  50.0
 J. WA           *   500    15      0    15 *  AG    498    4.3     .0  33.0
 K. WD           *     0    15   -500    15 *  AG    525    2.8     .0  33.0
 L. WE           *  -500    15  -1500    15 *  AG    525    2.3     .0  50.0
 M. EF           * -1500   -15   -500   -15 *  AG    715    2.3     .0  50.0
 N. EA           *  -500   -15      0   -15 *  AG    686    4.4     .0  33.0
 O. ED           *     0   -15    500   -15 *  AG    785    2.9     .0  33.0
 P. EE           *   500   -15   1500   -15 *  AG    785    2.3     .0  50.0
 Q. NL           *     0     0      8  -500 *  AG     37    3.5     .0  33.0
 R. SL           *     0     0    -23   500 *  AG     46    3.5     .0  33.0
 S. WL           *     0     0    500     8 *  AG     25    4.3     .0  33.0
 T. EL           *     0     0   -500    -8 *  AG     29    4.3     .0  33.0

 III.  RECEPTOR LOCATIONS

              *    COORDINATES (FT)
  RECEPTOR    *    X        Y      Z
 -------------*---------------------
 1. NE3       *     55      40    6.0
 2. SE3       *     55     -40    6.0
 3. SW3       *    -55     -40    6.0
 4. NW3       *    -55      40    6.0
 5. NE7       *     68      53    6.0
 6. SE7       *     68     -53    6.0
 7. SW7       *    -68     -53    6.0
 8. NW7       *    -68      53    6.0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

              *        * PRED  *                     CONC/LINK
              *  BRG   * CONC  *                       (PPM)
  RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
 -------------*--------*-------*-----------------------------------------------
 1. NE3       *  186.  *    .9 *   .0    .4    .0    .0    .0    .0    .0    .1
 2. SE3       *  275.  *    .9 *   .0    .2    .0    .0    .0    .0    .0    .0
 3. SW3       *    5.  *   1.0 *   .0    .0    .0    .1    .0    .5    .0    .0
 4. NW3       *  172.  *    .9 *   .0    .1    .0    .0    .0    .0    .4    .0
 5. NE7       *  187.  *    .7 *   .0    .3    .0    .0    .0    .0    .0    .1
 6. SE7       *  277.  *    .7 *   .0    .2    .0    .0    .0    .0    .0    .0
 7. SW7       *    7.  *    .8 *   .0    .0    .0    .1    .0    .3    .0    .0
 8. NW7       *   97.  *    .7 *   .0    .0    .0    .0    .0    .2    .0    .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

              *                            CONC/LINK
              *                              (PPM)
  RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
 -------------*-----------------------------------------------------------------------
 1. NE3       *   .0    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 2. SE3       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
 3. SW3       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
 4. NW3       *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 5. NE7       *   .0    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 6. SE7       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
 7. SW7       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
 8. NW7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
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       CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                JUNE 1989 VERSION
                PAGE   1

           JOB:   BROADWAY AND 2ND STREET AM WP
           RUN:                    (WORST CASE ANGLE)
     POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

        U=     .5 M/S            Z0= 100. CM           ALT=      0. (FT)
      BRG= WORST CASE            VD=    .0 CM/S
     CLAS=      7 (G)            VS=    .0 CM/S
     MIXH= 1000. M              AMB=    .0 PPM
    SIGTH=     5. DEGREES      TEMP= 15.6 DEGREE (C)

  II.  LINK VARIABLES

       LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
    DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
  -----------------*-------------------------*---------------------------------
  A. NF            *    23 -1500    23  -500 *  AG    984   2.3     .0  65.0
  B. NA            *    23  -500    23     0 *  AG    947   3.5     .0  60.0
  C. ND            *    23     0    23   500 *  AG    911   2.5     .0  45.0
  D. NE            *    23   500    23  1500 *  AG    911   2.3     .0  65.0
  E. SF            *   -30  1500   -30   500 *  AG   1013   2.3     .0  50.0
  F. SA            *   -30   500   -30     0 *  AG    967   3.6     .0  45.0
  G. SD            *   -30     0   -30  -500 *  AG   1002   2.6     .0  33.0
  H. SE            *   -30  -500   -30 -1500 *  AG   1002   2.3     .0  50.0
  I. WF            *  1500    15   500    15 *  AG    606   2.3     .0  50.0
  J. WA            *   500    15     0    15 *  AG    581   4.3     .0  33.0
  K. WD            *     0    15  -500    15 *  AG    620   2.8     .0  33.0
  L. WE            *  -500    15 -1500    15 *  AG    620   2.3     .0  50.0
  M. EF            * -1500   -15  -500   -15 *  AG    715   2.3     .0  50.0
  N. EA            *  -500   -15     0   -15 *  AG    686   4.3     .0  33.0
  O. ED            *     0   -15   500   -15 *  AG    785   2.8     .0  33.0
  P. EE            *   500   -15  1500   -15 *  AG    785   2.3     .0  50.0
  Q. NL            *     0     0     8  -500 *  AG     37   3.5     .0  33.0
  R. SL            *     0     0   -23   500 *  AG     46   3.5     .0  33.0
  S. WL            *     0     0   500     8 *  AG     25   4.1     .0  33.0
  T. EL            *     0     0  -500    -8 *  AG     29   4.1     .0  33.0

  III.  RECEPTOR LOCATIONS

               *    COORDINATES (FT)
    RECEPTOR   *    X        Y      Z
  -------------*----------------------
  1. NE3       *     55      40    6.0
  2. SE3       *     55     -40    6.0
  3. SW3       *    -55     -40    6.0
  4. NW3       *    -55      40    6.0
  5. NE7       *     68      53    6.0
  6. SE7       *     68     -53    6.0
  7. SW7       *    -68     -53    6.0
  8. NW7       *    -68      53    6.0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

               *        * PRED  *                   CONC/LINK
               *  BRG   * CONC  *                     (PPM)
   RECEPTOR    * (DEG)  * (PPM) *   A     B     C     D     E     F     G     H
  -------------*--------*-------*-------------------------------------------------
  1. NE3       *  186.  *    .9 *   .0    .4    .0    .0    .0    .0    .0    .1
  2. SE3       *  275.  *    .9 *   .0    .2    .0    .0    .0    .0    .0    .0
  3. SW3       *    5.  *   1.0 *   .0    .0    .0    .1    .0    .5    .0    .0
  4. NW3       *  172.  *    .9 *   .0    .1    .0    .0    .0    .1    .4    .0
  5. NE7       *  187.  *    .7 *   .0    .3    .0    .0    .0    .0    .0    .1
  6. SE7       *  277.  *    .7 *   .0    .2    .0    .0    .0    .0    .0    .0
  7. SW7       *    7.  *    .8 *   .0    .0    .0    .1    .0    .4    .0    .0
  8. NW7       *   97.  *    .7 *   .0    .0    .0    .0    .0    .2    .0    .0

   IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

               *                           CONC/LINK
               *                             (PPM)
   RECEPTOR    *   I     J     K     L     M     N     O     P     Q     R     S     T
  -------------*-----------------------------------------------------------------------
  1. NE3       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  2. SE3       *   .0    .0    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0
  3. SW3       *   .0    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0
  4. NW3       *   .0    .0    .1    .0    .0    .1    .0    .0    .0    .0    .0    .0
  5. NE7       *   .0    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  6. SE7       *   .0    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0
  7. SW7       *   .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  8. NW7       *   .0    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
```

```
        CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                 JUNE 1989 VERSION
                 PAGE   1

            JOB:   BROADWAY AND 2ND STREET PM NP
            RUN:                   (WORST CASE ANGLE)
      POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=     .5 M/S             Z0= 100. CM             ALT=      0. (FT)
      BRG= WORST CASE             VD=    .0 CM/S
     CLAS=      7 (G)             VS=    .0 CM/S
     MIXH= 1000. M               AMB=    .0 PPM
    SIGTH=     5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK         *  LINK COORDINATES (FT)   *                  EF     H     W
  DESCRIPTION     *   X1     Y1     X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
------------------*-------------------------*-----------------------------
A. NF             *    23 -1500     23  -500 *  AG   1704   2.3       .0  65.0
B. NA             *    23  -500     23     0 *  AG   1556   3.6       .0  60.0
C. ND             *    23     0     23   500 *  AG   1567   2.5       .0  45.0
D. NE             *    23   500     23  1500 *  AG   1567   2.3       .0  65.0
E. SF             *   -30  1500    -30   500 *  AG    801   2.3       .0  50.0
F. SA             *   -30   500    -30     0 *  AG    763   3.5       .0  45.0
G. SD             *   -30     0    -30  -500 *  AG    845   2.5       .0  33.0
H. SE             *   -30  -500    -30 -1500 *  AG    845   2.3       .0  50.0
I. WF             *  1500    15    500    15 *  AG    790   2.3       .0  50.0
J. WA             *   500    15      0    15 *  AG    744   4.6       .0  33.0
K. WD             *     0    15   -500    15 *  AG    883   2.9       .0  33.0
L. WE             *  -500    15  -1500    15 *  AG    883   2.3       .0  50.0
M. EF             * -1500   -15   -500   -15 *  AG    689   2.3       .0  50.0
N. EA             *  -500   -15      0   -15 *  AG    604   4.4       .0  33.0
O. ED             *     0   -15    500   -15 *  AG    689   2.8       .0  33.0
P. EE             *   500   -15   1500   -15 *  AG    689   2.3       .0  50.0
Q. NL             *     0     0      8  -500 *  AG    148   3.4       .0  33.0
R. SL             *     0     0    -23   500 *  AG     38   3.4       .0  33.0
S. WL             *     0     0    500     8 *  AG     46   4.3       .0  33.0
T. EL             *     0     0   -500    -8 *  AG     85   4.3       .0  33.0

III.  RECEPTOR LOCATIONS

             *     COORDINATES (FT)
  RECEPTOR   *    X        Y      Z
-------------*---------------------
1. NE3       *     55      40    6.0
2. SE3       *     55     -40    6.0
3. SW3       *    -55     -40    6.0
4. NW3       *    -55      40    6.0
5. NE7       *     68      53    6.0
6. SE7       *     68     -53    6.0
7. SW7       *    -68     -53    6.0
8. NW7       *    -68      53    6.0


 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED   *                       CONC/LINK
             *   BRG  * CONC   *                         (PPM)
  RECEPTOR   * (DEG)  * (PPM)  *    A      B      C     D     E     F     G     H
-------------*--------*--------*-------------------------------------------------
1. NE3       *  185.  *   1.3  *   .1    .7    .0    .0    .0    .0    .0    .1
2. SE3       *  352.  *   1.0  *   .0    .1    .5    .0    .0    .0    .0    .0
3. SW3       *   83.  *   1.0  *   .0    .2    .0    .0    .0    .0    .1    .0
4. NW3       *  171.  *   1.1  *   .1    .2    .0    .0    .0    .0    .3    .0
5. NE7       *  187.  *   1.0  *   .0    .5    .0    .0    .0    .0    .0    .1
6. SE7       *  277.  *    .9  *   .0    .3    .0    .0    .0    .0    .0    .0
7. SW7       *   81.  *    .8  *   .0    .2    .0    .0    .0    .0    .1    .0
8. NW7       *  169.  *    .8  *   .0    .2    .0    .0    .0    .0    .2    .0

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                               CONC/LINK
             *                                 (PPM)
  RECEPTOR   *   I     J     K     L     M     N     O     P     Q     R     S     T
-------------*--------------------------------------------------------------------
1. NE3       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
2. SE3       *   .0    .1    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
3. SW3       *   .0    .2    .0    .0    .0    .0    .3    .0    .0    .0    .0    .0
4. NW3       *   .0    .0    .2    .0    .0    .1    .0    .0    .0    .0    .0    .0
5. NE7       *   .0    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
6. SE7       *   .0    .0    .1    .0    .0    .3    .0    .0    .0    .0    .0    .0
7. SW7       *   .0    .2    .0    .0    .0    .0    .2    .0    .0    .0    .0    .0
8. NW7       *   .0    .0    .1    .0    .0    .1    .0    .0    .0    .0    .0    .0
```

```
         CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                  JUNE 1989 VERSION
                  PAGE   1

             JOB:   BROADWAY AND 2ND STREET PM WP
             RUN:                      (WORST CASE ANGLE)
       POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

        U=    .5 M/S             Z0= 100. CM           ALT=     0. (FT)
      BRG= WORST CASE            VD=    .0 CM/S
     CLAS=     7 (G)             VS=    .0 CM/S
     MIXH= 1000. M              AMB=    .0 PPM
    SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)


 II.  LINK VARIABLES

     LINK        *  LINK COORDINATES (FT)  *                  EF     H     W
  DESCRIPTION    *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (FT)  (FT)
 ----------------*-------------------------*-----------------------------
 A. NF           *    23 -1500    23  -500 *  AG   1704   2.3     .0  65.0
 B. NA           *    23  -500    23     0 *  AG   1556   3.6     .0  60.0
 C. ND           *    23     0    23   500 *  AG   1567   2.6     .0  45.0
 D. NE           *    23   500    23  1500 *  AG   1567   2.3     .0  65.0
 E. SF           *   -30  1500   -30   500 *  AG    838   2.3     .0  50.0
 F. SA           *   -30   500   -30     0 *  AG    800   3.6     .0  45.0
 G. SD           *   -30     0   -30  -500 *  AG    845   2.5     .0  33.0
 H. SE           *   -30  -500   -30 -1500 *  AG    845   2.3     .0  50.0
 I. WF           *  1500    15   500    15 *  AG    939   2.3     .0  50.0
 J. WA           *   500    15     0    15 *  AG    893   4.4     .0  33.0
 K. WD           *     0    15  -500    15 *  AG   1069   3.0     .0  33.0
 L. WE           *  -500    15 -1500    15 *  AG   1069   2.3     .0  50.0
 M. EF           * -1500   -15  -500   -15 *  AG    689   2.3     .0  50.0
 N. EA           *  -500   -15     0   -15 *  AG    604   4.3     .0  33.0
 O. ED           *     0   -15   500   -15 *  AG    689   2.8     .0  33.0
 P. EE           *   500   -15  1500   -15 *  AG    689   2.3     .0  50.0
 Q. NL           *     0     0     8  -500 *  AG    148   3.5     .0  33.0
 R. SL           *     0     0   -23   500 *  AG     38   3.5     .0  33.0
 S. WL           *     0     0   500     8 *  AG     46   4.3     .0  33.0
 T. EL           *     0     0  -500    -8 *  AG     85   4.3     .0  33.0

 III.  RECEPTOR LOCATIONS

             *    COORDINATES (FT)
   RECEPTOR  *     X       Y      Z
 ------------*---------------------
 1. NE3      *    55      40    6.0
 2. SE3      *    55     -40    6.0
 3. SW3      *   -55     -40    6.0
 4. NW3      *   -55      40    6.0
 5. NE7      *    68      53    6.0
 6. SE7      *    68     -53    6.0
 7. SW7      *   -68     -53    6.0
 8. NW7      *   -68      53    6.0


  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

             *        * PRED  *                CONC/LINK
             *   BRG  * CONC  *                  (PPM)
  RECEPTOR   * (DEG)  * (PPM) *   A    B    C    D    E    F    G    H
 ------------*--------*-------*-----------------------------------------
 1. NE3      *  185.  *   1.3 *   .1   .7   .0   .0   .0   .0   .0   .1
 2. SE3      *  352.  *   1.1 *   .0   .1   .5   .0   .0   .0   .0   .0
 3. SW3      *   83.  *   1.0 *   .0   .2   .0   .0   .0   .0   .1   .0
 4. NW3      *  171.  *   1.1 *   .1   .2   .0   .0   .0   .0   .3   .0
 5. NE7      *  187.  *   1.0 *   .0   .5   .0   .0   .0   .0   .0   .1
 6. SE7      *  277.  *    .9 *   .0   .3   .0   .0   .0   .0   .0   .0
 7. SW7      *   81.  *    .8 *   .0   .2   .0   .0   .0   .0   .1   .0
 8. NW7      *   97.  *    .9 *   .0   .0   .1   .0   .0   .2   .0   .0

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE)      (CONT.)

             *                        CONC/LINK
             *                          (PPM)
  RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
 ------------*-----------------------------------------------------------
 1. NE3      *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 2. SE3      *   .0   .2   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
 3. SW3      *   .0   .2   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0
 4. NW3      *   .0   .0   .2   .0   .0   .1   .0   .0   .0   .0   .0   .0
 5. NE7      *   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. SE7      *   .0   .0   .1   .0   .0   .3   .0   .0   .0   .0   .0   .0
 7. SW7      *   .0   .2   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
 8. NW7      *   .0   .4   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
Title    : Los Angeles County Avg 2015 Winter Default Title
Version  : Emfac2002 V2.2 Apr 23 2003
Run Date : 01/27/05 16:01:47
Scen Year: 2015 -- Model Years: 1970 to 2015
Season   : Winter
Area     : Los Angeles County
*****************************************************************************************
     Year:2015 -- Model Years 1970 to 2015 Inclusive --  Winter
     Emfac2002 Emission Factors: V2.2 Apr 23 2003

     County Average
                             Table    1:  Running Exhaust Emissions (grams/mile)

Pollutant Name: Carbon Monoxide          Temperature:  60F  Relative Humidity:   50%

     Speed
      MPH       LDA      LDT      MDT      HDT      UBUS      MCY      ALL

       3       3.563    6.794    7.410    9.924    37.917   27.766    5.314
       4       3.454    6.534    7.132    9.924    37.917   27.766    5.157
       5       3.351    6.292    6.875    9.924    37.917   27.766    5.010
       6       3.254    6.066    6.588    9.141    34.711   26.724    4.809
       7       3.162    5.855    6.322    8.437    31.848   25.768    4.623
       8       3.075    5.657    6.076    7.803    29.287   24.888    4.451
       9       2.992    5.472    5.848    7.231    26.993   24.080    4.291
      10       2.914    5.299    5.636    6.715    24.935   23.338    4.141
      11       2.840    5.136    5.439    6.248    23.087   22.657    4.002
      12       2.769    4.983    5.255    5.826    21.423   22.032    3.873
      13       2.702    4.839    5.083    5.443    19.924   21.459    3.751
      14       2.637    4.703    4.923    5.096    18.572   20.935    3.638
      15       2.576    4.575    4.773    4.780    17.351   20.458    3.531
      16       2.518    4.453    4.632    4.493    16.247   20.023    3.431
      17       2.462    4.339    4.500    4.232    15.247   19.629    3.337
      18       2.408    4.231    4.376    3.994    14.341   19.274    3.248
      19       2.357    4.128    4.260    3.777    13.520   18.955    3.164
      20       2.308    4.031    4.151    3.579    12.774   18.671    3.086
      21       2.261    3.939    4.047    3.398    12.096   18.421    3.011
      22       2.216    3.851    3.950    3.233    11.480   18.204    2.941
      23       2.173    3.768    3.859    3.082    10.920   18.017    2.875
      24       2.131    3.690    3.772    2.944    10.411   17.862    2.812
      25       2.091    3.615    3.691    2.818     9.948   17.736    2.752
      26       2.053    3.544    3.614    2.703     9.526   17.641    2.696
      27       2.016    3.476    3.542    2.598     9.143   17.574    2.643
      28       1.981    3.412    3.474    2.502     8.796   17.537    2.592
      29       1.947    3.351    3.409    2.414     8.480   17.529    2.545
      30       1.914    3.294    3.349    2.334     8.194   17.552    2.499
      31       1.883    3.239    3.291    2.261     7.936   17.604    2.457
      32       1.853    3.187    3.238    2.195     7.703   17.687    2.416
      33       1.824    3.138    3.187    2.135     7.493   17.802    2.378
      34       1.796    3.092    3.140    2.081     7.306   17.950    2.342
      35       1.769    3.048    3.096    2.033     7.139   18.132    2.308
      36       1.744    3.006    3.054    1.989     6.992   18.349    2.276
      37       1.719    2.968    3.016    1.951     6.863   18.604    2.246
      38       1.696    2.931    2.980    1.917     6.751   18.898    2.218
      39       1.674    2.897    2.947    1.887     6.656   19.233    2.192
      40       1.652    2.865    2.917    1.862     6.578   19.613    2.168
```

Appendix D-4

- Alternative Operation Emissions Inventory
    - Alternative 2 (No Project "B")
        - Regional Emission Summary Sheet
        - Stationary Source Emissions
        - URBEMIS2002 Output Files
    - Alternative 3 (Reduced Project)
        - Regional Emission Summary Sheet
        - Stationary Source Emissions
        - URBEMIS2002 Output Files
    - Alternative 5 (Alternative Land Use)
        - Regional Emission Summary Sheet
        - Stationary Source Emissions
        - URBEMIS2002 Output Files

Grand Avenue (Alternative 2 - No Project "B")

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Parcel Q					
Area	11	10	<1	22	<1
Mobile	368	45	82	41	<1
Parcel L/M-2					
Area	4	9	<1	43	<1
Mobile	100	12	21	14	<1
Parcel W-1/W-2					
Area	4	4	<1	15	<1
Mobile	106	13	23	11	<1
Total Stationary (Electricity)	4	21	<1	<1	2
Total Project	**114**	**37**	**24**	**26**	**2**
Net Project					
Net Stationary	23	43	1	80	2
Net Mobile	575	69	126	66	1
Total Net	598	112	128	147	3
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**48**	**57**	**(22)**	**92**	**(147)**
Significant?	**Yes**	**Yes**	**No**	**Yes**	**No**

Electricity Usage

		Electricity			Emission Factors (lbs/MWh) [b]				
		Usage Rate [a]	Total Electricity Usage		CO	ROC	NOx	PM10	SOx
Land Use	1,000 Sqft	(kWh\sq.ft\yr)	(KWh\year)	(MWh\Day)	0.2	0.01	1.15	0.04	0.12
Project									
Office	1.6	12.95	20,277	0.056	0.011	0.001	0.064	0.002	0.007
Retail	64.6	13.55	875,886	2.400	0.480	0.024	2.760	0.096	0.288
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	1012.0	5,627	5,694,018	15.600	3.120	0.156	17.940	0.624	1.872
Total Project			**6,590,181**	**18.055**	**3.61**	**0.18**	**20.76**	**0.72**	**2.17**
Net Emissions From Electricity Usage					**3.61**	**0.18**	**20.76**	**0.72**	**2.17**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Project Emissions (lbs/day)	3.61	0.18	20.76	0.72	2.17
Total Net Emissions (lbs/day)	**3.61**	**0.18**	**20.76**	**0.72**	**2.17**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

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              URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2\Alt 2 - Parcel Q.urb
Project Name:                  Grand Avenue Alternative 2 - Parcel Q
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                    DETAIL REPORT
                 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                          ROG        NOx        CO        SO2       PM10
 Natural Gas                       0.72       9.90       8.31         0       0.02
 Hearth                            0.00       0.00       0.00      0.00       0.00
 Landscaping - No winter emissions
 Consumer Prdcts                   0.00          -          -         -          -
 Architectural Coatings           20.52          -          -         -          -
 TOTALS(lbs/day,unmitigated)      21.24       9.90       8.31      0.00       0.02

               UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx        CO        SO2       PM10
High turnover (sit-down)        0.93       1.48      10.46      0.01       2.29
Strip mall                      2.78       4.42      31.23      0.04       6.83
Supermarket                     3.66       5.83      41.20      0.05       9.01
General office building        26.62      40.09     285.46      0.33      63.63

TOTAL EMISSIONS (lbs/day)      33.99      51.83     368.36      0.42      81.75

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                    No.      Total
Unit Type                  Acreage    Trip Rate                    Units      Trips

High turnover (sit-down)             52.80 trips/1000 sq. ft.       5.00     264.00
Strip mall                           37.95 trips/1000 sq. ft.      21.25     806.50
Supermarket                          53.20 trips/1000 sq. ft.      20.00 1,064.00
General office building               4.13 trips/1000 sq. ft.   1,417.76 5,858.00

                                              Sum of Total Trips       7,992.50
                                      Total Vehicle Miles Traveled    54,043.11

Vehicle Assumptions:

Fleet Mix:

Vehicle Type                Percent Type    Non-Catalyst     Catalyst          Diesel
Light Auto                      54.40          0.40           99.40              0.20
Light Truck < 3,750   lbs       15.30          0.70           98.00              1.30
Light Truck  3,751- 5,750       16.40          0.60           98.80              0.60
Med Truck     5,751- 8,500       7.30          0.00           98.60              1.40
Lite-Heavy   8,501-10,000        1.10          0.00           81.80             18.20
Lite-Heavy  10,001-14,000        0.30          0.00           66.70             33.30
Med-Heavy   14,001-33,000        1.00          0.00           20.00             80.00
Heavy-Heavy 33,001-60,000        0.80          0.00            0.00            100.00
Line Haul > 60,000    lbs        0.00          0.00            0.00            100.00
Urban Bus                        0.20          0.00           50.00             50.00
Motorcycle                       1.60         50.00           50.00              0.00
School Bus                       0.10          0.00            0.00            100.00
Motor Home                       1.50          0.00           93.30              6.70

Travel Conditions
                                      Residential                  Commercial
                            Home-     Home-      Home-
                            Work      Shop       Other     Commute   Non-Work Customer
Urban Trip Length (miles)   11.5       4.9        6.0       10.3       5.5       5.5
Rural Trip Length (miles)   11.5       4.9        6.0       10.3       5.5       5.5
Trip Speeds (mph)           35.0      40.0       40.0       40.0      40.0      40.0
% of Trips - Residential    20.0      37.0       43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                                5.0       2.5      92.5
Strip mall                                                    2.0       1.0      97.0
Supermarket                                                   2.0       1.0      97.0
General office building                                      35.0      17.5      47.5

Changes made to the default values for Land Use Trip Percentages


Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2\Alt 2 - Parcel Q.urb
Project Name:                   Grand Avenue Alternative 2 - Parcel Q
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                      (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.72       9.90       8.31          0       0.02
 Hearth - No summer emissions
 Landscaping                       0.50       0.02       3.12       0.00       0.01
 Consumer Prdcts                   0.00          -          -          -          -
 Architectural Coatings           20.52          -          -          -          -
 TOTALS(lbs/day,unmitigated)      21.74       9.92      11.44       0.00       0.03

                  UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx         CO        SO2       PM10
High turnover (sit-down)     0.81       1.28       9.94       0.01       2.29
Strip mall                   2.45       3.81      29.61       0.04       6.83
Supermarket                  3.19       5.03      39.06       0.05       9.01
General office building     28.79      34.51     276.74       0.36      63.63

TOTAL EMISSIONS (lbs/day)   35.24      44.63     355.35       0.46      81.75

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                Acreage    Trip Rate                    Units      Trips

High turnover (sit-down)           52.80 trips/1000 sq. ft.       5.00     264.00
Strip mall                         37.95 trips/1000 sq. ft.      21.25     806.50
Supermarket                        53.20 trips/1000 sq. ft.      20.00 1,064.00
General office building             4.13 trips/1000 sq. ft.   1,417.76 5,858.00

                                             Sum of Total Trips      7,992.50
                                    Total Vehicle Miles Traveled    54,043.11

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst        Diesel
Light Auto                    54.40            0.40            99.40           0.20
Light Truck < 3,750    lbs    15.30            0.70            98.00           1.30
Light Truck  3,751- 5,750     16.40            0.60            98.80           0.60
Med Truck    5,751- 8,500      7.30            0.00            98.60           1.40
Lite-Heavy   8,501-10,000      1.10            0.00            81.80          18.20
Lite-Heavy  10,001-14,000      0.30            0.00            66.70          33.30
Med-Heavy   14,001-33,000      1.00            0.00            20.00          80.00
Heavy-Heavy 33,001-60,000      0.80            0.00             0.00         100.00
Line Haul > 60,000     lbs     0.00            0.00             0.00         100.00
Urban Bus                      0.20            0.00            50.00          50.00
Motorcycle                     1.60           50.00            50.00           0.00
School Bus                     0.10            0.00             0.00         100.00
Motor Home                     1.50            0.00            93.30           6.70

Travel Conditions
                                  Residential               Commercial
                           Home-     Home-     Home-
                           Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                           5.0       2.5      92.5
Strip mall                                               2.0       1.0      97.0
Supermarket                                              2.0       1.0      97.0
General office building                                 35.0      17.5      47.5

Changes made to the default values for Land Use Trip Percentages


Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2\Alt 2 - Parcel Q.urb
Project Name:                 Grand Avenue Alternative 2 - Parcel Q
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                      DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx         CO        SO2       PM10
 Natural Gas                     0.72       9.90       8.31          0       0.02
 Hearth - No summer emissions
 Landscaping                     0.50       0.02       3.12       0.00       0.01
 Consumer Prdcts                 0.00          -          -          -          -
 Architectural Coatings         20.52          -          -          -          -
 TOTALS(lbs/day,unmitigated)    21.74       9.92      11.44       0.00       0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx         CO        SO2       PM10
High turnover (sit-down)     0.87       1.18      11.14       0.01       2.29
Strip mall                   2.65       3.53      33.16       0.04       6.83
Supermarket                  3.43       4.66      43.74       0.05       9.01
General office building     34.17      31.92     311.89       0.37      63.63

TOTAL EMISSIONS (lbs/day)   41.12      41.29     399.93       0.47      81.75

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.      Total
Unit Type                Acreage    Trip Rate                   Units      Trips

High turnover (sit-down)           52.80 trips/1000 sq. ft.      5.00     264.00
Strip mall                         37.95 trips/1000 sq. ft.     21.25     806.50
Supermarket                        53.20 trips/1000 sq. ft.     20.00   1,064.00
General office building             4.13 trips/1000 sq. ft.  1,417.76   5,858.00

                                           Sum of Total Trips          7,992.50
                                     Total Vehicle Miles Traveled     54,043.11

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst      Catalyst        Diesel
Light Auto                   54.40           0.40            99.40            0.20
Light Truck < 3,750   lbs    15.30           0.70            98.00            1.30
Light Truck  3,751- 5,750    16.40           0.60            98.80            0.60
Med Truck    5,751- 8,500     7.30           0.00            98.60            1.40
Lite-Heavy   8,501-10,000     1.10           0.00            81.80           18.20
Lite-Heavy  10,001-14,000     0.30           0.00            66.70           33.30
Med-Heavy   14,001-33,000     1.00           0.00            20.00           80.00
Heavy-Heavy 33,001-60,000     0.80           0.00             0.00          100.00
Line Haul > 60,000    lbs     0.00           0.00             0.00          100.00
Urban Bus                     0.20           0.00            50.00           50.00
Motorcycle                    1.60          50.00            50.00            0.00
School Bus                    0.10           0.00             0.00          100.00
Motor Home                    1.50           0.00            93.30            6.70

Travel Conditions
                                    Residential                   Commercial
                           Home-     Home-      Home-
                           Work      Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles)  11.5       4.9        6.0      10.3       5.5       5.5
Rural Trip Length (miles)  11.5       4.9        6.0      10.3       5.5       5.5
Trip Speeds (mph)          35.0      40.0       40.0      40.0      40.0      40.0
% of Trips - Residential   20.0      37.0       43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                             5.0       2.5      92.5
Strip mall                                                 2.0       1.0      97.0
Supermarket                                                2.0       1.0      97.0
General office building                                   35.0      17.5      47.5

Changes made to the default values for Land Use Trip Percentages


Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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             URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2 (No Project B)\Alt 2 - Parcel L and M-2.urb
Project Name:                 Grand Avenue Alternative 2 - Parcel L/M-2
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                     (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                         ROG        NOx        CO        SO2       PM10
 Natural Gas                       0.38       4.97       2.11       0        0.01
 Hearth                            0.21       3.64       1.55      0.02      0.29
 Landscaping - No winter emissions
 Consumer Prdcts                  32.24        -          -         -          -
 Architectural Coatings           10.60        -          -         -          -
 TOTALS(lbs/day,unmitigated)      43.44       8.61       3.67      0.02      0.30

               UNMITIGATED OPERATIONAL EMISSIONS

                                   ROG        NOx        CO        SO2       PM10
Apartments high rise               1.61       2.13      15.75      0.02      3.36
Condo/townhouse high rise          8.37      11.45      84.61      0.10     18.07

TOTAL EMISSIONS (lbs/day)          9.97      13.58     100.36      0.12     21.43

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.      Total
Unit Type                  Acreage    Trip Rate                 Units    Trips

Apartments high rise          2.13    2.52 trips/dwelling unit   132.00   332.00
Condo/townhouse high rise     8.23    3.39 trips/dwelling unit   527.00 1,784.00

                                             Sum of Total Trips       2,116.00
                                   Total Vehicle Miles Traveled      14,157.10

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst     Catalyst        Diesel
Light Auto                    54.40           0.40           99.40           0.20
Light Truck < 3,750   lbs     15.30           0.70           98.00           1.30
Light Truck  3,751- 5,750     16.40           0.60           98.80           0.60
Med Truck    5,751- 8,500      7.30           0.00           98.60           1.40
Lite-Heavy   8,501-10,000      1.10           0.00           81.80          18.20
Lite-Heavy  10,001-14,000      0.30           0.00           66.70          33.30
Med-Heavy   14,001-33,000      1.00           0.00           20.00          80.00
Heavy-Heavy 33,001-60,000      0.80           0.00            0.00         100.00
Line Haul > 60,000    lbs      0.00           0.00            0.00         100.00
Urban Bus                      0.20           0.00           50.00          50.00
Motorcycle                     1.60          50.00           50.00           0.00
School Bus                     0.10           0.00            0.00         100.00
Motor Home                     1.50           0.00           93.30           6.70

Travel Conditions
                                 Residential                     Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5      5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5      5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0     40.0
% of Trips - Residential  20.0      37.0      43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.13 to 2.515152/2.13
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/8.23 to 3.385199/8.23

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2 (No Project B)\Alt 2 - Parcel L and M-2.urb
Project Name:                   Grand Avenue Alternative 2 - Parcel L/M-2
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                       DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG       NOx        CO       SO2      PM10
 Natural Gas                     0.38      4.97      2.11         0      0.01
 Hearth - No summer emissions
 Landscaping                     0.18      0.02      1.26      0.00      0.00
 Consumer Prdcts                32.24         -         -         -         -
 Architectural Coatings         10.60         -         -         -         -
 TOTALS(lbs/day,unmitigated)    43.40      4.99      3.38      0.00      0.01

                UNMITIGATED OPERATIONAL EMISSIONS

                                ROG       NOx        CO       SO2      PM10
Apartments high rise           1.94      1.83     15.20      0.02      3.36
Condo/townhouse high rise      9.40      9.85     81.66      0.10     18.07

TOTAL EMISSIONS (lbs/day)     11.34     11.69     96.85      0.12     21.43

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.      Total
Unit Type                Acreage    Trip Rate                   Units    Trips

Apartments high rise        2.13    2.52 trips/dwelling unit   132.00   332.00
Condo/townhouse high rise   8.23    3.39 trips/dwelling unit   527.00 1,784.00

                                               Sum of Total Trips     2,116.00
                                     Total Vehicle Miles Traveled    14,157.10

Vehicle Assumptions:

Fleet Mix:

Vehicle Type             Percent Type    Non-Catalyst     Catalyst        Diesel
Light Auto                 54.40            0.40           99.40            0.20
Light Truck < 3,750   lbs  15.30            0.70           98.00            1.30
Light Truck  3,751- 5,750  16.40            0.60           98.80            0.60
Med Truck    5,751- 8,500   7.30            0.00           98.60            1.40
Lite-Heavy   8,501-10,000   1.10            0.00           81.80           18.20
Lite-Heavy  10,001-14,000   0.30            0.00           66.70           33.30
Med-Heavy   14,001-33,000   1.00            0.00           20.00           80.00
Heavy-Heavy 33,001-60,000   0.80            0.00            0.00          100.00
Line Haul > 60,000    lbs   0.00            0.00            0.00          100.00
Urban Bus                   0.20            0.00           50.00           50.00
Motorcycle                  1.60           50.00           50.00            0.00
School Bus                  0.10            0.00            0.00          100.00
Motor Home                  1.50            0.00           93.30            6.70

Travel Conditions
                                 Residential                 Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other   Commute Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0     10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0     10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0     40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.13 to 2.515152/2.13
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/8.23 to 3.385199/8.23

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows    8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2 (No Project B)\Alt 2 - Parcel L and M-2.urb
Project Name:                 Grand Avenue Alternative 2 - Parcel L/M-2
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                     (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
  Natural Gas                      0.38       4.97       2.11          0       0.01
  Hearth - No summer emissions
  Landscaping                      0.18       0.02       1.26       0.00       0.00
  Consumer Prdcts                 32.24          -          -          -          -
  Architectural Coatings          10.60          -          -          -          -
  TOTALS(lbs/day,unmitigated)     43.40       4.99       3.38       0.00       0.01

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx         CO        SO2       PM10
Apartments high rise           2.40       1.70      17.06       0.02       3.36
Condo/townhouse high rise     11.33       9.12      91.65       0.10      18.07

TOTAL EMISSIONS (lbs/day)     13.73      10.82     108.71       0.12      21.43

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.      Total
Unit Type                  Acreage    Trip Rate                 Units     Trips

Apartments high rise          2.13    2.52 trips/dwelling unit    132.00    332.00
Condo/townhouse high rise     8.23    3.39 trips/dwelling unit    527.00 1,784.00

                                                 Sum of Total Trips       2,116.00
                                           Total Vehicle Miles Traveled  14,157.10

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type     Non-Catalyst      Catalyst          Diesel
Light Auto                     54.40            0.40           99.40             0.20
Light Truck < 3,750    lbs     15.30            0.70           98.00             1.30
Light Truck  3,751- 5,750      16.40            0.60           98.80             0.60
Med Truck    5,751- 8,500       7.30            0.00           98.60             1.40
Lite-Heavy   8,501-10,000       1.10            0.00           81.80            18.20
Lite-Heavy  10,001-14,000       0.30            0.00           66.70            33.30
Med-Heavy   14,001-33,000       1.00            0.00           20.00            80.00
Heavy-Heavy 33,001-60,000       0.80            0.00            0.00           100.00
Line Haul > 60,000     lbs      0.00            0.00            0.00           100.00
Urban Bus                       0.20            0.00           50.00            50.00
Motorcycle                      1.60           50.00           50.00             0.00
School Bus                      0.10            0.00            0.00           100.00
Motor Home                      1.50            0.00           93.30             6.70

Travel Conditions
                                    Residential                    Commercial
                            Home-     Home-      Home-
                            Work      Shop       Other   Commute  Non-Work Customer
Urban Trip Length (miles)  11.5       4.9        6.0      10.3       5.5       5.5
Rural Trip Length (miles)  11.5       4.9        6.0      10.3       5.5       5.5
Trip Speeds (mph)          35.0      40.0       40.0      40.0      40.0      40.0
% of Trips - Residential   20.0      37.0       43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.13 to 2.515152/2.13
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/8.23 to 3.385199/8.23

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
```

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                URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2 (No Project B)\Alt 2 - Parcel W-1 and W-2.urb
Project Name:                 Grand Avenue Alternative 2 - Parcel W-1/W-2
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                          DETAIL REPORT
                       (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                       ROG        NOx        CO        SO2       PM10
 Natural Gas                     0.19       2.49      1.52        0        0.00
 Hearth                          0.06       1.02      0.43      0.01       0.08
 Landscaping - No winter emissions
 Consumer Prdcts                 9.00        -          -         -          -
 Architectural Coatings          5.21        -          -         -          -
 TOTALS(lbs/day,unmitigated)    14.46       3.51      1.95      0.01       0.09

                   UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx        CO        SO2       PM10
Apartments high rise           0.45       0.60       4.42      0.01       0.94
Condo/townhouse high rise      2.89       4.03      29.79      0.03       6.36
Strip mall                     1.96       3.13      22.07      0.02       4.83
General office building        4.52       7.04      50.09      0.06      11.17

TOTAL EMISSIONS (lbs/day)      9.82      14.79     106.38      0.12      23.30

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.      Total
Unit Type                  Acreage    Trip Rate                Units     Trips

Apartments high rise          0.60    2.52 trips/dwelling unit   37.00    93.24
Condo/townhouse high rise     2.30    4.27 trips/dwelling unit  147.00   628.11
Strip mall                           45.80 trips/1000 sq. ft.    12.45   570.00
General office building               6.94 trips/1000 sq. ft.   148.04 1,028.00

                                              Sum of Total Trips     2,319.35
                                         Total Vehicle Miles Traveled  15,396.98

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst          Diesel
Light Auto                   54.40             0.40           99.40              0.20
Light Truck < 3,750   lbs    15.30             0.70           98.00              1.30
Light Truck  3,751- 5,750    16.40             0.60           98.80              0.60
Med Truck    5,751- 8,500     7.30             0.00           98.60              1.40
Lite-Heavy   8,501-10,000     1.10             0.00           81.80             18.20
Lite-Heavy  10,001-14,000     0.30             0.00           66.70             33.30
Med-Heavy   14,001-33,000     1.00             0.00           20.00             80.00
Heavy-Heavy 33,001-60,000     0.80             0.00            0.00            100.00
Line Haul > 60,000    lbs     0.00             0.00            0.00            100.00
Urban Bus                     0.20             0.00           50.00             50.00
Motorcycle                    1.60            50.00           50.00              0.00
School Bus                    0.10             0.00            0.00            100.00
Motor Home                    1.50             0.00           93.30              6.70

Travel Conditions
                                    Residential                   Commercial
                           Home-      Home-      Home-
                           Work       Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5         4.9        6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5         4.9        6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0        40.0       40.0      40.0      40.0      40.0
% of Trips - Residential  20.0        37.0       43.0

% of Trips - Commercial (by land use)
Strip mall                                                  2.0       1.0      97.0
General office building                                    35.0      17.5      47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/.6 to 2.52/.6
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/2.3 to 4.272884/2.3

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2 (No Project B)\Alt 2 - Parcel W-1 and W-2.urb
Project Name:                 Grand Avenue Alternative 2 - Parcel W-1/W-2
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                      DETAIL REPORT
                   (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG       NOx        CO       SO2      PM10
 Natural Gas                        0.19      2.49      1.52         0      0.00
 Hearth - No summer emissions
 Landscaping                        0.36      0.04      2.52      0.00      0.01
 Consumer Prdcts                    9.00         -         -         -         -
 Architectural Coatings             5.21         -         -         -         -
 TOTALS(lbs/day,unmitigated)       14.76      2.53      4.04      0.00      0.01

                 UNMITIGATED OPERATIONAL EMISSIONS

                                  ROG       NOx        CO       SO2      PM10
Apartments high rise              0.54      0.52      4.27      0.01      0.94
Condo/townhouse high rise         3.10      3.47     28.75      0.04      6.36
Strip mall                        1.72      2.70     20.92      0.03      4.83
General office building           4.49      6.06     48.56      0.06     11.17

TOTAL EMISSIONS (lbs/day)         9.85     12.74    102.51      0.13     23.30

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                    No.      Total
Unit Type                  Acreage    Trip Rate                    Units      Trips

Apartments high rise          0.60    2.52 trips/dwelling unit     37.00      93.24
Condo/townhouse high rise     2.30    4.27 trips/dwelling unit    147.00     628.11
Strip mall                           45.80 trips/1000 sq. ft.      12.45     570.00
General office building               6.94 trips/1000 sq. ft.     148.04 1,028.00

                                              Sum of Total Trips       2,319.35
                                    Total Vehicle Miles Traveled      15,396.98

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type     Non-Catalyst        Catalyst         Diesel
Light Auto                  54.40             0.40             99.40            0.20
Light Truck < 3,750    lbs  15.30             0.70             98.00            1.30
Light Truck  3,751- 5,750   16.40             0.60             98.80            0.60
Med Truck    5,751- 8,500    7.30             0.00             98.60            1.40
Lite-Heavy   8,501-10,000    1.10             0.00             81.80           18.20
Lite-Heavy  10,001-14,000    0.30             0.00             66.70           33.30
Med-Heavy   14,001-33,000    1.00             0.00             20.00           80.00
Heavy-Heavy 33,001-60,000    0.80             0.00              0.00          100.00
Line Haul > 60,000     lbs   0.00             0.00              0.00          100.00
Urban Bus                    0.20             0.00             50.00           50.00
Motorcycle                   1.60            50.00             50.00            0.00
School Bus                   0.10             0.00              0.00          100.00
Motor Home                   1.50             0.00             93.30            6.70

Travel Conditions
                                   Residential                  Commercial
                            Home-      Home-      Home-
                            Work       Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5         4.9        6.0       10.3        5.5        5.5
Rural Trip Length (miles) 11.5         4.9        6.0       10.3        5.5        5.5
Trip Speeds (mph)         35.0        40.0       40.0       40.0       40.0       40.0
% of Trips - Residential  20.0        37.0       43.0

% of Trips - Commercial (by land use)
Strip mall                                                   2.0        1.0       97.0
General office building                                     35.0       17.5       47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/.6 to 2.52/.6
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/2.3 to 4.272884/2.3

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 2 (No Project B)\Alt 2 - Parcel W-1 and W-2.urb
Project Name:                  Grand Avenue Alternative 2 - Parcel W-1/W-2
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                      (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx        CO        SO2        PM10
 Natural Gas                      0.19       2.49       1.52        0        0.00
 Hearth - No summer emissions
 Landscaping                      0.36       0.04       2.52      0.00       0.01
 Consumer Prdcts                  9.00        -          -          -          -
 Architectural Coatings           5.21        -          -          -          -
 TOTALS(lbs/day,unmitigated)     14.76       2.53       4.04      0.00       0.01

                  UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx        CO        SO2        PM10
Apartments high rise           0.67       0.48       4.79      0.01       0.94
Condo/townhouse high rise      3.66       3.21      32.27      0.04       6.36
Strip mall                     1.85       2.50      23.43      0.03       4.83
General office building        5.13       5.60      54.73      0.06      11.17

TOTAL EMISSIONS (lbs/day)     11.32      11.79     115.23      0.13      23.30

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                 Acreage    Trip Rate                    Units     Trips

Apartments high rise         0.60     2.52 trips/dwelling unit    37.00     93.24
Condo/townhouse high rise    2.30     4.27 trips/dwelling unit   147.00    628.11
Strip mall                           45.80 trips/1000 sq. ft.     12.45    570.00
General office building               6.94 trips/1000 sq. ft.    148.04 1,028.00

                                               Sum of Total Trips      2,319.35
                                         Total Vehicle Miles Traveled  15,396.98

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst       Catalyst          Diesel
Light Auto                     54.40           0.40             99.40             0.20
Light Truck < 3,750   lbs      15.30           0.70             98.00             1.30
Light Truck  3,751- 5,750      16.40           0.60             98.80             0.60
Med Truck     5,751- 8,500      7.30           0.00             98.60             1.40
Lite-Heavy   8,501-10,000       1.10           0.00             81.80            18.20
Lite-Heavy  10,001-14,000       0.30           0.00             66.70            33.30
Med-Heavy   14,001-33,000       1.00           0.00             20.00            80.00
Heavy-Heavy 33,001-60,000       0.80           0.00              0.00           100.00
Line Haul > 60,000     lbs      0.00           0.00              0.00           100.00
Urban Bus                       0.20           0.00             50.00            50.00
Motorcycle                      1.60          50.00             50.00             0.00
School Bus                      0.10           0.00              0.00           100.00
Motor Home                      1.50           0.00             93.30             6.70

Travel Conditions
                                     Residential                   Commercial
                            Home-      Home-      Home-
                            Work       Shop       Other     Commute   Non-Work Customer
Urban Trip Length (miles) 11.5         4.9        6.0       10.3       5.5        5.5
Rural Trip Length (miles) 11.5         4.9        6.0       10.3       5.5        5.5
Trip Speeds (mph)         35.0        40.0       40.0       40.0      40.0       40.0
% of Trips - Residential  20.0        37.0       43.0

% of Trips - Commercial (by land use)
Strip mall                                                   2.0       1.0       97.0
General office building                                     35.0      17.5       47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/.6 to 2.52/.6
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/2.3 to 4.272884/2.3

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.
The landscape year changed from 2005 to 2015.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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Grand Avenue (Alternative 3 - Reduced Project)

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Parcel Q					
Area	13	11	<1	33	<1
Mobile	337	41	73	35	<1
Parcel L/M-2					
Area	6	9	<1	43	<1
Mobile	187	22	41	21	<1
Parcel W-1/W-2					
Area	9	11	<1	44	<1
Mobile	233	28	51	28	<1
Total Stationary (Electricity)	13	75	3	<1	8
Total Project	**255**	**114**	**54**	**72**	**8**
Net Project					
Net Stationary	40	106	3	120	8
Net Mobile	757	91	165	84	1
Total Net	798	198	169	204	9
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**248**	**143**	**19**	**149**	**(141)**
Significant?	**Yes**	**Yes**	**Yes**	**Yes**	**No**

Grand Avenue (Alternative 3 - Reduced Project) Electricity Usage

Electricity Usage

		Electricity Usage Rate [a]	Total Electricity Usage		Emission Factors (lbs/MWh) [b]				
					CO	ROC	NOx	PM10	SOx
Land Use	1,000 Sqft	(kWh\sq.ft\yr)	(KWh\year)	(MWh\Day)	0.2	0.01	1.15	0.04	0.12
Project									
Office	510.8	12.95	6,614,213	18.121	3.624	0.181	20.839	0.725	2.175
Retail	336.8	13.55	4,562,963	12.501	2.500	0.125	14.376	0.500	1.500
Hotel/Motel	236.3	9.95	2,350,688	6.440	1.288	0.064	7.406	0.258	0.773
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	1854.0	5,627	10,431,531	28.580	5.716	0.286	32.866	1.143	3.430
	Total Project		**23,959,394**	**65.642**	**13.13**	**0.66**	**75.49**	**2.63**	**7.88**
	Net Emissions From Electricity Usage				**13.13**	**0.66**	**75.49**	**2.63**	**7.88**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Project Emissions (lbs/day)	13.13	0.66	75.49	2.63	7.88
Total Net Emissions (lbs/day)	**13.13**	**0.66**	**75.49**	**2.63**	**7.88**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

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               URBEMIS 2002 For Windows   8.7.0

File Name:                       V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3\Alt 3 - Parcel Q.urb
Project Name:                    Grand Avenue Alternative 3 - Parcel Q
Project Location:                South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                          DETAIL REPORT
                       (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
   Source                           ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.67       9.05       6.43          0       0.02
 Hearth                            0.12       2.07       0.88       0.01       0.17
 Landscaping - No winter emissions
 Consumer Prdcts                  18.35          -          -          -          -
 Architectural Coatings           12.66          -          -          -          -
 TOTALS(lbs/day,unmitigated)      31.80      11.12       7.31       0.01       0.18

                  UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx         CO        SO2       PM10
Apartments high rise          0.86       1.14       8.40       0.01       1.79
Condo/townhouse high rise     4.82       6.61      48.83       0.06      10.43
Event Facility                1.17       1.43      10.09       0.01       2.21
Racquetball/health            1.53       2.37      16.74       0.02       3.67
High turnover (sit-down)      4.69       7.47      52.83       0.06      11.57
Hotel                         3.79       5.61      39.63       0.04       8.68
Strip mall                    8.29      13.16      92.94       0.10      20.32
Supermarket                   5.97       9.50      67.09       0.08      14.67

TOTAL EMISSIONS (lbs/day)    31.11      47.28     336.57       0.38      73.34

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                   No.     Total
Unit Type                  Acreage    Trip Rate                   Units     Trips

Apartments high rise          1.21     2.36 trips/dwelling unit    75.00    177.19
Condo/townhouse high rise     4.69     3.43 trips/dwelling unit   300.00 1,029.54
Event Facility                         1.35 trips/Seats           188.00    254.61
Racquetball/health                    11.26 trips/1000 sq. ft.     37.50    422.33
High turnover (sit-down)              42.32 trips/1000 sq. ft.     31.50 1,333.00
Hotel                                  4.85 trips/rooms           206.00    999.97
Strip mall                            32.74 trips/1000 sq. ft.     73.31 2,400.00
Supermarket                           43.59 trips/1000 sq. ft.     39.75 1,732.58

                                               Sum of Total Trips      8,349.22
                                      Total Vehicle Miles Traveled    48,476.42

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                    54.40            0.40            99.40            0.20
Light Truck < 3,750   lbs     15.30            0.70            98.00            1.30
Light Truck  3,751- 5,750     16.40            0.60            98.80            0.60
Med Truck    5,751- 8,500      7.30            0.00            98.60            1.40
Lite-Heavy   8,501-10,000      1.10            0.00            81.80           18.20
Lite-Heavy  10,001-14,000      0.30            0.00            66.70           33.30
Med-Heavy   14,001-33,000      1.00            0.00            20.00           80.00
Heavy-Heavy 33,001-60,000      0.80            0.00             0.00          100.00
Line Haul > 60,000    lbs      0.00            0.00             0.00          100.00
Urban Bus                      0.20            0.00            50.00           50.00
Motorcycle                     1.60           50.00            50.00            0.00
School Bus                     0.10            0.00             0.00          100.00
Motor Home                     1.50            0.00            93.30            6.70

Travel Conditions
                                    Residential                  Commercial
                           Home-     Home-     Home-
                           Work      Shop      Other   Commute   Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Event Facility                                          5.0        2.5      92.5
Racquetball/health                                      5.0        2.5      92.5
High turnover (sit-down) rest.                          5.0        2.5      92.5
Hotel                                                   5.0        2.5      92.5
Strip mall                                              2.0        1.0      97.0
Supermarket                                             2.0        1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/1.21 to 2.3625/1.21
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/4.69 to 3.43181/4.69

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3\Alt 3 - Parcel Q.urb
Project Name:                   Grand Avenue Alternative 3 - Parcel Q
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                     DETAIL REPORT
                   (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG        NOx         CO         SO2        PM10
 Natural Gas                      0.67       9.05       6.43          0        0.02
 Hearth - No summer emissions
 Landscaping                      1.00       0.04       6.24       0.00        0.02
 Consumer Prdcts                 18.35          -          -          -           -
 Architectural Coatings          12.66          -          -          -           -
 TOTALS(lbs/day,unmitigated)     32.67       9.08      12.67       0.00        0.04

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx         CO         SO2        PM10
Apartments high rise           1.06       0.98       8.11       0.01        1.79
Condo/townhouse high rise      5.40       5.69      47.12       0.06       10.43
Event Facility                 1.80       1.23       9.59       0.01        2.21
Racquetball/health             1.46       2.04      15.91       0.02        3.67
High turnover (sit-down)       4.11       6.44      50.21       0.06       11.57
Hotel                          4.10       4.83      37.67       0.05        8.68
Strip mall                     7.35      11.35      88.10       0.11       20.32
Supermarket                    5.23       8.19      63.60       0.08       14.67

TOTAL EMISSIONS (lbs/day)     30.51      40.76     320.32       0.41       73.34

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                      No.      Total
Unit Type                  Acreage    Trip Rate                      Units     Trips

Apartments high rise          1.21     2.36 trips/dwelling unit      75.00    177.19
Condo/townhouse high rise     4.69     3.43 trips/dwelling unit     300.00 1,029.54
Event Facility                         1.35 trips/Seats             188.00    254.61
Racquetball/health                    11.26 trips/1000 sq. ft.       37.50    422.33
High turnover (sit-down)              42.32 trips/1000 sq. ft.       31.50 1,333.00
Hotel                                  4.85 trips/rooms             206.00    999.97
Strip mall                            32.74 trips/1000 sq. ft.       73.31 2,400.00
Supermarket                           43.59 trips/1000 sq. ft.       39.75 1,732.58

                                                Sum of Total Trips     8,349.22
                                         Total Vehicle Miles Traveled 48,476.42

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst          Diesel
Light Auto                     54.40           0.40            99.40             0.20
Light Truck < 3,750   lbs      15.30           0.70            98.00             1.30
Light Truck  3,751- 5,750      16.40           0.60            98.80             0.60
Med Truck     5,751- 8,500      7.30           0.00            98.60             1.40
Lite-Heavy   8,501-10,000       1.10           0.00            81.80            18.20
Lite-Heavy  10,001-14,000       0.30           0.00            66.70            33.30
Med-Heavy   14,001-33,000       1.00           0.00            20.00            80.00
Heavy-Heavy 33,001-60,000       0.80           0.00             0.00           100.00
Line Haul > 60,000    lbs       0.00           0.00             0.00           100.00
Urban Bus                       0.20           0.00            50.00            50.00
Motorcycle                      1.60          50.00            50.00             0.00
School Bus                      0.10           0.00             0.00           100.00
Motor Home                      1.50           0.00            93.30             6.70

Travel Conditions
                                  Residential                  Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
Event Facility                                           5.0       2.5      92.5
Racquetball/health                                       5.0       2.5      92.5
High turnover (sit-down) rest.                           5.0       2.5      92.5
Hotel                                                    5.0       2.5      92.5
Strip mall                                               2.0       1.0      97.0
Supermarket                                              2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/1.21 to 2.3625/1.21
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/4.69 to 3.43181/4.69

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3\Alt 3 - Parcel Q.urb
Project Name:                   Grand Avenue Alternative 3 - Parcel Q
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                      (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG       NOx        CO       SO2      PM10
 Natural Gas                        0.67      9.05      6.43        0      0.02
 Hearth - No summer emissions
 Landscaping                        1.00      0.04      6.24      0.00     0.02
 Consumer Prdcts                   18.35        -         -         -        -
 Architectural Coatings            12.66        -         -         -        -
 TOTALS(lbs/day,unmitigated)       32.67      9.08     12.67      0.00     0.04

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG      NOx       CO       SO2     PM10
Apartments high rise          1.32     0.91      9.10     0.01     1.79
Condo/townhouse high rise     6.50     5.26     52.89     0.06    10.43
Event Facility                2.41     1.14     10.75     0.01     2.21
Racquetball/health            1.64     1.89     17.83     0.02     3.67
High turnover (sit-down)      4.44     5.97     56.27     0.07    11.57
Hotel                         4.89     4.48     42.21     0.05     8.68
Strip mall                    7.98    10.51     98.67     0.12    20.32
Supermarket                   5.65     7.59     71.23     0.08    14.67

TOTAL EMISSIONS (lbs/day)    34.83    37.74    358.96     0.42    73.34

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.      Total
Unit Type                  Acreage    Trip Rate                 Units     Trips

Apartments high rise          1.21     2.36 trips/dwelling unit   75.00    177.19
Condo/townhouse high rise     4.69     3.43 trips/dwelling unit  300.00 1,029.54
Event Facility                         1.35 trips/Seats          188.00    254.61
Racquetball/health                    11.26 trips/1000 sq. ft.    37.50    422.33
High turnover (sit-down)              42.32 trips/1000 sq. ft.    31.50 1,333.00
Hotel                                  4.85 trips/rooms          206.00    999.97
Strip mall                            32.74 trips/1000 sq. ft.    73.31 2,400.00
Supermarket                           43.59 trips/1000 sq. ft.    39.75 1,732.58

                                           Sum of Total Trips       8,349.22
                                    Total Vehicle Miles Traveled   48,476.42

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst     Catalyst         Diesel
Light Auto                     54.40           0.40           99.40            0.20
Light Truck < 3,750   lbs      15.30           0.70           98.00            1.30
Light Truck  3,751- 5,750      16.40           0.60           98.80            0.60
Med Truck     5,751- 8,500      7.30           0.00           98.60            1.40
Lite-Heavy    8,501-10,000      1.10           0.00           81.80           18.20
Lite-Heavy  10,001-14,000       0.30           0.00           66.70           33.30
Med-Heavy   14,001-33,000       1.00           0.00           20.00           80.00
Heavy-Heavy 33,001-60,000       0.80           0.00            0.00          100.00
Line Haul > 60,000     lbs      0.00           0.00            0.00          100.00
Urban Bus                       0.20           0.00           50.00           50.00
Motorcycle                      1.60          50.00           50.00            0.00
School Bus                      0.10           0.00            0.00          100.00
Motor Home                      1.50           0.00           93.30            6.70

Travel Conditions
                                  Residential                     Commercial
                            Home-     Home-      Home-
                            Work      Shop       Other   Commute  Non-Work Customer
Urban Trip Length (miles)  11.5        4.9        6.0     10.3       5.5       5.5
Rural Trip Length (miles)  11.5        4.9        6.0     10.3       5.5       5.5
Trip Speeds (mph)          35.0       40.0       40.0     40.0      40.0      40.0
% of Trips - Residential   20.0       37.0       43.0

% of Trips - Commercial (by land use)
Event Facility                                             5.0       2.5      92.5
Racquetball/health                                         5.0       2.5      92.5
High turnover (sit-down) rest.                             5.0       2.5      92.5
Hotel                                                      5.0       2.5      92.5
Strip mall                                                 2.0       1.0      97.0
Supermarket                                                2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/1.21 to 2.3625/1.21
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/4.69 to 3.43181/4.69

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3 (Reduced Project)\Alt 3 - Parcel L and M-2.urb
Project Name:                   Grand Avenue Alternative 3 - Parcel L/M-2
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                         ROG       NOx        CO       SO2      PM10
 Natural Gas                      0.42      5.44      2.58         0      0.01
 Hearth                           0.21      3.52      1.50      0.02      0.28
 Landscaping - No winter emissions
 Consumer Prdcts                 31.16         -         -         -         -
 Architectural Coatings          11.17         -         -         -         -
 TOTALS(lbs/day,unmitigated)     42.96      8.96      4.08      0.02      0.30

                 UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG       NOx        CO       SO2      PM10
Apartments high rise            1.46      1.92     14.23      0.02      3.04
Condo/townhouse high rise       7.69     10.47     77.40      0.09     16.53
High turnover (sit-down)        1.67      2.67     18.86      0.02      4.13
Strip mall                      6.85     10.89     76.91      0.09     16.81

TOTAL EMISSIONS (lbs/day)      17.68     25.95    187.41      0.21     40.51

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                 Acreage    Trip Rate                    Units    Trips

Apartments high rise         2.05    2.36 trips/dwelling unit    127.00   300.04
Condo/townhouse high rise    7.97    3.20 trips/dwelling unit    510.00 1,632.00
High turnover (sit-down)            42.30 trips/1000 sq. ft.      11.25   475.86
Strip mall                          36.23 trips/1000 sq. ft.      54.83 1,986.13

                                                 Sum of Total Trips     4,394.03
                                       Total Vehicle Miles Traveled    26,772.14

Vehicle Assumptions:

Fleet Mix:

Vehicle Type             Percent Type    Non-Catalyst     Catalyst         Diesel
Light Auto                  54.40            0.40           99.40            0.20
Light Truck < 3,750   lbs   15.30            0.70           98.00            1.30
Light Truck  3,751- 5,750   16.40            0.60           98.80            0.60
Med Truck    5,751- 8,500    7.30            0.00           98.60            1.40
Lite-Heavy   8,501-10,000    1.10            0.00           81.80           18.20
Lite-Heavy  10,001-14,000    0.30            0.00           66.70           33.30
Med-Heavy   14,001-33,000    1.00            0.00           20.00           80.00
Heavy-Heavy 33,001-60,000    0.80            0.00            0.00          100.00
Line Haul > 60,000    lbs    0.00            0.00            0.00          100.00
Urban Bus                    0.20            0.00           50.00           50.00
Motorcycle                   1.60           50.00           50.00            0.00
School Bus                   0.10            0.00            0.00          100.00
Motor Home                   1.50            0.00           93.30            6.70

Travel Conditions
                                 Residential                  Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0     10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0     10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0     40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                           5.0       2.5      92.5
Strip mall                                               2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.05 to 2.3625/2.05
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/7.97 to 3.2/7.97

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3 (Reduced Project)\Alt 3 - Parcel L and M-2.urb
Project Name:                  Grand Avenue Alternative 3 - Parcel L/M-2
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                       DETAIL REPORT
                   (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG        NOx         CO        SO2        PM10
 Natural Gas                      0.42       5.44       2.58          0        0.01
 Hearth - No summer emissions
 Landscaping                      0.50       0.02       3.12       0.00        0.01
 Consumer Prdcts                 31.16          -          -          -           -
 Architectural Coatings          11.17          -          -          -           -
 TOTALS(lbs/day,unmitigated)     43.25       5.46       5.70       0.00        0.02

                UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx         CO        SO2        PM10
Apartments high rise          1.80       1.66      13.73       0.02        3.04
Condo/townhouse high rise     8.76       9.01      74.70       0.09       16.53
High turnover (sit-down)      1.47       2.30      17.92       0.02        4.13
Strip mall                    6.05       9.39      72.91       0.09       16.81

TOTAL EMISSIONS (lbs/day)    18.07      22.36     179.27       0.23       40.51

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.      Total
Unit Type                  Acreage    Trip Rate                  Units     Trips

Apartments high rise         2.05    2.36 trips/dwelling unit   127.00    300.04
Condo/townhouse high rise    7.97    3.20 trips/dwelling unit   510.00 1,632.00
High turnover (sit-down)            42.30 trips/1000 sq. ft.     11.25    475.86
Strip mall                          36.23 trips/1000 sq. ft.     54.83 1,986.13

                                            Sum of Total Trips      4,394.03
                                      Total Vehicle Miles Traveled  26,772.14

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst     Catalyst          Diesel
Light Auto                    54.40           0.40           99.40             0.20
Light Truck < 3,750   lbs     15.30           0.70           98.00             1.30
Light Truck  3,751- 5,750     16.40           0.60           98.80             0.60
Med Truck    5,751- 8,500      7.30           0.00           98.60             1.40
Lite-Heavy   8,501-10,000      1.10           0.00           81.80            18.20
Lite-Heavy  10,001-14,000      0.30           0.00           66.70            33.30
Med-Heavy   14,001-33,000      1.00           0.00           20.00            80.00
Heavy-Heavy 33,001-60,000      0.80           0.00            0.00           100.00
Line Haul > 60,000    lbs      0.00           0.00            0.00           100.00
Urban Bus                      0.20           0.00           50.00            50.00
Motorcycle                     1.60          50.00           50.00             0.00
School Bus                     0.10           0.00            0.00           100.00
Motor Home                     1.50           0.00           93.30             6.70

Travel Conditions
                                   Residential                  Commercial
                          Home-      Home-     Home-
                          Work       Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5        4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5        4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0       40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0       37.0      43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                            5.0       2.5      92.5
Strip mall                                                2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/2.05 to 2.3625/2.05
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/7.97 to 3.2/7.97

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

 File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3 (Reduced Project)\Alt 3 - Parcel L and M-2.urb
 Project Name:                   Grand Avenue Alternative 3 - Parcel L/M-2
 Project Location:               South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                       (Pounds/Day - Summer)

 AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
     Source                          ROG         NOx         CO          SO2         PM10
  Natural Gas                       0.42        5.44        2.58           0        0.01
  Hearth - No summer emissions
  Landscaping                       0.50        0.02        3.12        0.00        0.01
  Consumer Prdcts                  31.16           -           -           -           -
  Architectural Coatings           11.17           -           -           -           -
  TOTALS(lbs/day,unmitigated)      43.25        5.46        5.70        0.00        0.02

                   UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG        NOx         CO         SO2        PM10
 Apartments high rise            2.24       1.53       15.41       0.02        3.04
 Condo/townhouse high rise      10.61       8.34       83.85       0.10       16.53
 High turnover (sit-down)        1.58       2.13       20.09       0.02        4.13
 Strip mall                      6.55       8.70       81.65       0.10       16.81

 TOTAL EMISSIONS (lbs/day)      20.98      20.71      201.00       0.23       40.51

 Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

 OPERATIONAL (Vehicle) EMISSION ESTIMATES

 Analysis Year: 2015  Temperature (F): 85   Season: Summer

 EMFAC Version: EMFAC2002 (9/2002)

 Summary of Land Uses:

                                                                     No.      Total
 Unit Type                 Acreage    Trip Rate                      Units    Trips

 Apartments high rise         2.05     2.36 trips/dwelling unit     127.00   300.04
 Condo/townhouse high rise    7.97     3.20 trips/dwelling unit     510.00 1,632.00
 High turnover (sit-down)             42.30 trips/1000 sq. ft.       11.25   475.86
 Strip mall                           36.23 trips/1000 sq. ft.       54.83 1,986.13

                                                 Sum of Total Trips     4,394.03
                                          Total Vehicle Miles Traveled 26,772.14

 Vehicle Assumptions:

 Fleet Mix:

 Vehicle Type               Percent Type    Non-Catalyst      Catalyst          Diesel
 Light Auto                      54.40            0.40          99.40             0.20
 Light Truck < 3,750   lbs       15.30            0.70          98.00             1.30
 Light Truck  3,751- 5,750       16.40            0.60          98.80             0.60
 Med Truck    5,751- 8,500        7.30            0.00          98.60             1.40
 Lite-Heavy   8,501-10,000        1.10            0.00          81.80            18.20
 Lite-Heavy  10,001-14,000        0.30            0.00          66.70            33.30
 Med-Heavy   14,001-33,000        1.00            0.00          20.00            80.00
 Heavy-Heavy 33,001-60,000        0.80            0.00           0.00           100.00
 Line Haul > 60,000    lbs        0.00            0.00           0.00           100.00
 Urban Bus                        0.20            0.00          50.00            50.00
 Motorcycle                       1.60           50.00          50.00             0.00
 School Bus                       0.10            0.00           0.00           100.00
 Motor Home                       1.50            0.00          93.30             6.70

 Travel Conditions
                                    Residential                    Commercial
                            Home-      Home-      Home-
                            Work       Shop       Other    Commute   Non-Work Customer
 Urban Trip Length (miles)  11.5        4.9        6.0      10.3       5.5      5.5
 Rural Trip Length (miles)  11.5        4.9        6.0      10.3       5.5      5.5
 Trip Speeds (mph)          35.0       40.0       40.0      40.0      40.0     40.0
 % of Trips - Residential   20.0       37.0       43.0

 % of Trips - Commercial (by land use)
 High turnover (sit-down) rest.                              5.0       2.5     92.5
 Strip mall                                                  2.0       1.0     97.0

 Changes made to the default values for Land Use Trip Percentages

 The Trip Rate and/or Acreage values for Apartments high rise
  have changed from the defaults 5.29/2.05 to 2.3625/2.05
 The Trip Rate and/or Acreage values for Condominium/townhouse high rise
  have changed from the defaults 5.26/7.97 to 3.2/7.97

 Changes made to the default values for Area

 The wood stove percentage changed from 35 to 0.
 The wood fireplace percentage changed from 10 to 0.
 The natural gas fireplace percentage changed from 55 to 100.

 Changes made to the default values for Operations

 The operational emission year changed from 2005 to 2015.
 The operational winter temperature changed from  50 to 60.
 The operational summer temperature changed from  90 to 85.
 The operational summer selection item changed from   8 to 6.
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               URBEMIS 2002 For Windows   8.7.0

 File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3 (Reduced Project)\Alt 3 - Parcel W-1 and W-2.urb
 Project Name:                  Grand Avenue Alternative 3 - Parcel W-1/W-2
 Project Location:              South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                         DETAIL REPORT
                    (Pounds/Day - Winter)

 AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
     Source                          ROG        NOx         CO        SO2        PM10
  Natural Gas                       0.59       7.89       4.96          0        0.01
  Hearth                            0.17       2.95       1.25       0.02        0.24
  Landscaping - No winter emissions
  Consumer Prdcts                  26.08          -          -          -           -
  Architectural Coatings           16.41          -          -          -           -
  TOTALS(lbs/day,unmitigated)      43.25      10.84       6.22       0.02        0.25

                 UNMITIGATED OPERATIONAL EMISSIONS

                                 ROG        NOx         CO        SO2       PM10
 Apartments high rise           1.23       1.62      11.99       0.01       2.56
 Condo/townhouse high rise      6.54       8.92      65.95       0.08      14.08
 High turnover (sit-down)       1.12       1.78      12.60       0.01       2.76
 Strip mall                     4.85       7.70      54.37       0.06      11.88
 General office building        8.32      12.37      88.05       0.10      19.63

 TOTAL EMISSIONS (lbs/day)     22.07      32.39     232.97       0.27      50.92

 Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

 OPERATIONAL (Vehicle) EMISSION ESTIMATES

 Analysis Year: 2015  Temperature (F): 60   Season: Winter

 EMFAC Version: EMFAC2002 (9/2002)

 Summary of Land Uses:

                                                                    No.      Total
 Unit Type                   Acreage     Trip Rate                  Units     Trips

 Apartments high rise           1.73     2.36 trips/dwelling unit    107.00    252.79
 Condo/townhouse high rise      6.66     3.26 trips/dwelling unit    426.00 1,390.56
 High turnover (sit-down)               42.40 trips/1000 sq. ft.       7.50    318.00
 Strip mall                             34.41 trips/1000 sq. ft.      40.80 1,404.00
 General office building                 3.54 trips/1000 sq. ft.     510.75 1,807.00

                                                   Sum of Total Trips      5,172.34
                                         Total Vehicle Miles Traveled     33,651.16

 Vehicle Assumptions:

 Fleet Mix:

 Vehicle Type               Percent Type    Non-Catalyst      Catalyst          Diesel
 Light Auto                     54.40           0.40            99.40             0.20
 Light Truck < 3,750   lbs      15.30           0.70            98.00             1.30
 Light Truck  3,751- 5,750      16.40           0.60            98.80             0.60
 Med Truck     5,751- 8,500      7.30           0.00            98.60             1.40
 Lite-Heavy   8,501-10,000       1.10           0.00            81.80            18.20
 Lite-Heavy  10,001-14,000       0.30           0.00            66.70            33.30
 Med-Heavy   14,001-33,000       1.00           0.00            20.00            80.00
 Heavy-Heavy 33,001-60,000       0.80           0.00             0.00           100.00
 Line Haul > 60,000     lbs      0.00           0.00             0.00           100.00
 Urban Bus                       0.20           0.00            50.00            50.00
 Motorcycle                      1.60          50.00            50.00             0.00
 School Bus                      0.10           0.00             0.00           100.00
 Motor Home                      1.50           0.00            93.30             6.70

 Travel Conditions
                                    Residential                    Commercial
                            Home-     Home-      Home-
                            Work      Shop       Other    Commute  Non-Work Customer
 Urban Trip Length (miles) 11.5       4.9        6.0      10.3       5.5       5.5
 Rural Trip Length (miles) 11.5       4.9        6.0      10.3       5.5       5.5
 Trip Speeds (mph)         35.0      40.0       40.0      40.0      40.0      40.0
 % of Trips - Residential  20.0      37.0       43.0

 % of Trips - Commercial (by land use)
 High turnover (sit-down) rest.                             5.0       2.5      92.5
 Strip mall                                                 2.0       1.0      97.0
 General office building                                   35.0      17.5      47.5

 Changes made to the default values for Land Use Trip Percentages

 The Trip Rate and/or Acreage values for Apartments high rise
  have changed from the defaults 5.29/1.73 to 2.3625/1.73
 The Trip Rate and/or Acreage values for Condominium/townhouse high rise
  have changed from the defaults 5.26/6.66 to 3.264218/6.66

 Changes made to the default values for Area

 The wood stove percentage changed from 35 to 0.
 The wood fireplace percentage changed from 10 to 0.
 The natural gas fireplace percentage changed from 55 to 100.

 Changes made to the default values for Operations

 The operational emission year changed from 2005 to 2015.
 The operational winter temperature changed from  50 to 60.
 The operational summer temperature changed from  90 to 75.
 The operational summer selection item changed from   8 to 5.
```

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              URBEMIS 2002 For Windows   8.7.0

 File Name:                         V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3 (Reduced Project)\Alt 3 - Parcel W-1 and W-2.urb
 Project Name:                      Grand Avenue Alternative 3 - Parcel W-1/W-2
 Project Location:                  South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                     DETAIL REPORT
                  (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG         NOx         CO          SO2         PM10
 Natural Gas                       0.59        7.89        4.96          0          0.01
 Hearth - No summer emissions
 Landscaping                       0.62        0.02        3.90        0.00         0.01
 Consumer Prdcts                  26.08          -           -           -            -
 Architectural Coatings           16.41          -           -           -            -
 TOTALS(lbs/day,unmitigated)      43.70        7.91        8.86        0.00         0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG         NOx         CO          SO2         PM10
Apartments high rise           1.51        1.40       11.57        0.01         2.56
Condo/townhouse high rise      7.41        7.68       63.65        0.08        14.08
High turnover (sit-down)       0.98        1.54       11.98        0.02         2.76
Strip mall                     4.29        6.64       51.54        0.07        11.88
General office building        9.29       10.65       85.36        0.11        19.63

TOTAL EMISSIONS (lbs/day)     23.49       27.90      224.10        0.29        50.92

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                     No.      Total
Unit Type                    Acreage     Trip Rate                  Units     Trips

Apartments high rise          1.73     2.36 trips/dwelling unit    107.00    252.79
Condo/townhouse high rise     6.66     3.26 trips/dwelling unit    426.00 1,390.56
High turnover (sit-down)              42.40 trips/1000 sq. ft.       7.50    318.00
Strip mall                            34.41 trips/1000 sq. ft.      40.80 1,404.00
General office building                3.54 trips/1000 sq. ft.     510.75 1,807.00

                                             Sum of Total Trips        5,172.34
                                    Total Vehicle Miles Traveled      33,651.16

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type     Non-Catalyst      Catalyst          Diesel
Light Auto                     54.40            0.40            99.40             0.20
Light Truck < 3,750    lbs     15.30            0.70            98.00             1.30
Light Truck  3,751- 5,750      16.40            0.60            98.80             0.60
Med Truck     5,751- 8,500      7.30            0.00            98.60             1.40
Lite-Heavy    8,501-10,000      1.10            0.00            81.80            18.20
Lite-Heavy   10,001-14,000      0.30            0.00            66.70            33.30
Med-Heavy    14,001-33,000      1.00            0.00            20.00            80.00
Heavy-Heavy  33,001-60,000      0.80            0.00             0.00           100.00
Line Haul > 60,000     lbs      0.00            0.00             0.00           100.00
Urban Bus                       0.20            0.00            50.00            50.00
Motorcycle                      1.60           50.00            50.00             0.00
School Bus                      0.10            0.00             0.00           100.00
Motor Home                      1.50            0.00            93.30             6.70

Travel Conditions
                                  Residential                    Commercial
                            Home-      Home-       Home-
                            Work       Shop        Other     Commute   Non-Work Customer
Urban Trip Length (miles) 11.5        4.9         6.0        10.3        5.5        5.5
Rural Trip Length (miles) 11.5        4.9         6.0        10.3        5.5        5.5
Trip Speeds (mph)         35.0       40.0        40.0        40.0       40.0       40.0
% of Trips - Residential  20.0       37.0        43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                                5.0        2.5       92.5
Strip mall                                                    2.0        1.0       97.0
General office building                                      35.0       17.5       47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/1.73 to 2.3625/1.73
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.66 to 3.264218/6.66

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows    8.7.0

File Name:                       V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 3 (Reduced Project)\Alt 3  - Parcel W-1 and W-2.urb
Project Name:                    Grand Avenue Alternative 3 - Parcel W-1/W-2
Project Location:                South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                       DETAIL REPORT
                   (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.59       7.89       4.96          0       0.01
 Hearth - No summer emissions
 Landscaping                       0.62       0.02       3.90       0.00       0.01
 Consumer Prdcts                  26.08          -          -          -          -
 Architectural Coatings           16.41          -          -          -          -
 TOTALS(lbs/day,unmitigated)      43.70       7.91       8.86       0.00       0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                                  ROG        NOx         CO        SO2       PM10
Apartments high rise             1.88       1.29      12.99       0.01       2.56
Condo/townhouse high rise        8.96       7.11      71.44       0.08      14.08
High turnover (sit-down)         1.06       1.42      13.42       0.02       2.76
Strip mall                       4.65       6.15      57.72       0.07      11.88
General office building         11.17       9.85      96.21       0.11      19.63

TOTAL EMISSIONS (lbs/day)       27.73      25.82     251.78       0.29      50.92

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                  No.     Total
Unit Type                   Acreage    Trip Rate                 Units     Trips

Apartments high rise          1.73    2.36 trips/dwelling unit   107.00    252.79
Condo/townhouse high rise     6.66    3.26 trips/dwelling unit   426.00 1,390.56
High turnover (sit-down)             42.40 trips/1000 sq. ft.      7.50    318.00
Strip mall                           34.41 trips/1000 sq. ft.     40.80 1,404.00
General office building               3.54 trips/1000 sq. ft.    510.75 1,807.00

                                               Sum of Total Trips     5,172.34
                                        Total Vehicle Miles Traveled    33,651.16

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type     Non-Catalyst      Catalyst          Diesel
Light Auto                    54.40            0.40             99.40             0.20
Light Truck < 3,750   lbs     15.30            0.70             98.00             1.30
Light Truck  3,751- 5,750     16.40            0.60             98.80             0.60
Med Truck     5,751- 8,500     7.30            0.00             98.60             1.40
Lite-Heavy   8,501-10,000      1.10            0.00             81.80            18.20
Lite-Heavy  10,001-14,000      0.30            0.00             66.70            33.30
Med-Heavy   14,001-33,000      1.00            0.00             20.00            80.00
Heavy-Heavy 33,001-60,000      0.80            0.00              0.00           100.00
Line Haul > 60,000    lbs      0.00            0.00              0.00           100.00
Urban Bus                      0.20            0.00             50.00            50.00
Motorcycle                     1.60           50.00             50.00             0.00
School Bus                     0.10            0.00              0.00           100.00
Motor Home                     1.50            0.00             93.30             6.70

Travel Conditions
                                   Residential                   Commercial
                            Home-      Home-      Home-
                            Work       Shop       Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5        4.9        6.0      10.3        5.5        5.5
Rural Trip Length (miles) 11.5        4.9        6.0      10.3        5.5        5.5
Trip Speeds (mph)         35.0       40.0       40.0      40.0       40.0       40.0
% of Trips - Residential  20.0       37.0       43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                             5.0        2.5       92.5
Strip mall                                                 2.0        1.0       97.0
General office building                                   35.0       17.5       47.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/1.73 to 2.3625/1.73
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/6.66 to 3.264218/6.66

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
```

Grand Avenue (Alternative 5 - Alternative Land Use)

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Parcel Q					
Area	7	12	<1	61	<1
Mobile	203	24	44	24	<1
Parcel L/M-2					
Area	5	13	<1	63	<1
Mobile	142	17	30	20	<1
Parcel W-1/W-2					
Area	8	20	<1	99	<1
Mobile	218	25	47	30	<1
Total Stationary (Electricity)	13	73	3	<1	8
Total Project	**239**	**118**	**50**	**130**	**8**
Net Project					
Net Stationary	34	118	4	224	8
Net Mobile	563	66	121	74	1
Total Net	597	184	125	299	9
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**47**	**129**	**(25)**	**244**	**(141)**
Significant?	**Yes**	**Yes**	**No**	**Yes**	**No**

Grand Avenue (Alternative 5 - Alternative Land Use)

Electricity Usage

Electricity Usage

		Electricity				Emission Factors (lbs/MWh) [b]			
		Usage Rate [a]	Total Electricity Usage		CO	ROC	NOx	PM10	SOx
Land Use	1,000 Sqft	(kWh\sq.ft\yr)	(KWh\year)	(MWh\Day)	0.2	0.01	1.15	0.04	0.12
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	35.0	13.55	474,250	1.299	0.260	0.013	1.494	0.052	0.156
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	4046.0	5,627	22,764,819	62.369	12.474	0.624	71.725	2.495	7.484
	Total Project		**23,239,069**	**63.669**	**12.73**	**0.64**	**73.22**	**2.55**	**7.64**
	Net Emissions From Electricity Usage				**12.73**	**0.64**	**73.22**	**2.55**	**7.64**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Project Emissions (lbs/day)	12.73	0.64	73.22	2.55	7.64
Total Net Emissions (lbs/day)	**12.73**	**0.64**	**73.22**	**2.55**	**7.64**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

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               URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5\Alt 5 - Parcel Q.urb
Project Name:                  Grand Avenue Alternative 5 - Parcel Q
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                          DETAIL REPORT
                       (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                        ROG       NOx        CO       SO2      PM10
 Natural Gas                     0.56      7.21      3.20         0      0.01
 Hearth                          0.30      5.05      2.15      0.03      0.41
 Landscaping - No winter emissions
 Consumer Prdcts                44.72         -         -         -         -
 Architectural Coatings         15.16         -         -         -         -
 TOTALS(lbs/day,unmitigated)    60.72     12.26      5.35      0.03      0.42

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx        CO       SO2      PM10
Apartments high rise            2.24       2.96     21.91      0.03      4.68
Condo/townhouse high rise      11.31      15.44    114.11      0.13     24.36
High turnover (sit-down)        0.65       1.03      7.29      0.01      1.60
Strip mall                      2.12       3.38     23.84      0.03      5.21
Supermarket                     3.21       5.12     36.18      0.04      7.91

TOTAL EMISSIONS (lbs/day)      19.52      27.93    203.34      0.23     43.76

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.     Total
Unit Type                 Acreage    Trip Rate                  Units    Trips

Apartments high rise         2.95     2.52 trips/dwelling unit   183.00    462.00
Condo/townhouse high rise   11.42     3.29 trips/dwelling unit   731.00 2,405.97
High turnover (sit-down)             52.57 trips/1000 sq. ft.      3.50    184.00
Strip mall                           43.89 trips/1000 sq. ft.     14.03    615.61
Supermarket                          62.29 trips/1000 sq. ft.     15.00    934.37

                                              Sum of Total Trips     4,601.95
                                     Total Vehicle Miles Traveled   28,917.99

Vehicle Assumptions:

Fleet Mix:

Vehicle Type             Percent Type    Non-Catalyst      Catalyst        Diesel
Light Auto                  54.40            0.40            99.40           0.20
Light Truck < 3,750   lbs   15.30            0.70            98.00           1.30
Light Truck  3,751- 5,750   16.40            0.60            98.80           0.60
Med Truck    5,751- 8,500    7.30            0.00            98.60           1.40
Lite-Heavy   8,501-10,000    1.10            0.00            81.80          18.20
Lite-Heavy  10,001-14,000    0.30            0.00            66.70          33.30
Med-Heavy   14,001-33,000    1.00            0.00            20.00          80.00
Heavy-Heavy 33,001-60,000    0.80            0.00             0.00         100.00
Line Haul > 60,000    lbs    0.00            0.00             0.00         100.00
Urban Bus                    0.20            0.00            50.00          50.00
Motorcycle                   1.60           50.00            50.00           0.00
School Bus                   0.10            0.00             0.00         100.00
Motor Home                   1.50            0.00            93.30           6.70

Travel Conditions
                              Residential                   Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                           5.0       2.5      92.5
Strip mall                                               2.0       1.0      97.0
Supermarket                                              2.0       1.0      97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.95 to 2.52459/2.95
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/11.42 to 3.29134/11.42

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5\Alt 5 - Parcel Q.urb
Project Name:                 Grand Avenue Alternative 5 - Parcel Q
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                    DETAIL REPORT
                (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                       ROG       NOx       CO        SO2       PM10
 Natural Gas                     0.56      7.21      3.20         0      0.01
 Hearth - No summer emissions
 Landscaping                     0.62      0.02      3.90      0.00      0.01
 Consumer Prdcts                44.72         -         -         -         -
 Architectural Coatings         15.16         -         -         -         -
 TOTALS(lbs/day,unmitigated)    61.05      7.23      7.10      0.00      0.03

                UNMITIGATED OPERATIONAL EMISSIONS

                               ROG       NOx       CO        SO2       PM10
Apartments high rise           2.69      2.55     21.15      0.03      4.68
Condo/townhouse high rise     12.79     13.29    110.13      0.14     24.36
High turnover (sit-down)       0.56      0.89      6.93      0.01      1.60
Strip mall                     1.86      2.91     22.60      0.03      5.21
Supermarket                    2.79      4.42     34.30      0.04      7.91

TOTAL EMISSIONS (lbs/day)     20.70     24.06    195.10      0.25     43.76

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                    No.      Total
Unit Type                 Acreage    Trip Rate                     Units     Trips

Apartments high rise         2.95     2.52 trips/dwelling unit     183.00    462.00
Condo/townhouse high rise   11.42     3.29 trips/dwelling unit     731.00 2,405.97
High turnover (sit-down)             52.57 trips/1000 sq. ft.        3.50    184.00
Strip mall                           43.89 trips/1000 sq. ft.       14.03    615.61
Supermarket                          62.29 trips/1000 sq. ft.       15.00    934.37

                                              Sum of Total Trips      4,601.95
                                        Total Vehicle Miles Traveled  28,917.99

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type     Non-Catalyst      Catalyst          Diesel
Light Auto                    54.40            0.40            99.40              0.20
Light Truck < 3,750   lbs     15.30            0.70            98.00              1.30
Light Truck  3,751- 5,750     16.40            0.60            98.80              0.60
Med Truck    5,751- 8,500      7.30            0.00            98.60              1.40
Lite-Heavy   8,501-10,000      1.10            0.00            81.80             18.20
Lite-Heavy  10,001-14,000      0.30            0.00            66.70             33.30
Med-Heavy   14,001-33,000      1.00            0.00            20.00             80.00
Heavy-Heavy 33,001-60,000      0.80            0.00             0.00            100.00
Line Haul > 60,000    lbs      0.00            0.00             0.00            100.00
Urban Bus                      0.20            0.00            50.00             50.00
Motorcycle                     1.60           50.00            50.00              0.00
School Bus                     0.10            0.00             0.00            100.00
Motor Home                     1.50            0.00            93.30              6.70

Travel Conditions
                                     Residential                  Commercial
                             Home-     Home-      Home-
                             Work      Shop       Other    Commute   Non-Work Customer
Urban Trip Length (miles) 11.5       4.9        6.0      10.3        5.5        5.5
Rural Trip Length (miles) 11.5       4.9        6.0      10.3        5.5        5.5
Trip Speeds (mph)          35.0      40.0       40.0      40.0       40.0       40.0
% of Trips - Residential   20.0      37.0       43.0

% of Trips - Commercial (by land use)
High turnover (sit-down) rest.                               5.0        2.5       92.5
Strip mall                                                   2.0        1.0       97.0
Supermarket                                                  2.0        1.0       97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.28/2.95 to 2.52459/2.95
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/11.42 to 3.29134/11.42

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

 File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5\Alt 5 - Parcel Q.urb
 Project Name:                 Grand Avenue Alternative 5 - Parcel Q
 Project Location:             South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                      DETAIL REPORT
                   (Pounds/Day - Summer)

 AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
     Source                        ROG         NOx          CO         SO2        PM10
  Natural Gas                     0.56        7.21        3.20           0        0.01
  Hearth - No summer emissions
  Landscaping                     0.62        0.02        3.90        0.00        0.01
  Consumer Prdcts                44.72           -           -           -           -
  Architectural Coatings         15.16           -           -           -           -
  TOTALS(lbs/day,unmitigated)    61.05        7.23        7.10        0.00        0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx         CO        SO2       PM10
 Apartments high rise          3.33       2.36      23.74       0.03       4.68
 Condo/townhouse high rise    15.46      12.30     123.61       0.14      24.36
 High turnover (sit-down)      0.61       0.82       7.77       0.01       1.60
 Strip mall                    2.01       2.70      25.31       0.03       5.21
 Supermarket                   2.99       4.09      38.41       0.05       7.91

 TOTAL EMISSIONS (lbs/day)    24.39      22.27     218.83       0.25      43.76

 Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

 OPERATIONAL (Vehicle) EMISSION ESTIMATES

 Analysis Year: 2015  Temperature (F): 85   Season: Summer

 EMFAC Version: EMFAC2002 (9/2002)

 Summary of Land Uses:

                                                                No.      Total
 Unit Type                  Acreage    Trip Rate               Units     Trips

 Apartments high rise          2.95     2.52 trips/dwelling unit   183.00   462.00
 Condo/townhouse high rise    11.42     3.29 trips/dwelling unit   731.00 2,405.97
 High turnover (sit-down)              52.57 trips/1000 sq. ft.      3.50   184.00
 Strip mall                            43.89 trips/1000 sq. ft.     14.03   615.61
 Supermarket                           62.29 trips/1000 sq. ft.     15.00   934.37

                                             Sum of Total Trips      4,601.95
                                      Total Vehicle Miles Traveled  28,917.99

 Vehicle Assumptions:

 Fleet Mix:

 Vehicle Type               Percent Type    Non-Catalyst      Catalyst         Diesel
 Light Auto                      54.40           0.40           99.40            0.20
 Light Truck < 3,750   lbs      15.30           0.70           98.00            1.30
 Light Truck  3,751- 5,750      16.40           0.60           98.80            0.60
 Med Truck    5,751- 8,500       7.30           0.00           98.60            1.40
 Lite-Heavy   8,501-10,000       1.10           0.00           81.80           18.20
 Lite-Heavy  10,001-14,000       0.30           0.00           66.70           33.30
 Med-Heavy   14,001-33,000       1.00           0.00           20.00           80.00
 Heavy-Heavy 33,001-60,000       0.80           0.00            0.00          100.00
 Line Haul > 60,000     lbs      0.00           0.00            0.00          100.00
 Urban Bus                       0.20           0.00           50.00           50.00
 Motorcycle                      1.60          50.00           50.00            0.00
 School Bus                      0.10           0.00            0.00          100.00
 Motor Home                      1.50           0.00           93.30            6.70

 Travel Conditions
                                      Residential                  Commercial
                             Home-     Home-      Home-
                             Work      Shop       Other    Commute  Non-Work Customer
 Urban Trip Length (miles) 11.5       4.9        6.0       10.3       5.5        5.5
 Rural Trip Length (miles) 11.5       4.9        6.0       10.3       5.5        5.5
 Trip Speeds (mph)         35.0      40.0       40.0       40.0      40.0       40.0
 % of Trips - Residential  20.0      37.0       43.0

 % of Trips - Commercial (by land use)
 High turnover (sit-down) rest.                              5.0       2.5       92.5
 Strip mall                                                  2.0       1.0       97.0
 Supermarket                                                 2.0       1.0       97.0

 Changes made to the default values for Land Use Trip Percentages

 The Trip Rate and/or Acreage values for Apartments high rise
  have changed from the defaults 5.28/2.95 to 2.52459/2.95
 The Trip Rate and/or Acreage values for Condominium/townhouse high rise
  have changed from the defaults 5.26/11.42 to 3.29134/11.42

 Changes made to the default values for Area

 The wood stove percentage changed from 35 to 0.
 The wood fireplace percentage changed from 10 to 0.
 The natural gas fireplace percentage changed from 55 to 100.

 Changes made to the default values for Operations

 The operational emission year changed from 2005 to 2015.
 The operational winter temperature changed from  50 to 60.
 The operational summer temperature changed from  90 to 85.
 The operational summer selection item changed from   8 to 6.
```

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              URBEMIS 2002 For Windows   8.7.0

File Name:                    V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5 (Alternative Land Use)\Alt 5 - Parcel L and M-2.urb
Project Name:                 Grand Avenue Alternative 5 - Parcel L/M-2
Project Location:             South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                    DETAIL REPORT
                  (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.56       7.22       3.07          0       0.01
 Hearth                            0.31       5.29       2.25       0.03       0.43
 Landscaping - No winter emissions
 Consumer Prdcts                  46.82          -          -          -          -
 Architectural Coatings           15.39          -          -          -          -
 TOTALS(lbs/day,unmitigated)      63.08      12.51       5.32       0.03       0.44

                UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx         CO        SO2       PM10
Apartments high rise          2.33       3.09      22.86       0.03       4.88
Condo/townhouse high rise    11.82      16.12     119.14       0.14      25.44

TOTAL EMISSIONS (lbs/day)    14.15      19.21     142.00       0.16      30.32

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                               No.      Total
Unit Type                 Acreage    Trip Rate                 Units    Trips

Apartments high rise         3.08    2.52 trips/dwelling unit  191.00   482.00
Condo/townhouse high rise   11.97    3.28 trips/dwelling unit  766.00 2,512.00

                                           Sum of Total Trips     2,994.00
                                    Total Vehicle Miles Traveled  20,031.35

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type   Non-Catalyst     Catalyst          Diesel
Light Auto                    54.40           0.40           99.40             0.20
Light Truck < 3,750   lbs     15.30           0.70           98.00             1.30
Light Truck  3,751- 5,750     16.40           0.60           98.80             0.60
Med Truck     5,751- 8,500     7.30           0.00           98.60             1.40
Lite-Heavy   8,501-10,000      1.10           0.00           81.80            18.20
Lite-Heavy  10,001-14,000      0.30           0.00           66.70            33.30
Med-Heavy   14,001-33,000      1.00           0.00           20.00            80.00
Heavy-Heavy 33,001-60,000      0.80           0.00            0.00           100.00
Line Haul > 60,000    lbs      0.00           0.00            0.00           100.00
Urban Bus                      0.20           0.00           50.00            50.00
Motorcycle                     1.60          50.00           50.00             0.00
School Bus                     0.10           0.00            0.00           100.00
Motor Home                     1.50           0.00           93.30             6.70

Travel Conditions
                                   Residential                 Commercial
                            Home-     Home-     Home-
                            Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles)  11.5       4.9       6.0      10.3      5.5       5.5
Rural Trip Length (miles)  11.5       4.9       6.0      10.3      5.5       5.5
Trip Speeds (mph)          35.0      40.0      40.0      40.0     40.0      40.0
% of Trips - Residential   20.0      37.0      43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/3.08 to 2.52356/3.08
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/11.97 to 3.279373/11.97

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
```

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               URBEMIS 2002 For Windows   8.7.0

 File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5 (Alternative Land Use)\Alt 5 - Parcel L and M-2.urb
 Project Name:                   Grand Avenue Alternative 5 - Parcel L/M-2
 Project Location:               South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                       DETAIL REPORT
                     (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                          ROG        NOx         CO        SO2       PM10
 Natural Gas                       0.56       7.22       3.07          0       0.01
 Hearth - No summer emissions
 Landscaping                       0.25       0.01       1.56       0.00       0.01
 Consumer Prdcts                  46.82          -          -          -          -
 Architectural Coatings           15.39          -          -          -          -
 TOTALS(lbs/day,unmitigated)      63.02       7.23       4.63       0.00       0.02

                 UNMITIGATED OPERATIONAL EMISSIONS

                                ROG        NOx         CO        SO2       PM10
Apartments high rise            2.81       2.66      22.06       0.03       4.88
Condo/townhouse high rise      13.37      13.88     114.98       0.14      25.44

TOTAL EMISSIONS (lbs/day)      16.19      16.54     137.04       0.17      30.32

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                 No.      Total
Unit Type                 Acreage    Trip Rate                 Units      Trips

Apartments high rise         3.08    2.52 trips/dwelling unit   191.00   482.00
Condo/townhouse high rise   11.97    3.28 trips/dwelling unit   766.00 2,512.00

                                              Sum of Total Trips      2,994.00
                                     Total Vehicle Miles Traveled    20,031.35

Vehicle Assumptions:

Fleet Mix:

Vehicle Type                Percent Type    Non-Catalyst      Catalyst        Diesel
Light Auto                      54.40           0.40           99.40            0.20
Light Truck < 3,750   lbs       15.30           0.70           98.00            1.30
Light Truck  3,751- 5,750       16.40           0.60           98.80            0.60
Med Truck    5,751- 8,500        7.30           0.00           98.60            1.40
Lite-Heavy   8,501-10,000        1.10           0.00           81.80           18.20
Lite-Heavy  10,001-14,000        0.30           0.00           66.70           33.30
Med-Heavy   14,001-33,000        1.00           0.00           20.00           80.00
Heavy-Heavy 33,001-60,000        0.80           0.00            0.00          100.00
Line Haul > 60,000    lbs        0.00           0.00            0.00          100.00
Urban Bus                        0.20           0.00           50.00           50.00
Motorcycle                       1.60          50.00           50.00            0.00
School Bus                       0.10           0.00            0.00          100.00
Motor Home                       1.50           0.00           93.30            6.70

Travel Conditions
                                    Residential                 Commercial
                            Home-     Home-     Home-
                            Work      Shop      Other   Commute  Non-Work Customer
Urban Trip Length (miles)  11.5        4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles)  11.5        4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)          35.0       40.0      40.0      40.0      40.0      40.0
% of Trips - Residential   20.0       37.0      43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/3.08 to 2.52356/3.08
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/11.97 to 3.279373/11.97

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows   8.7.0

File Name:                         V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5 (Alternative Land Use)\Alt 5 - Parcel L and M-2.urb
Project Name:                      Grand Avenue Alternative 5 - Parcel L/M-2
Project Location:                  South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                     (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG        NOx         CO        SO2       PM10
 Natural Gas                     0.56       7.22       3.07          0       0.01
 Hearth - No summer emissions
 Landscaping                     0.25       0.01       1.56       0.00       0.01
 Consumer Prdcts                46.82          -          -          -          -
 Architectural Coatings         15.39          -          -          -          -
 TOTALS(lbs/day,unmitigated)    63.02       7.23       4.63       0.00       0.02

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx         CO        SO2       PM10
Apartments high rise           3.48       2.46      24.76       0.03       4.88
Condo/townhouse high rise     16.16      12.84     129.06       0.15      25.44

TOTAL EMISSIONS (lbs/day)     19.64      15.31     153.82       0.18      30.32

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.      Total
Unit Type                  Acreage    Trip Rate                Units     Trips

Apartments high rise          3.08    2.52 trips/dwelling unit   191.00    482.00
Condo/townhouse high rise    11.97    3.28 trips/dwelling unit   766.00  2,512.00

                                          Sum of Total Trips      2,994.00
                                   Total Vehicle Miles Traveled  20,031.35

Vehicle Assumptions:

Fleet Mix:

Vehicle Type               Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                    54.40            0.40            99.40           0.20
Light Truck < 3,750   lbs     15.30            0.70            98.00           1.30
Light Truck  3,751- 5,750     16.40            0.60            98.80           0.60
Med Truck    5,751- 8,500      7.30            0.00            98.60           1.40
Lite-Heavy   8,501-10,000      1.10            0.00            81.80          18.20
Lite-Heavy  10,001-14,000      0.30            0.00            66.70          33.30
Med-Heavy   14,001-33,000      1.00            0.00            20.00          80.00
Heavy-Heavy 33,001-60,000      0.80            0.00             0.00         100.00
Line Haul > 60,000    lbs      0.00            0.00             0.00         100.00
Urban Bus                      0.20            0.00            50.00          50.00
Motorcycle                     1.60           50.00            50.00           0.00
School Bus                     0.10            0.00             0.00         100.00
Motor Home                     1.50            0.00            93.30           6.70

Travel Conditions
                                    Residential                  Commercial
                           Home-     Home-     Home-
                           Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles)  11.5       4.9       6.0      10.3      5.5       5.5
Rural Trip Length (miles)  11.5       4.9       6.0      10.3      5.5       5.5
Trip Speeds (mph)          35.0      40.0      40.0      40.0     40.0      40.0
% of Trips - Residential   20.0      37.0      43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/3.08 to 2.52356/3.08
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/11.97 to 3.279373/11.97

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
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             URBEMIS 2002 For Windows   8.7.0

File Name:                      V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5 (Alternative Land Use)\Alt 5 - Parcel W-1 and W-2.urb
Project Name:                   Grand Avenue Alternative 5 - Parcel W-1/W-2
Project Location:               South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                      DETAIL REPORT
                   (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)
    Source                         ROG        NOx        CO        SO2       PM10
 Natural Gas                      0.87      11.32      4.82         0       0.02
 Hearth                           0.49       8.30      3.53      0.05       0.67
 Landscaping - No winter emissions
 Consumer Prdcts                 73.43          -         -         -          -
 Architectural Coatings          24.14          -         -         -          -
 TOTALS(lbs/day,unmitigated)     98.93      19.62      8.35      0.05       0.69

                UNMITIGATED OPERATIONAL EMISSIONS

                              ROG        NOx         CO        SO2       PM10
Apartments high rise         3.66       4.85      35.86       0.04       7.66
Condo/townhouse high rise   18.09      24.61     181.93       0.21      38.85

TOTAL EMISSIONS (lbs/day)   21.75      29.46     217.79       0.25      46.50

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 60   Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                   No.      Total
Unit Type                 Acreage    Trip Rate                    Units     Trips

Apartments high rise         4.84    2.52 trips/dwelling unit    300.00    756.00
Condo/townhouse high rise   18.77    3.19 trips/dwelling unit  1,201.00  3,836.00

                                              Sum of Total Trips      4,592.00
                                        Total Vehicle Miles Traveled  30,722.78

Vehicle Assumptions:

Fleet Mix:

Vehicle Type                  Percent Type    Non-Catalyst       Catalyst          Diesel
Light Auto                         54.40            0.40            99.40             0.20
Light Truck < 3,750    lbs         15.30            0.70            98.00             1.30
Light Truck  3,751- 5,750          16.40            0.60            98.80             0.60
Med Truck     5,751- 8,500          7.30            0.00            98.60             1.40
Lite-Heavy    8,501-10,000          1.10            0.00            81.80            18.20
Lite-Heavy  10,001-14,000           0.30            0.00            66.70            33.30
Med-Heavy   14,001-33,000           1.00            0.00            20.00            80.00
Heavy-Heavy 33,001-60,000           0.80            0.00             0.00           100.00
Line Haul > 60,000     lbs          0.00            0.00             0.00           100.00
Urban Bus                           0.20            0.00            50.00            50.00
Motorcycle                          1.60           50.00            50.00             0.00
School Bus                          0.10            0.00             0.00           100.00
Motor Home                          1.50            0.00            93.30             6.70

Travel Conditions
                                   Residential                    Commercial
                          Home-      Home-      Home-
                          Work       Shop       Other    Commute   Non-Work  Customer
Urban Trip Length (miles) 11.5        4.9        6.0      10.3        5.5        5.5
Rural Trip Length (miles) 11.5        4.9        6.0      10.3        5.5        5.5
Trip Speeds (mph)         35.0       40.0       40.0      40.0       40.0       40.0
% of Trips - Residential  20.0       37.0       43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/4.84 to 2.52/4.84
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/18.77 to 3.194005/18.77

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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               URBEMIS 2002 For Windows   8.7.0

File Name:                     V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5 (Alternative Land Use)\Alt 5 - Parcel W-1 and W-2.urb
Project Name:                  Grand Avenue Alternative 5 - Parcel W-1/W-2
Project Location:              South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                        DETAIL REPORT
                    (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                         ROG        NOx         CO         SO2       PM10
  Natural Gas                      0.87      11.32       4.82         0        0.02
  Hearth - No summer emissions
  Landscaping                      0.25       0.01       1.56       0.00       0.01
  Consumer Prdcts                 73.43         -          -          -          -
  Architectural Coatings          24.14         -          -          -          -
  TOTALS(lbs/day,unmitigated)     98.70      11.33       6.38       0.00       0.03

                 UNMITIGATED OPERATIONAL EMISSIONS

                               ROG        NOx         CO         SO2       PM10
Apartments high rise           4.41       4.18      34.60       0.04       7.66
Condo/townhouse high rise     20.60      21.19     175.58       0.22      38.85

TOTAL EMISSIONS (lbs/day)     25.01      25.36     210.18       0.26      46.50

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 75   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                              No.      Total
Unit Type                  Acreage    Trip Rate              Units     Trips

Apartments high rise          4.84    2.52 trips/dwelling unit    300.00    756.00
Condo/townhouse high rise    18.77    3.19 trips/dwelling unit  1,201.00  3,836.00

                                            Sum of Total Trips     4,592.00
                                     Total Vehicle Miles Traveled    30,722.78

Vehicle Assumptions:

Fleet Mix:

Vehicle Type              Percent Type    Non-Catalyst      Catalyst         Diesel
Light Auto                     54.40           0.40            99.40            0.20
Light Truck < 3,750   lbs      15.30           0.70            98.00            1.30
Light Truck  3,751- 5,750      16.40           0.60            98.80            0.60
Med Truck     5,751- 8,500      7.30           0.00            98.60            1.40
Lite-Heavy    8,501-10,000      1.10           0.00            81.80           18.20
Lite-Heavy  10,001-14,000       0.30           0.00            66.70           33.30
Med-Heavy   14,001-33,000       1.00           0.00            20.00           80.00
Heavy-Heavy 33,001-60,000       0.80           0.00             0.00          100.00
Line Haul > 60,000    lbs       0.00           0.00             0.00          100.00
Urban Bus                       0.20           0.00            50.00           50.00
Motorcycle                      1.60          50.00            50.00            0.00
School Bus                      0.10           0.00             0.00          100.00
Motor Home                      1.50           0.00            93.30            6.70

Travel Conditions
                               Residential                     Commercial
                          Home-     Home-      Home-
                          Work      Shop       Other     Commute   Non-Work  Customer
Urban Trip Length (miles) 11.5       4.9        6.0       10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9        6.0       10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0       40.0       40.0      40.0      40.0
% of Trips - Residential  20.0      37.0       43.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Apartments high rise
 have changed from the defaults 5.29/4.84 to 2.52/4.84
The Trip Rate and/or Acreage values for Condominium/townhouse high rise
 have changed from the defaults 5.26/18.77 to 3.194005/18.77

Changes made to the default values for Area

The wood stove percentage changed from 35 to 0.
The wood fireplace percentage changed from 10 to 0.
The natural gas fireplace percentage changed from 55 to 100.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 75.
The operational summer selection item changed from   8 to 5.
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              URBEMIS 2002 For Windows  8.7.0

File Name:                       V:\AQNOISE DIVISION\Active Projects\Grand Avenue\Alternatives\Alternative 5 (Alternative Land Use)\Alt 5 - Parcel W-1 and W-2.urb
Project Name:                    Grand Avenue Alternative 5 - Parcel W-1/W-2
Project Location:                South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

                    DETAIL REPORT
                 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)
    Source                        ROG       NOx        CO       SO2       PM10
 Natural Gas                     0.87     11.32      4.82         0       0.02
 Hearth - No summer emissions
 Landscaping                     0.25      0.01      1.56      0.00       0.01
 Consumer Prdcts                73.43         -         -         -          -
 Architectural Coatings         24.14         -         -         -          -
 TOTALS(lbs/day,unmitigated)    98.70     11.33      6.38      0.00       0.03

                UNMITIGATED OPERATIONAL EMISSIONS

                                ROG       NOx        CO       SO2      PM10
Apartments high rise           5.46      3.87     38.84      0.04      7.66
Condo/townhouse high rise     24.95     19.61    197.08      0.22     38.85

TOTAL EMISSIONS (lbs/day)     30.41     23.48    235.92      0.27     46.50

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015  Temperature (F): 85   Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

                                                                No.    Total
Unit Type                 Acreage   Trip Rate                   Units   Trips

Apartments high rise         4.84   2.52 trips/dwelling unit   300.00   756.00
Condo/townhouse high rise   18.77   3.19 trips/dwelling unit 1,201.00 3,836.00

                                          Sum of Total Trips     4,592.00
                                  Total Vehicle Miles Traveled   30,722.78

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Lite-Heavy   8,501-10,000      1.10           0.00           81.80            18.20
Lite-Heavy  10,001-14,000      0.30           0.00           66.70            33.30
Med-Heavy   14,001-33,000      1.00           0.00           20.00            80.00
Heavy-Heavy 33,001-60,000      0.80           0.00            0.00           100.00
Line Haul > 60,000    lbs      0.00           0.00            0.00           100.00
Urban Bus                      0.20           0.00           50.00            50.00
Motorcycle                     1.60          50.00           50.00             0.00
School Bus                     0.10           0.00            0.00           100.00
Motor Home                     1.50           0.00           93.30             6.70

Travel Conditions
                               Residential                   Commercial
                          Home-     Home-     Home-
                          Work      Shop      Other    Commute  Non-Work Customer
Urban Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Rural Trip Length (miles) 11.5       4.9       6.0      10.3       5.5       5.5
Trip Speeds (mph)         35.0      40.0      40.0      40.0      40.0      40.0
% of Trips - Residential  20.0      37.0      43.0

Changes made to the default values for Land Use Trip Percentages

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The operational emission year changed from 2005 to 2015.
The operational winter temperature changed from  50 to 60.
The operational summer temperature changed from  90 to 85.
The operational summer selection item changed from   8 to 6.
```