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**LOS ANGELES METRO  
ORANGE LINE EXTENSION  
Transitional Analysis  
Task 6: Environmental Analysis**

Prepared for  
Los Angeles County Transportation Commission  
818 West Seventh Street, Los Angeles, California 90017



**LACTC**  
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April 1990

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Century City Station: Bus and automobile access appears adequate for the Constellation Boulevard option. For the Santa Monica Boulevard option, bus access appears adequate for eastbound buses, but is awkward for westbound through buses such as the RTD #4. A bus cutout on the north side of "big" Santa Monica Boulevard (i.e. the north roadway) is recommended.

Westwood Station: Bus and automobile access appears difficult during the evening peak hour. The bus-actuated signal on Veteran Avenue may be ineffective during the evening peak hour, since traffic regularly backs up from Wilshire Boulevard through this site. The Veteran Avenue access would be effectively a right-in, right-out driveway. Similar access problems would be encountered at the bus and automobile entrance at Gayley Avenue and Lindbrook Drive, which is regularly blocked by traffic backed up from Wilshire Boulevard in the evening peak period. Consideration should be given to providing a bus right-turn exit to westbound Wilshire Boulevard.

The automobile and bus trips generated by the Westwood Station are likely to impact traffic in the area. The Metro Line will reduce some automobile trips, particularly for those who live to the east and work or attend school in Westwood. However, if those who live on the west side of Los Angeles and commute eastward all drive to Westwood Station, the impact could be considerable, since this movement coincides with the peak flow of traffic in Westwood. Mitigating these automobile impacts would require extremely costly intersection improvements and purchase of additional right-of-way along Wilshire Boulevard. Improvements may also be needed on the San Diego Freeway, as well as its interchange with Wilshire Boulevard. As an alternative to building wider highways, use of feeder bus lines should be encouraged to transport riders between home and Westwood.

Automobile traffic impacts could be reduced by not providing a park-and-ride lot in Westwood. The Metro Rail Line could be extended to the Federal Veteran's Administration property to the west of the San Diego Freeway, and providing a park-and-ride terminal station there. The surface street impacts with VA site would be of a lesser magnitude than a Westwood terminus, although freeway traffic impacts may be about the same.

Olympic-Crenshaw Station: Bus and automobile access appears adequate.

Pico-San Vicente Station: Bus and automobile access appears adequate.

Olympic-San Vicente Station: Bus and automobile access appears adequate, but bus and automobile trips generated by the station

may impact traffic at the three intersections of the San Vicente-Olympic-Fairfax triangle. Intersection improvements may be needed to mitigate these impacts. Traffic diverting through residential neighborhoods is a possibility.

Pico-Fairfax Station: Bus and automobile access appears adequate.

Pico-La Cienega Station: Bus and automobile access appears adequate. However, automobile and bus trips generated by the station may impact the intersection of Pico Boulevard and La Cienega Boulevard, requiring improvements to the intersection. Pass-through traffic is possible along Alfred Street, impacting a residential neighborhood.

Pico-Beverly Station: Bus and automobile access appears adequate. Pass-through traffic is possible, impacting a residential neighborhood.

Olympic-La Brea Station: Bus and automobile access appears adequate, although cars traveling on southbound La Brea Avenue would have to make a difficult left turn onto either Olympic Boulevard or Sycamore Avenue.

Santa Monica-Fairfax Station: Bus and automobile access appears adequate.

Santa Monica-San Vicente Station: Bus and automobile access appears adequate.

Santa Monica-Beverly Station: Bus and automobile access appears adequate.

### **Chapter 3: Construction Impacts**

Along the aerial portion of the Wilshire Boulevard alignment, large portions of Wilshire Boulevard would be occupied by construction area. Preferably two lanes of traffic in each lane should be maintained in each direction, although occasionally it may have to be reduced to one lane in each direction. Detours to other streets may be needed on occasions where Wilshire Boulevard must be completely closed.

One subterranean station is proposed on Wilshire Boulevard, at Crenshaw Boulevard. The station would be constructed by means of cut-and-cover. Decking should be provided to allow traffic to proceed over the construction site. All other subterranean stations are proposed outside of street right-of-way, which should have little traffic impact.

**TABLE A**  
**BUS STOPS AND BAYS**

<u>Station Number</u>	<u>Station Name</u>	<u>Bus Access</u>		
		<u>Off-Street Bays</u>	<u>On-Street Bays</u>	<u>On-Street Stops</u>
31	Wilshire/Crenshaw	2	2	2
32	Wilshire/La Brea	2	1	3
33	Wilshire/Fairfax	4	2	2
34	Wilshire/La Cienega	4	3	3
35	Wilshire/Beverly	0	1	3
36	Century City	10	0	5
36	Century City East	12	0	1
36	Century City, Santa Monica Alt.	9	4	0
37	Westwood Village	12	2	0
38	Santa Monica/Fairfax	0	3	3
39	Santa Monica/San Vicente	4	0	2
40	Santa Monica/Beverly	0	1	3
41	Olympic/Crenshaw	2	3	1
42	Pico/San Vicente	12	0	0
43	San Vicente/Olympic/Fairfax	2	5	0
44	Pico/Fairfax	1 or 2	0	4
45	Pico/La Cienega	4	2	2
46	Pico/Beverly	3	2	1
47	Olympic/La Brea	0	5	2

METRO RAIL TRANSITIONAL ANALYSIS  
DISCUSSION OF FEEDER BUS SYSTEM FOR WESTERN EXTENSION

General Approach

The bus system in the Metro Rail corridor would be integrated with the rail line. The major objectives would be as follows:

- Coordinate bus and rail service to improve mobility and reduce travel times for patrons.
- Feed passengers to the rail system to take advantage of the greater efficiency of rail.
- Reduce competing bus service to reduce operating costs; savings could be applied to the cost of rail service or to other improvements in bus service.

The philosophy and objectives of bus-rail coordination are discussed more fully in several documents prepared by SCRTD in 1988 and 1989 in connection with the Blue Line opening.

The existing bus network in the corridor of the western extension of Metro Rail is basically a grid network. The existing north-south routes can function as feeder routes to the rail stations with relatively minor modifications, since most of the proposed stations are located at the major north-south arterials served by those bus routes.

The east-west bus routes can be discussed in three categories: local, limited-stop, and express. Local routes operate along the major streets parallel to the rail alignments such as Wilshire, Olympic, Third Street, etc. In some cases these routes can be rerouted slightly to connect with the rail line, thus allowing patrons to take advantage of the faster travel time of the rail system. Service would probably be reduced somewhat on the parallel routes closest to the rail line to reflect the diversion of passengers to rail.

Some of the limited-stop routes, such as the #320 along Wilshire, could be eliminated, since they would compete with the rail line, but the rail line would provide faster service with greater operating efficiency.

Some of the express routes from the western portion of the corridor would be rerouted to terminate at a station such as Westwood or La Brea. This would be done to provide accessibility to more destinations along the rail corridor, reduce travel time to downtown for most patrons, and reduce operating costs.

The following list shows which bus routes are proposed to connect with each station along each of the five alternative alignments.

## List of Proposed Feeder Routes by Station

### WILSHIRE ALIGNMENT

#### Crenshaw Station

- #20 Wilshire local - through E-W
- #66/67 W. 8th St. - extend from 8th/Western to terminate here
- #210 Vine/Rossmore/Crenshaw - through N-S; probable short-turn from south
- (assume routes # 18 and #209 terminate at Western Station)

#### La Brea Station

- #20 Wilshire local - through E-W
- #212 La Brea - through N-S; probable short-turn from south
- #216 Park/La Brea shuttle - terminal
- + express routes from Santa Monica Freeway (#436, 438, 439); alternative would be to La Cienega Station
- + possible tie-ins of routes which currently terminate at Rimpau loop?

#### Fairfax Station

- #20 Wilshire local - through E-W
- #1/217 Fairfax/Hollywood - through N-S; short-turn from north
- #27 Olympic/Burton Way - through W-S, or possible segmenting?
- #216 Park/La Brea shuttle - terminal

#### La Cienega Station

- #20 Wilshire local - through E-W
- #105 La Cienega/Vernon - through N-S; possible short-turn
- #220 Robertson - through N-S; (Alternate: terminate south leg here, and extend #10 south to terminate here)
- #16 3rd Street - extend from Beverly Center to terminate here
- + express routes from Santa Monica Freeway, (#436, 437?, 438, 439) if not connected to La Brea Station
- SM#12 via Robertson from south

#### Beverly Station

- #20 Wilshire local - through E-W
- #3 Sunset/Beverly - through N-S via Canon

#### Century Center

- #4/304 Santa Monica Blvd. - through E-W; possible short-turn
- #14 Beverly Blvd. - extend SW to terminate here
- #22 (service along Beverly Glen) - terminate here from west
- #27/28 Olympic - terminate here
- + Santa Monica routes #5 (E&W); #9-W; #13
- + Culver City route #3

#### Westwood

- #20&22 Wilshire - through E-W; possible short-turn
- #2 Sunset - possibly split here into east and west segments
- #430 ???
- #434 Malibu - terminal

- #437 Marina - terminal (or to La Cienega)
- #560 Valley/LAX - through N-S; short-turn from north
  - + Santa Monica routes #1, 2, 3, 8, 12; terminate some or all here vs. current terminal at UCLA
  - + Santa Monica #10 (current express to LA CBD)
  - + Culver City #6
  - + UCLA shuttle buses

PICO (SHORT) ALIGNMENT

Olympic/Crenshaw Station

- #27/28 Olympic - through E-W
- #66/67 W. 8th St. - extend to terminate here
- #210 Crenshaw - through N-S ( short-turn service will continue to Wilshire/Western)

Pico/San Vicente Station

Routes which currently terminate at Rimpau Loop:

- #30/31 Pico
  - Santa Monica #7, 13
- #33 Venice - possibly segment here
- #212 La Brea - deviate to stop here NB & SB
- #333 Venice express - terminate here
  - + freeway routes: #436,438,439; possibly #434,437

San Vicente/Olympic/Fairfax Station

- #27/28 Olympic - possibly segment here
- #1/217 Fairfax - through N-S; possible short-turn
  - + possible extensions from West LA Transit Center via Fairfax: #37, 38?

(Remaining stations generally as in Wilshire Alignment)

PICO (LONG) ALIGNMENT

(First three stations generally as in Pico - short alignment)

Pico/Fairfax Station

- SM#7, 13 through E-W
- #1/217 through N-S
  - + possible extensions from West LA Transit Center via Fairfax: #37, 38?

Pico/La Cienega Station

- SM#7 through E-W
- #105 La Cienega - through N-S
- #220 Robertson - through N-S
  - + freeway routes: #436,438,439; possibly #434,437 (if not to Pico/San Vicente)

Pico/Beverly Station

- SM #7 & 13 through E-W
- #3 Sunset/Beverly - terminal (from north via Beverly)

+ Culver City route?

(Century City and Westwood as in Wilshire Alignment)

#### OLYMPIC ALIGNMENT

##### Olympic/Crenshaw Station

(same as Crenshaw/Olympic in Pico Short Alignment)

##### Olympic/La Brea Station

#27/28 Olympic through E-W

#212 La Brea through N-S

+ express routes from Santa Monica Freeway: #436,438,439

##### Olympic/San Vicente/Fairfax

(same as for Pico Short Alignment)

(Remaining stations generally as in Wilshire Alignment)

#### SANTA MONICA ALIGNMENT

##### Santa Monica/Fairfax Station

#4 Santa Monica - through E-W (assume no #304)

#1/217 Fairfax/Hollywood - through N-S; possible short-turn

##### Santa Monica/San Vicente Station

#4 Santa Monica - through E-W

#10 Melrose - west terminal

#105 Vernon/La Cienega - north terminal

#220 Robertson - north terminal

#16 3rd St. - extend to terminate here

##### Santa Monica/Beverly Station

#4 Santa Monica - through E-W

#3 Sunset/Beverly - through N-S

#14 Beverly Blvd. - through E-W

#22 Beverly Glen/Century City - terminate from southwest

#27 Olympic/Burton - through E-W

##### Century City Station and Westwood Station

basically similar to Wilshire alignment (see above)

### Bus Facilities at Stations

Facilities would be provided at each station to accommodate the feeder buses and the transferring passengers. The major features are as follows:

1. For terminating routes, provide off-street bus loading facilities, e.g. sawtooth bus bays.
2. For north-south bus routes (i.e. perpendicular to rail line), provide recessed bays along the street or utilize far-side stops. The high volume of passenger activity would result in long dwell times, which would disrupt traffic if loading was done at a near-side stop in a regular traffic lane.
3. For east-west (parallel) routes, e.g. along Wilshire Blvd, normal bus stops in traffic lanes are preferred. Boarding/alighting volumes at each station will be lower than for perpendicular routes.

This subject is discussed in more detail in SCRTD's October 1988 report Bus/Rail Interface Design Guideline Manual.

Manuel Padron & Associates

April 3, 1990



***Appendix B***  
***Noise and Vibration Analysis***



AAAI Report 1053  
AAAI Project 89015

**NOISE AND VIBRATION TECHNICAL REPORT FOR THE  
METRO ORANGE LINE TRANSITIONAL ANALYSIS**

January 1990

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## NOISE AND VIBRATION TECHNICAL REPORT FOR THE METRO ORANGE LINE TRANSITIONAL ANALYSIS

### 1.0 INTRODUCTION

This report examines the potential noise and vibration impacts associated with the operation of the Metro Orange Line along the various alternative alignments proposed. A "screening" level analysis of these impacts was performed, which identified areas where the criteria levels may be exceeded and noise and vibration mitigation required. The generalized noise and vibration impacts expected are compared among the various alternatives.

Other noise and vibration impacts associated with the Orange Line include station noise impacts, construction noise and vibration impacts, and potential noise impacts of system ancillary and support facilities. These potential impacts are also examined in a general, qualitative way.

LACTC is committed to building a transportation system that meets all project noise and vibration criteria. The range of possible noise and vibration mitigation measures needed to ensure this are also described in this report.

### 2.0 IMPACT OF OPERATIONS

#### 2.1 Criteria

In this initial assessment, the noise and vibration criteria developed by SCRTD and presented in the January 1983 "Technical Report on Noise and Vibration," are used to determine impacts. These criteria are dependent upon way-side land uses and their varying sensitivity to noise and vibration. Three types of criteria are needed for rail operations; maximum ground-borne noise, maximum air-borne noise, and maximum ground-borne vibration levels experienced during a train pass-by. See Tables 1, 2, and 3.

The criteria account for the type of community area and general ambient noise or vibration environment in which a sensitive land use might be located. For example, the maximum ground-borne noise level allowed at a single family residence is higher in an area which is predominantly commercial than in a low-density residential area.

## 2.2 Projections

Estimates of noise and vibration emissions from the operation of the Metro Orange Line are based on data given in Reference 1. The model used predicts a single source level number (i.e., maximum A-weighted sound level) rather than levels in octave bands of frequency. The results are therefore less accurate than those required in an EIR level of analysis, but are considered adequate for the purposes of the Transitional Analysis. Table 4 summarizes the noise and vibration source levels used in the analysis.

The preliminary operating plan prepared by Manuel Padron and the plan and profile drawings furnished by Bechtel were used to develop the noise and vibration projections. A "windshield" survey was conducted along the various proposed alignments in order to identify and locate noise and vibration sensitive land uses adjacent to the rail route.

The primary source of impact for the proposed Orange Line system is ground-borne noise. Ground-borne noise is generated during rail vehicle operations as the steel wheels of the vehicle impact the rail. The wheel/rail-generated vibration is transmitted into the ground via the connection through the tie and ballast; it travels through the ground to nearby building foundations and is transmitted through the structural members of the building to its occupants and is audible as a low-pitched rumble.

The results of the impact analysis are summarized in Tables 5 through 9 for the various alternatives. Each table shows the numbers of structures in each category where the projections indicate that noise and vibration levels may exceed the criteria along each alignment. Each alignment is broken into sections (identified by the engineering station numbers) in which source noise and vibration conditions are essentially similar. The following paragraphs discuss the noise and vibration impacts associated with each alignment alternative.

#### Wilshire Alignment

The ground-borne noise criteria could be exceeded in several areas if no specific mitigation measures are used. Along the Wilshire Blvd section, 2 temples and 3 theaters might be affected. There may also be ground-borne noise impacts in sections where the alignment crosses under residential areas northeast of Beverly Hills High, between Century Park East and Santa Monica Blvd, and between Santa Monica Blvd and Westwood Blvd. In Westwood, 2 movie theaters may be affected.

The airborne noise criteria would be exceeded at locations adjacent to the entire aerial section of the alignment, if no mitigation measures are used. However, soundwalls are a general mitigation measure included in the baseline project design for aerial sections. Proper soundwall design will ensure that the criteria for maximum airborne noise levels are not exceeded at any location along the aerial portion of this alignment.

#### Pico (Short) Alignment

No structures along the Crenshaw/Pico/San Vicente portion of this alignment would experience ground-borne noise or vibration levels which exceed the criteria levels. After the alignment rejoins Wilshire Blvd, 2 movie theaters, the residential areas described

above, and 2 movie theaters in Westwood may be affected by ground-borne noise.

#### Pico (Long) Alignment

Along Pico Blvd, 2 churches, 2 temples, and the Cathay TV and music studio may experience ground-borne noise levels which exceed the criteria. Between Santa Monica Blvd and Beverly Hills High the alignment crosses under the southern portion of the same residential area as the Wilshire alignment. Ground-borne noise levels may exceed the criteria in this area also. West of the high school the alignment is the same as the Wilshire alternative, and has the same potential impact areas.

#### Olympic (Short) Alignment

Most sections of this alternative contain residential land uses along the proposed alignment. As a result, ground-borne noise criteria levels may be exceeded in residences between Wilshire and Olympic along Crenshaw, between Crenshaw and Lucerne along Olympic, and in the vicinity of the Olympic/La Brea and Olympic/San Vicente/Fairfax stations. After the alignment rejoins Wilshire Blvd, 2 movie theaters, the residential areas described in the Wilshire alternative section, and 2 movie theaters in Westwood may experience ground-borne noise levels exceeding the criteria.

#### Santa Monica Blvd Alignment

Wayside ground-borne noise levels may exceed criteria at 2 theaters along the Hollywood Blvd portions of this alignment. The alignment crosses under residential land uses between Hollywood Blvd and Santa Monica Blvd where ground-borne noise levels may exceed the criteria. No impacts are expected adjacent to the Santa Monica Blvd portion of this alignment. However, the same residential areas described above between Santa Monica Blvd

and Westwood Blvd may be affected by ground-borne noise. Also, the same 2 movie theaters in Westwood may be affected.

### 2.3 Mitigation Measures

This section contains general noise and vibration mitigation measures incorporated into the design of the system, a range of additional measures that may be required at specific locations to meet the project criteria, and extraordinary measures that will be considered where additional measures are not adequate to meet project criteria. Preliminary results indicate that, with the proposed general and specific mitigation measures described below, all noise and vibration impacts in excess of project criteria can be eliminated. Actual recommendations and the precise location and type of specific mitigation measure will be developed as needed as the project design is further refined.

#### General Mitigation Measures

A detailed description of the mitigation measures for noise and vibration impacts are contained in Section 8.4 of the 1983 FEIS for the Metro (Red) Line. The mitigation measures listed below are standard design features used throughout the Metro Rail system:

Use of continuous welded rail instead of jointed rail to reduce noise on the steel wheel/rail interface.

Use of rail vehicles with lightweight trucks rather than heavyweight trucks in order to provide minimum unsprung weight.

Use of special grinding (truing) equipment to ensure the smoothness of the wheel/rail interaction. This standard maintenance work will be scheduled based on a specified number of vehicle service miles.

Use of Direct Fixation fasteners as a track fixation method.

The projections of baseline Project noise and vibration levels assume implementation of these general mitigation measures.

#### Specific Mitigation Measures

Where the general mitigation measures listed above are not adequate to reduce noise and vibration to criteria levels, additional measures specific to the problem area will be applied as appropriate:

Use of resilient (soft) direct fixation fasteners.

Use of resiliently supported ties. This feature lowers ground-borne noise by approximately 6 to 10 dB below baseline, and reduces ground-borne vibration by lesser amounts.

Use of floating slab trackbed, which lowers ground-borne noise by as much as 15 to 20 dB below baseline. Ground-borne vibration levels are reduced by approximately 5 to 10 dB.

Which mitigation measure to use in a particular case depends on the source frequency content and propagation characteristics of the local soil, and would be determined after a more detailed analysis is performed. The approximate length of track (for both sets of rails) in each of the sections of each alignment which would require one of these types of mitigation are shown in Tables 10 through 14.

The current study has not identified specific areas which would require the more extensive floating-slab trackbed mitigation of ground-borne noise. Such measures may be required at track

crossovers where the source vibration levels may be 10 dB higher than on standard sections. In further environmental studies, these locations will be defined, at which time any potential land use conflicts can be identified and mitigated.

#### Extraordinary Mitigation Measures

Although the current results indicate that the general and specific mitigation measures are adequate to meet project noise and vibration criteria, SCRTD may discover situations where this is not the case during later design stages. In any such cases, the following extraordinary measures will be considered to supplement the general and specific measures:

Non-standard floating slab design;

Vibration isolation by blocking direct transmission of vibration in areas where the subway structure is unusually close to buildings and their foundations. This can be accomplished by using elastomer pads in intervening soil as special resilient elements;

Crossover relocation;

Rail system structure modification;

Minor shifts in horizontal or vertical alignment.

#### **2.4 Summary**

Table 15 presents a comparison of the numbers of structures where way-side noise and/or vibration criteria may be exceeded along the various alignments. The Pico (short), Pico (long), and Santa Monica Blvd alternatives each impact about 100 structures with no specific mitigation. The Olympic alternative would impact about 150 structures, while the Wilshire alternative would impact about 190 structures including about 90 affected by airborne noise.

Table 15 also shows the approximate total length of both sets of rails which might require vibration mitigation for each alignment alternative. The Santa Monica Blvd alignment would require the shortest length of specific mitigation measures of all the alternatives.

### 3.0 STATION IMPACTS

Because the noise of the rail vehicles emanates primarily from the interaction of the wheel on the rail, noise levels increase with operating speeds. For this reason, in the immediate vicinity of passenger stations where trains will be decelerating and accelerating, noise levels would be considerably less than would be expected if the rail vehicles were to pass through the station without stopping. Any potential noise impact resulting from a passenger station, then, arises from the increase in traffic flow in the vicinity of the station and station ventilation systems (addressed in section 5.0) rather than from rail operations.

A straightforward way of measuring this potential impact is to look at the increase in Leq or CNEL (see Reference 2, Attachment 1) resulting from projected increases in traffic flow. In reviewing such increases, however, the way in which people perceive changes in noise levels must be taken into account. Typically, most people cannot distinguish either individual noise levels or noise environments, which differ by 1 to 2 dB. A 3 dB difference in level or exposure is barely noticeable. On the other hand, a difference of 10 dB is usually perceived as a doubling in the loudness of a sound or in the noisiness of an environment.

In order for CNEL values to increase by as much as 3 dB, which would be barely noticeable, traffic volumes would have to increase by a factor of 2. Preliminary estimates of the changes in traffic flow in the vicinity of Metro Rail passenger stations

are relatively small, except in the vicinity of the Century City station. Constellation Ave traffic (relatively low at present) may double at the Metro station location, which would result in a barely noticeable increase in traffic noise levels (3 dB). This is not expected to cause an adverse impact because there are no sensitive land uses in the immediate area.

#### 4.0 IMPACTS OF CONSTRUCTION

Although construction activities are temporary in nature, the unusually high noise levels generated by many pieces of construction equipment are often a source of annoyance to people in the immediate vicinity of a construction site. Coupled with the fact that "temporary" may imply many months or even years, construction activities can be a major disruption for a variety of land uses. The vibration generated by construction activities can also be a serious concern, particularly in vibration-sensitive locations; however, at many construction sites the noise of construction is sufficiently severe that the vibration impact is considered a secondary problem.

Typical noise levels produced by construction equipment are listed in Table 16. The listed levels represent average values for typical present-day construction equipment without special noise-control features. Even with such features, which might reduce levels by several decibels, it is clear that the maximum level produced by a variety of construction equipment can be excessive when compared to the noise levels occurring in the environment or to noise level limits that might be contained within municipal ordinances, such as the 75 dB limit contained in the City of Los Angeles noise ordinance. In addition to careful planning and implementation of mitigation measures, it is often necessary to apply for variance to local noise ordinances in order for construction activity to proceed.

The criteria adopted by SCRTD for construction activity noise are fully explained in reference 2. Tables 17 and 18 summarize the criteria.

Minimizing construction noise in sensitive areas requires consideration of best available equipment during the construction planning stage. Such consideration includes a well-written set of noise specifications for subsequent inclusion in the construction documents to which contractors must comply. The noise specification should be written in the interest of complying with local noise ordinances and should include a set of guidelines to enable contractors to bid properly. These guidelines give the maximum emission levels for specific items of equipment. Quieted machinery is available to contractors, which can result in considerable reduction in construction noise.

Construction noise can also be reduced by planning and proper selection of the quietest way in which to perform an operation. One example, selected for this project, is the use of auger-piling rather than pile driving. An example of planning is proper placement of equipment to maximize the distance between noisy equipment and residential properties, such as off-site concrete mixing. Further, temporary noise barriers can be placed around some of the noisiest operations.

#### **5.0 ANCILLARY AND SUPPORT EQUIPMENT**

There is a potential for stationary noise impacts in the vicinity of ancillary equipment such as tunnel and/or station ventilation machinery and openings. The airborne noise criteria adopted by SCRTD for these sources (shown in Table 19) are more restrictive than typical city noise ordinance limits for residential areas. However, commercially available fan and duct silencing materials and enclosures can ensure compliance with the criteria.

Another source of stationary noise associated with the Metro Orange Line are the traction power substations and emergency

generators. The primary noise source in these installations are the tonal components generated by the electrical transformers. Because of the intrusive nature of the transformer tones, the criteria levels are reduced by 5 dB(A), as required by most noise ordinances. Again, commercially available sound panels, enclosures, and absorptive treatments can ensure compliance with the criteria levels.

REFERENCES

1. Towers, D. A. and Kurzweil, L. G. "Vibration Impact Assessment for the Proposed Houston High Capacity Transit Corridor Alternatives," BBN Report 5093, prepared for Houston Transit Consultants, July 1982.
2. "Technical Report Noise and Vibration Los Angeles Rail Rapid Transit Project," by WESTEC Services, Inc. for U.S. DOT UMTA and SCRTD, January 1983.

TABLE 1 CRITERIA FOR MAXIMUM AIRBORNE NOISE  
FROM METRO RAIL OPERATIONS

A. Residences and Buildings with Sleeping Areas:

		<u>Maximum Passby Airborne Noise Level, dBA</u>		
<u>Community Area Category</u>		<u>Single Family Dwellings</u>	<u>Multi- Family Dwellings</u>	<u>Commercial Buildings</u>
I	Low Density Residential	70	75	80
II	Average Residential	75	75	80
III	High Density Residential	75	80	85
IV	Commercial	80	80	85
V	Industrial/Highway	80	85	85

B: Special Function Buildings:

<u>Type of Building or Room</u>	<u>Maximum Passby Airborne Noise Level, dBA</u>
Amphitheaters	65
"Quiet" Outdoor Recreation Areas	70
Concert Halls, Radio and TV Studios	70
Churches, Theaters, Schools, Hospitals Museums, Libraries	75

Source: "Technical Report Noise and Vibration Los Angeles Rail  
Rapid Transit Project," WESTEC Services, Inc.,  
January 1983.

TABLE 2 CRITERIA FOR MAXIMUM GROUND-BORNE NOISE  
FROM METRO RAIL OPERATIONS

A. Residences and Buildings with Sleeping Areas:

		<u>Maximum Passby Ground-borne Noise Level, dBA</u>		
<u>Community Area Category</u>		<u>Single Family Dwellings</u>	<u>Multi- Family Dwellings</u>	<u>Commercial Buildings</u>
I	Low Density Residential	30	35	40
II	Average Residential	35	40	45
III	High Density Residential	35	40	45
IV	Commercial	40	45	45
V	Industrial/Highway	40	45	50

B: Special Function Buildings:

<u>Type of Building or Room</u>	<u>Maximum Passby Airborne Noise Level, dBA</u>
Concert Halls and TV Studios	25
Auditoriums and Music Rooms	30
Churches and Theaters	30-35
Hospital Sleeping Rooms	35-40
Courtsrooms	35
Schools and Libraries	35-40
University Buildings	35-40
Offices	35-45
Commercial Buildings	45-55

Source: "Technical Report Noise and Vibration Los Angeles Rail  
Rapid Transit Project," WESTEC Services, Inc.,  
January 1983.

TABLE 3 CRITERIA FOR MAXIMUM GROUND-BORNE VIBRATION  
FROM METRO RAIL OPERATIONS

A. Residences and Buildings with Sleeping Areas:

		Maximum Passby Ground-borne Vibration Velocity Level, <u>dB re: 1 micro in/sec</u>		
<u>Community Area Category</u>		<u>Single Family Dwellings</u>	<u>Multi- Family Dwellings</u>	<u>Commercial Buildings</u>
I	Low Density Residential	70	70	70
II	Average Residential	70	70	75
III	High Density Residential	70	75	75
IV	Commercial	70	75	75
V	Industrial/Highway	75	75	75

B: Special Function Buildings:

		Maximum Passby Ground-borne Vibration Velocity Level, <u>dB re: 1 micro in/sec</u>
Concert Halls and TV Studios		65
Auditoriums and Music Rooms		70
Churches and Theaters		70-75
Hospital Sleeping Rooms		70-75
Courtrooms		75
Schools and Libraries		75
University Buildings		75-80
Offices		75-80
Commercial Buildings		75-85
Vibration Sensitive Industrial or Research Laboratory		60-70

Source: "Technical Report Noise and Vibration Los Angeles Rail  
Rapid Transit Project," WESTEC Services, Inc.,  
January 1983.

TABLE 4 METRO RAIL NOISE AND VIBRATION SOURCE LEVELS

METRO RAIL PASSBY MAXIMUM: -----	Distance from Vehicle Path Centerline, ft.	
	50 -----	100 -----
	For speeds of 30 mph/50 mph	
Airborne Noise Level, dBA	78/85	72/79
Ground-borne Noise Level, dBA	36/40	29/32
Ground-borne Vibration Velocity Level in dB re: 1 micro in/sec		
In Subway	54/58	50/53
Aerial	53/57	51/55

Source: Acoustical Analysis Associates, Inc.

**TABLE 5 ESTIMATED NUMBERS OF STRUCTURES EXPOSED TO METRO RAIL PASSBY  
GROUND-BORNE OR AIRBORNE NOISE LEVELS EXCEEDING CRITERIA  
BASELINE CASE - NO MITIGATION**

ALIGNMENT STATION NUMBERS	RESIDENTIAL		OTHERS:						TOTAL
	SGL	MF	COMM	THEATER	CHURCH	SCHOOL	MUSEUM	STUDIO	
WILSHIRE ALIGNMENT									
100-134									0
134-160				1	2				3
160-192			14 *				2 *		16
192-240			29 *						29
240-292			44 *					1 *	45
292-330				1					1
330-362				1					1
362-400									0
400-425	15	14				1			30
425-455									0
455-475	18	8							26
475-482									0
482-520	35	4							39
520-548				2					2
TOTALS	68	26	87	5	2	3	1	0	192

\* Airborne Noise Criterion Exceeded - Aerial portion of Alignment.

Source: Acoustical Analysis Associates, Inc.

**TABLE 6 ESTIMATED NUMBERS OF STRUCTURES EXPOSED TO METRO RAIL PASSBY  
GROUND-BORNE OR AIRBORNE NOISE LEVELS EXCEEDING CRITERIA  
BASELINE CASE - NO MITIGATION**

ALIGNMENT STATION NUMBERS	RESIDENTIAL		COMM	OTHERS:				STUDIO	TOTAL
	SGL	MF		THEATER	CHURCH	SCHOOL	MUSEUM		
SHORT PICO ALIGNMENT									
100-134									0
134-152									0
152-190									0
190-208									0
208-240									0
240-293									0
293-320									0
320-340									0
REJOINS WILSHIRE ALIGNMENT									
292-330				1					1
330-362				1					1
362-400									0
400-425	15	14				1			30
425-455									0
430	18	8							26
475-482									0
482-520	35	4							39
520-548				2					2
TOTALS	68	26	0	4	0	1	0	0	99

Source: Acoustical Analysis Associates, Inc.

**TABLE 7 ESTIMATED NUMBERS OF STRUCTURES EXPOSED TO METRO RAIL PASSBY  
GROUND-BORNE OR AIRBORNE NOISE LEVELS EXCEEDING CRITERIA  
BASELINE CASE - NO MITIGATION**

ALIGNMENT STATION NUMBERS	RESIDENTIAL		COMM	OTHERS: THEATER	CHURCH	SCHOOL	MUSEUM	STUDIO	TOTAL
	SGL	MF							
LONG PICO ALIGNMENT									
100-134									0
134-152									0
152-190									0
190-208									0
208-230									0
230-280					1				1
280-290									0
290-320								1	1
320-350					1				1
350-390					2				2
390-405									0
405-423									0
423-450	23	11							34
REJOINS WILSHIRE ALIGNMENT									
425-455									0
455-475	18	8							26
475-482									0
482-520	35	4							39
520-548				2					2
TOTALS	76	23	0	2	4	0	0	1	106

Source: Acoustical Analysis Associates, Inc.

**TABLE 8 ESTIMATED NUMBERS OF STRUCTURES EXPOSED TO METRO RAIL PASSBY  
GROUND-BORNE OR AIRBORNE NOISE LEVELS EXCEEDING CRITERIA  
BASELINE CASE - NO MITIGATION**

ALIGNMENT STATION NUMBERS	RESIDENTIAL		COMM	OTHERS:					TOTAL
	SGL	MF		THEATER	CHURCH	SCHOOL	MUSEUM	STUDIO	
SHORT OLYMPIC ALIGNMENT									
100-114									0
114-140	8	11			1	1			21
140-178	18								18
178-222									0
222-240		8							8
240-270									0
270-297	5								5
REJOINS SHORT PICO ALIGNMENT									
320-340									0
REJOINS WILSHIRE ALIGNMENT									
292-330				1					1
330-362				1					1
362-400									0
400-425	15	14				1			30
425-455									0
455-475	18	8							26
475-482									0
482-520	35	4							39
520-548				2					2
TOTALS	99	45	0	4	1	2	0	0	151

Source: Acoustical Analysis Associates, Inc.

**TABLE 9 ESTIMATED NUMBERS OF STRUCTURES EXPOSED TO METRO RAIL PASSBY  
GROUND-BORNE OR AIRBORNE NOISE LEVELS EXCEEDING CRITERIA  
BASELINE CASE - NO MITIGATION**

ALIGNMENT STATION NUMBERS	RESIDENTIAL		COMM	OTHERS:					TOTAL
	SGL	MF		THEATER	CHURCH	SCHOOL	MUSEUM	STUDIO	
SANTA MONICA BLVD ALIGNMENT									
100-120				2					2
120-180	9	32							41
180-210	5	16				1			22
210-240									0
240-270	2	1							3
270-330									0
330-365									0
365-392									0
392-418									0
418-463	35								35
463-489				2					2
TOTALS	51	49	0	4	1	0	0	0	105

Source: Acoustical Analysis Associates, Inc.

TABLE 10 METRO RAIL TRANSITIONAL ANALYSIS - ESTIMATED LENGTH OF SPECIFIC NOISE AND VIBRATION MITIGATION MEASURES

ALIGNMENT STATION NUMBERS	LENGTH, FEET	
	SOUNDWALLS	RESILIENT FASTENERS OR TIE SUPPORTS
-----		
WILSHIRE ALIGNMENT		
100-134		
134-160		600
160-192	3200	
192-240	4800	
240-292	5200	
292-330		250
330-362		150
362-400		
400-425		2500
425-455		200
455-475		2000
475-482		300
482-520		3800
520-548		500
TOTALS	13200	10300

Source: Acoustical Analysis Associates, Inc.

TABLE 11 METRO RAIL TRANSITIONAL ANALYSIS - ESTIMATED LENGTH OF SPECIFIC NOISE AND VIBRATION MITIGATION MEASURES

ALIGNMENT STATION NUMBERS	LENGTH, FEET	
	SOUNDWALLS	RESILIENT FASTENERS OR TIE SUPPORTS
-----		
SHORT PICO ALIGNMENT		
100-134		
134-152		
152-190		
190-208		
208-240		
240-293		
293-320		
320-340		
REJOINS WILSHIRE ALIGNMENT		
292-330		250
330-362		150
362-400		150
400-425		2500
425-455		200
430		2000
475-482		300
482-520		3800
520-548		500
TOTALS	0	9850

Source: Acoustical Analysis Associates, Inc.

TABLE 12 METRO RAIL TRANSITIONAL ANALYSIS - ESTIMATED LENGTH OF SPECIFIC NOISE AND VIBRATION MITIGATION MEASURES

ALIGNMENT STATION NUMBERS	LENGTH, FEET	
	SOUNDWALLS	RESILIENT FASTENERS OR TIE SUPPORTS
LONG PICO ALIGNMENT		
100-134		
134-152		
152-190		
190-208		
208-230		
230-280		100
280-290		
290-320		300
320-350		150
350-390		600
390-405		
405-423		
423-450		3700
REJOINS WILSHIRE ALIGNMENT		
425-455		200
455-475		2000
475-482		300
482-520		3800
520-548		500
TOTALS	0	11650

Source: Acoustical Analysis Associates, Inc.

TABLE 13 METRO RAIL TRANSITIONAL ANALYSIS - ESTIMATED LENGTH OF SPECIFIC NOISE AND VIBRATION MITIGATION MEASURES

ALIGNMENT STATION NUMBERS	LENGTH, FEET	
	SOUNDWALLS	RESILIENT FASTENERS OR TIE SUPPORTS
SHORT OLYMPIC ALIGNMENT		
100-114		
114-140		2600
140-178		2100
178-222		
222-240		1600
240-270		
270-297		350
REJOINS SHORT PICO ALIGNMENT		
320-340		
REJOINS WILSHIRE ALIGNMENT		
292-330		250
330-362		150
362-400		150
400-425		2500
425-455		200
455-475		2000
475-482		300
482-520		3800
520-548		500
TOTALS	0	10200

Source: Acoustical Analysis Associates, Inc.

TABLE 14 METRO RAIL TRANSITIONAL ANALYSIS - ESTIMATED LENGTH OF SPECIFIC NOISE AND VIBRATION MITIGATION MEASURES

ALIGNMENT STATION NUMBERS	LENGTH, FEET	
	SOUNDWALLS	RESILIENT FASTENERS OR TIE SUPPORTS
-----		
SANTA MONICA BLVD ALIGNMENT		
100-120		350
120-180		2900
180-210		1700
210-240		
240-270		400
270-330		
330-365		
365-392		
392-418		
418-463		3800
463-489		500
TOTALS	0	9650

Source: Acoustical Analysis Associates, Inc.

**TABLE 15 SUMMARY OF NUMBERS OF STRUCTURES WHERE UNMITIGATED METRO RAIL  
PASS-BY LEVELS EXCEED NOISE AND/OR VIBRATION CRITERIA  
AND LENGTH OF ROUTE REQUIRING MITIGATION**

ALIGNMENT	NUMBERS OF STRUCTURES IMPACTED								TOTAL	LENGTH OF SUBWAY TRACK REQUIRING MITIGATIONS (FT)
	RESIDENTIAL SGL	RESIDENTIAL MF	COMM	OTHERS: THEATER	CHURCH	SCHOOL	MUSEUM	STUDIO		
-----										
WILSHIRE ALIGNMENT										
TOTALS	68	26	0	5	2	1	0	0	192	10300
(AERIAL SECTION)			(87)			(2)	(1)			(13200)
SHORT PICO ALIGNMENT										
TOTALS	68	26	0	4	0	1	0	0	99	9850
LONG PICO ALIGNMENT										
TOTALS	76	23	0	2	4	0	0	1	106	11650
SHORT OLYMPIC ALIGNMENT										
TOTALS	99	45	0	4	1	2	0	0	151	10200
SANTA MONICA BLVD ALIGNMENT										
TOTALS	51	49	0	4	1	0	0	0	105	9650

Source: Acoustical Analysis Associates, Inc.

TABLE 16 MAXIMUM NOISE LEVELS FOR CONSTRUCTION  
EQUIPMENT

<u>Equipment</u>	<u>Maximum A-Level at 50 feet, dB</u>
Air Compressor	81
Backhoe	85
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Derrick Crane	88
Mobile Crane	83
Dozer	87
Generator	78
Grader	85
Jackhammer	88
Loader	84
Paver	89
Piledriver	101
Pneumatic Tool	85
Pump	76
Rock Driller	98
Roller	80
Saw	78
Scraper	88
Shovel	82
Truck	88

---

Source: "Power Plant Construction Noise Guide," BBN  
Report 3321 for ESEERCO, May 1977.

TABLE 17 CRITERIA FOR CONTINUOUS CONSTRUCTION NOISE

<u>Affected Structure or Area</u>	<u>Maximum Allowable Continuous Noise Level, dBA</u>	
	<u>Daytime</u>	<u>Nighttime</u>
Residential		
Single Family Residence	60	50
Along an arterial or in multi-family residential areas, including hospitals	65	55
In semi-residential/commercial areas, including hotels	70	60
Commercial		<u>At All Times</u>
In semi-residential/commercial areas, including schools		70
In commercial areas with no nighttime residency		75
Industrial		
All locations		80

Source: "Technical Report Noise and Vibration Los Angeles Rail Rapid Transit Project," WESTEC Services, Inc., January 1983.

TABLE 18 CRITERIA FOR INTERMITTENT CONSTRUCTION NOISE

<u>Affected Structure or Area</u>	<u>Maximum Allowable Intermittent Noise Level, dBA</u>	
	<u>Daytime</u>	<u>Nighttime</u>
Residential		
Single Family Residence	75	60
Along an arterial or in multi-family residential areas, including hospitals	80	65
In semi-residential/commercial areas, including hotels	85	70
Commercial		<u>At All Times</u>
In semi-residential/commercial areas, including schools		85
In commercial areas with no nighttime residency		85
Industrial		
All locations		90

Source: "Technical Report Noise and Vibration Los Angeles Rail Rapid Transit Project," WESTEC Services, Inc., January 1983.

TABLE 19 CRITERIA FOR MAXIMUM AIRBORNE NOISE FROM  
TRANSIT SYSTEM FAN AND VENT SHAFTS

		<u>Maximum Noise Level, dBA</u>	
<u>Community Area Category</u>		<u>Vent Shaft</u>	<u>Fan Shaft</u>
I	Low Density Residential	50	40
II	Average Residential	55	45
III	High Density Residential	60	50
IV	Commercial	65	55
V	Industrial/Highway	75	65

Note: The criteria are to be applied at a distance of 50 feet from the shaft outlet or shall be applied at the setback line of the nearest building or occupied area, whichever is closer.

Source: "Technical Report Noise and Vibration Los Angeles Rail Rapid Transit Project," WESTEC Services, Inc., January 1983.



***Appendix C***  
***Historic Resources Inventory and***  
***Survey Forms***



The DPR forms in Appendix C provide a historic and potentially historic structure inventory. This appendix contains official documentation by the State Historic Preservation Office which dates and ranks buildings and other cultural resources to determine their age and significance. The buildings in this inventory have been identified by previous historic/cultural resource surveys.

HISTORIC RESOURCES INVENTORY

Ser. No. 0213-100  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 2 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A \_\_\_\_\_ B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

1. Common name: Beverly Gardens
2. Historic name: Beverly Gardens
3. Street or rural address: North side of Santa Monica Boulevard/ North side of Wilshire Bl.  
City Beverly Hills Zip 90210 County Los Angeles
4. Parcel number: \_\_\_\_\_
5. Present Owner: City of Beverly Hills Address: 450 N. Crescent Dr.  
City Beverly Hills Zip 90210 Ownership is: Public  Private
6. Present Use: Park Original use: Park

DESCRIPTION

- 7a. Architectural style:
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

See attached Request for Determination of Eligibility Report.

Attach Photo(s) Here

See attached.

8. Construction date: 1907  
Estimated \_\_\_\_\_ Factual
9. Architect \_\_\_\_\_  
Cook; Wilbur C.
10. Builder \_\_\_\_\_  
Unknown
11. Approx. property size (in feet)  
Frontage \_\_\_\_\_ Depth \_\_\_\_\_  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
\_\_\_\_\_

### HISTORIC RESOURCES INVENTORY

Ser. No. 0213-90  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 41-220600-370080 B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

#### IDENTIFICATION

1. Common name: \_\_\_\_\_
2. Historic name: Chamber of Commerce Building
3. Street or rural address: 9441 Santa Monica Boulevard  
City Beverly Hills Zip 90210 County Los Angeles
4. Parcel number: 4343-010-004
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Retail/office Original use: Retail/office

#### DESCRIPTION

- 7a. Architectural style: Spanish
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

This two story commercial building at the northeast corner of Beverly Drive and Santa Monica Boulevard is Spanish in style. Flat-roofed, of brick and concrete construction, and stucco-sided, the building is given a horizontal emphasis by a molded cornice and by two stringcourses which frame the second story. Clustered in three's and four's on the south elevation and banded across the smaller west elevation, the second floor windows are recessed, flat-headed, multi-paned casements with transoms. The principal entry to the building is centered on the south elevation and articulated by a massive arch with radiating voussoirs. Four display windows of differing sizes are located on each side of the entry. Three smaller doorways are set into flat-headed and Mayan arched openings. Impost moldings characterize all of the arches. Three more storefronts are located on the west elevation. Most of the windows have had their transoms enclosed or painted. The most notable feature of the building is the treatment of the southwest and northwest corners. Both are cut away, creating elaborately molded triangular overhangs. Besides the transoms, the relatively minor alterations include a brick dado applied to a couple of the storefronts.



3. Construction date: 1928  
Estimated \_\_\_\_\_ Factual X
9. Architect Clyde Duval
10. Builder Lung & Bergstrom
11. Approx. property size (in feet)  
Frontage 209 Depth 40  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

SERIAL NUMBER: 0213-46-5

UTM: A 11-370060-3769500  
B 11-370060-3769640  
C 11-369660-3769860  
D 11-369880-3769460

CONTINUATION SHEET: Beverly Hills Schools--Thematic Grouping

COMMON NAME: Beverly Hills High School

HISTORIC NAME: Beverly Hills High School

ADDRESS: 0241 Moreno Dr. South

PARCEL NUMBER:

CONSTRUCTION DATE: 1927/1930-40/1956-57/1959-60/1967-70

ORIGINAL OWNER: Los Angeles Unified School District

ARCHITECT: Farquhar; Robert D./Stile O. Clements/Taylor & Taylor/Allison & Rible/  
Honnold & Rex/Rowland H. Crawford

BUILDER: Schlueter; H.W./J.K. Thomas/Gates & Huntley/Baruch Corp./Arthur Pinnes/  
Pallisgaard Const. Co./Howard Dunn/Montgomery Ross Fisher

DESCRIPTION:

Sited on a gentle rise at the western edge of the City, Beverly Hills High School occupies a large, multi-building campus. The main structure, which faces Moreno Drive, was built in 1927 in a dignified Mediterranean style. It is two and three stories, of concrete construction, and capped by tiled hip roofs. A three story bell and clock tower, offset to the north, anchors the asymmetrically massed building. Typical stylistic details include stringcourses which define a taller first floor and quoining at the edges of each building block. An elaborately rusticated entry, topped by a tablet with the school's name and by a pediment, sits at the head of the stairs which lead to the building from the curb. Other entries are also classically, if more plainly, treated. Additional notable features include loggias, arcades, denticulated cornices, wrought iron railings, and dormer vents. Windows are mostly arranged in threes and fours, and have had their transoms enclosed and sash replaced.

In 1939-1940, a gymnasium and swimming facility was added to the campus. Remarkable for its elliptical shape, vaulted roof, and Streamline Moderne styling, the structure was partially funded by a WPA grant. Streamlining is particularly evident in the one story, rectangular entrance pavilion, which has rounded corners, a flat roof, and horizontal banding. Three large multi-paned windows are set into the facade.

Other buildings in contemporary styles were added in 1956-1957 (Business Education), 1959-1960 (Science), and 1967-1970 (new building and addition to main building). However, due to the location of the newer additions on the east and north, the original vista of the school, set behind broad, terraced lawns, has been preserved.

**HISTORIC RESOURCES INVENTORY**

**IDENTIFICATION**

1. Common name: Beverly Hills Porsche-Audi DEMO!
2. Historic name: Clock Market
3. Street or rural address: 8423 Wilshire Blvd.  
 City Beverly Hills Zip 90211 County Los Angeles
4. Parcel number: 4334-022-060
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
 City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Auto dealership Original use: Market

**DESCRIPTION**

- 7a. Architectural style: Spanish Colonial Revival
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

The Clock Market is an outstanding example of a commercial building type developed in the 1920s in response to the new automobile-oriented lifestyle. It is a one and two story L-shaped building, situated on the northeast corner of Wilshire Boulevard and Hamilton Drive. Of stone tile construction, it is sheathed in stucco and its gabled roof covered with clay tile as was appropriate for the Spanish style. The two story portion of the structure, at the south end of the east wing, is dominated by the square clock tower that gave the building its name. Typical Spanish characteristics are displayed, including arched entries on the south and west, balconies of stucco and iron, casement windows separated by pilasters, clay tile roof vents, and iron grilles. Other distinctive features are a smaller, corbelled "tower" on the Wilshire facade, an entry embellished with plaster decoration on the west, and a cut away corner with a scalloped overhang. The two story portion of the building is largely intact. Some alterations to the one story wings to the north and west were made in 1939 to adapt the market, with fold-back doors, to an automobile showroom and (see continuation sheet)



8. Construction date: 1929  
 Estimated \_\_\_\_\_ Factual X
9. Architect C.W. Wilson & Sons
10. Builder C.W. Wilson & Sons
11. Approx. property size (in feet)  
 Frontage 130 Depth 170  
 or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 4 SHL. \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 11-303220-7069960 B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

### HISTORIC RESOURCES INVENTORY

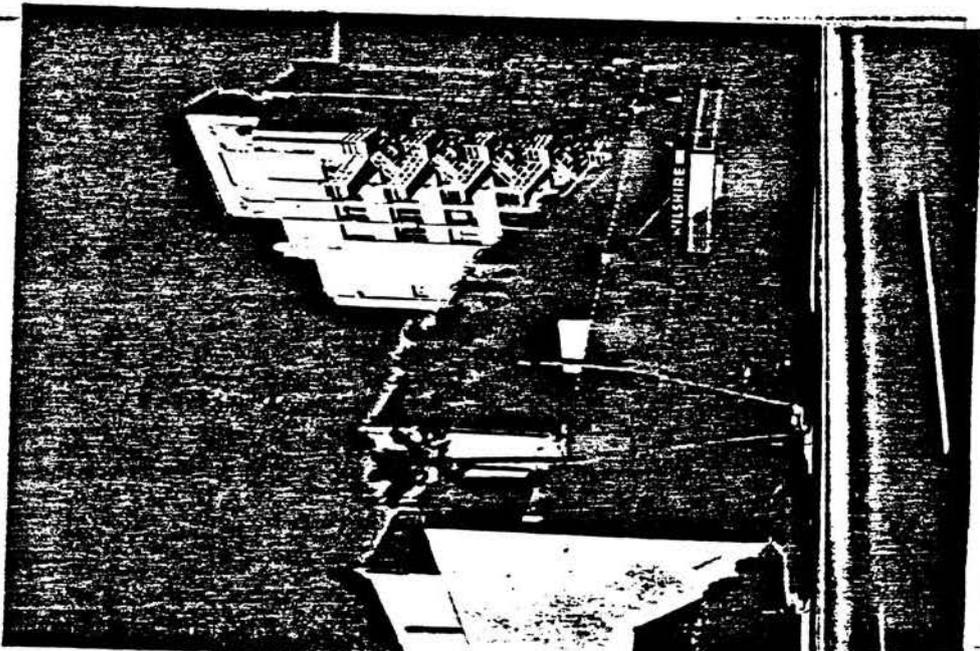
#### IDENTIFICATION

1. Common name: Wilshire Theatre
2. Historic name: Fox Wilshire Theatre
3. Street or rural address: 8444 Wilshire Blvd.  
City Beverly Hills Zip 90211 County Los Angeles
4. Parcel number: 4333-029-018
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Theatre Original use: Theatre

#### DESCRIPTION

- 7a. Architectural style: Art Deco
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

Located at the southeast corner of Wilshire Boulevard and Hamilton Drive, the Fox Wilshire Theatre is an eight story theatre, retail, and office building in the Art Deco style. The reinforced concrete structure is asymmetrically massed, with the six story office tower located at the corner and a two story base containing the theatre entrance, stores, and some offices extending at an angle along Wilshire Boulevard. Stepped and reeded piers establish strongly vertical lines, apparent in the piers and spandrels. Characteristic zig-zagging, both in profile and as shallowly carved moldings, is extensively used. Even the transom windows of the ground floor feature chevron-patterned paning. Stylized decoration in flat-relief is also used, to cap piers and adorn the elevator shaft penthouse. A firescape on the east elevation seems to echo the jagged lines of the design. Metal casements with transoms appear in the second through eighth stories. Although the street level has been altered, specifically the theatre marquee and the angled corner storefront, the east two storefronts are relatively intact.



8. Construction date: 1930  
Estimated \_\_\_\_\_ Factual X
9. Architect S. Charles Lee
10. Builder Unknown
11. Approx. property size (in feet)  
Frontage 94 Depth 142  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

SERIAL NUMBER: 0213-94-1

UTM: 11-372960-3770060

CONTINUATION SHEET: Beverly Hills Neighborhood Theatres--Thematic Grouping

COMMON NAME: Fine Arts Theatre

HISTORIC NAME: Regina Wilshire Theatre

ADDRESS: 8554 Wilshire Boulevard

PARCEL NUMBER: 4333-018-030

CONSTRUCTION DATE: 1936

ORIGINAL OWNER: De Bell; Joseph

ARCHITECT: Priteca; B. Marcus

BUILDER: Priteca; B. Marcus

DESCRIPTION:

Like many smaller movie houses from the twenties and later, the design of the Regina Wilshire (Fine Arts) Theatre is dominated by its marquee and tower. A response to the automobile culture, the stepped tower keynotes an Art Deco scheme. Shallow setbacks, reeding, and a strongly geometric pattern articulate the tower and the parapet to either side of it. Below the parapet, the one story, stuccoed structure contains two storefronts and the centered theatre entrance. Reeded piers anchor the corners of the building while a horizontally grooved band tops the openings. The storefronts have been re-glazed and the theatre lobby enclosed, but the marquee, with the exception of the name, is original. It is accented by miniature "pilasters" highlighted by neon lighting.



SERIAL NUMBER: 0213-94-2

UTM: 11-371930-3770240

CONTINUATION SHEET: Beverly Hills Neighborhood Theatres—Thematic Grouping

COMMON NAME: Music Hall Theatre

HISTORIC NAME: Elite Theatre

ADDRESS: 9036 Wilshire Blvd.

PARCEL NUMBER: 4331-023-006

CONSTRUCTION DATE: 1936

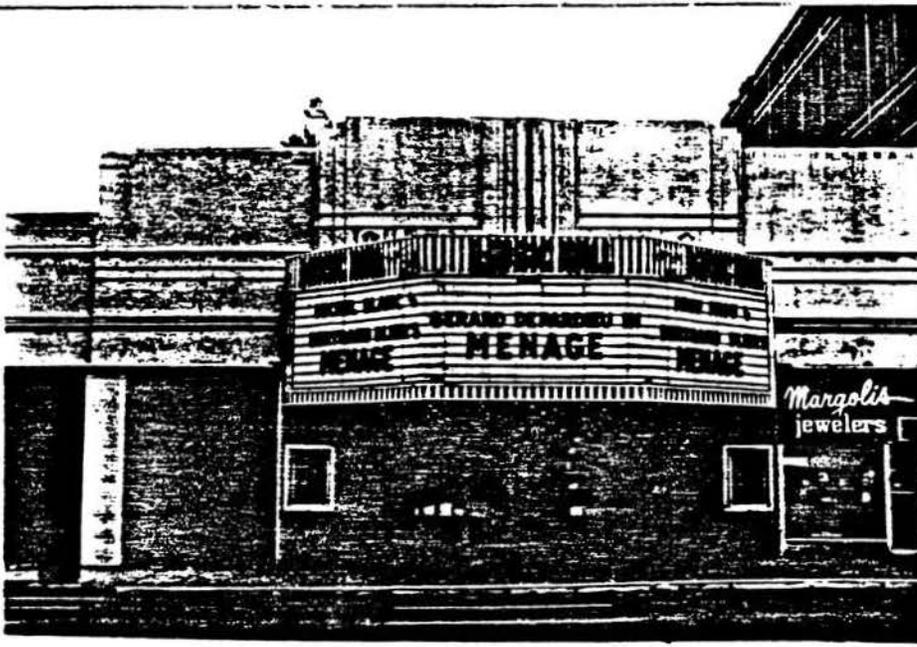
ORIGINAL OWNER: Schmid; John

ARCHITECT: Verity; Wilfred B.

BUILDER: Schloat; G. Warren

DESCRIPTION:

The Elite (now Music Hall) Theatre is a one story stucco-sheathed and flat-roofed structure in the Art Deco style. Two storefronts, the larger facing the Wilshire and Wetherly intersection, the smaller, west of the theatre entry, are incorporated into this commercial building. The parapet is the focal point for the design and is banded horizontally by decorative moldings, shallow changes in surface plane, and grooving. Reeding finishes its upper edge. A decorative frieze above the theatre marquee is bisected by a reeded pier that originally rose to a stepped spire. Although this element has been removed, a second "tower" with stepped sides and a scrolled base, tops the corner entry to the storefront. Other alterations include the removal of the original marquee and ticket office and the re-glazing of the storefronts.



### HISTORIC RESOURCES INVENTORY

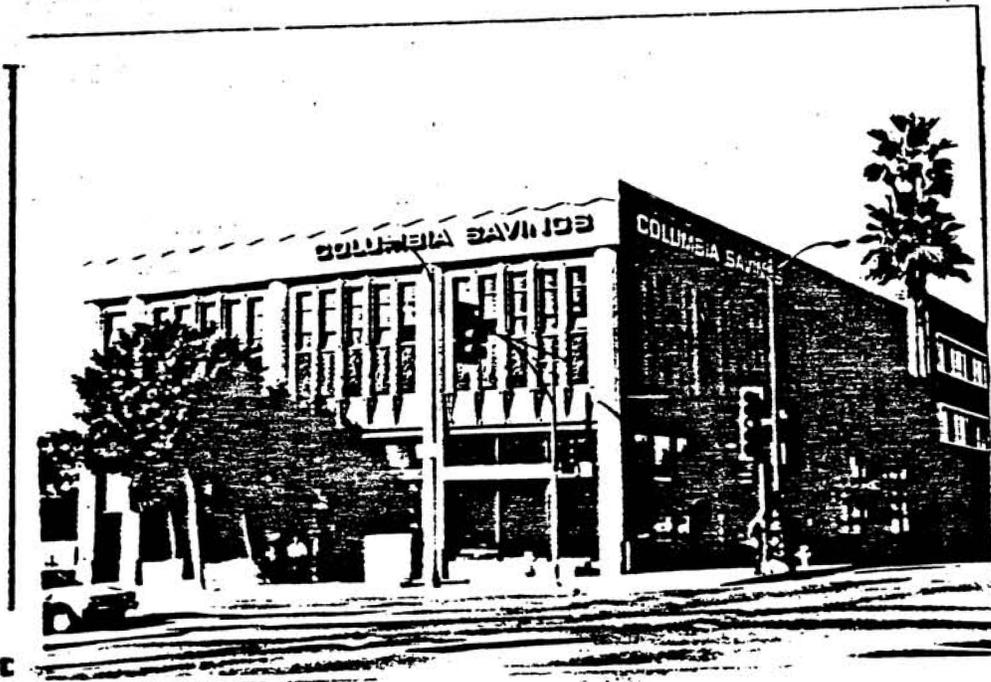
#### IDENTIFICATION

1. Common name: Columbia Savings
2. Historic name: \_\_\_\_\_
3. Street or rural address: 8810 Wilshire Blvd.  
City Beverly Hills Zip 90211 County Los Angeles
4. Parcel number: 4333-008-002
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Bank/office Original use: Retail/office

#### DESCRIPTION

- 7a. Architectural style: Art Deco
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

Located at the southwest corner of Wilshire and Robertson Boulevards, this two story commercial building is Art Deco in style. Flat-roofed and of stucco-sheathed brick construction, the structure is organized into five identical bays on Wilshire and three on Robertson. At the southeast corner of the building, an additional bay, much smaller in size, contains the entry to the upper store offices. Rounded and fluted piers, heavier at the ends, extend uninterrupted to a frieze zone to define the bays. While the ground floor openings have been reglazed, the pattern of display windows and transoms suggests the original configuration. The upper stories are intact, with ornamented pilasters and decorated spandrels framing five metal sash in each bay. An unadorned frieze bands the building and is edged by a zig-zag cornice. Although the ground floor is altered and the stucco sheathing is re-textured, the building faithfully preserves the verticality and the ornamentation of its Art Deco design.



8. Construction date: 1929  
Estimated \_\_\_\_\_ Factual X
9. Architect None
10. Builder The Austin Co. of California
11. Approx. property size (in feet)  
Frontage 120 Depth 158  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

HISTORIC RESOURCES INVENTORY

Ser. No. 0213-96  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 3 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 11-351170-3900240 B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

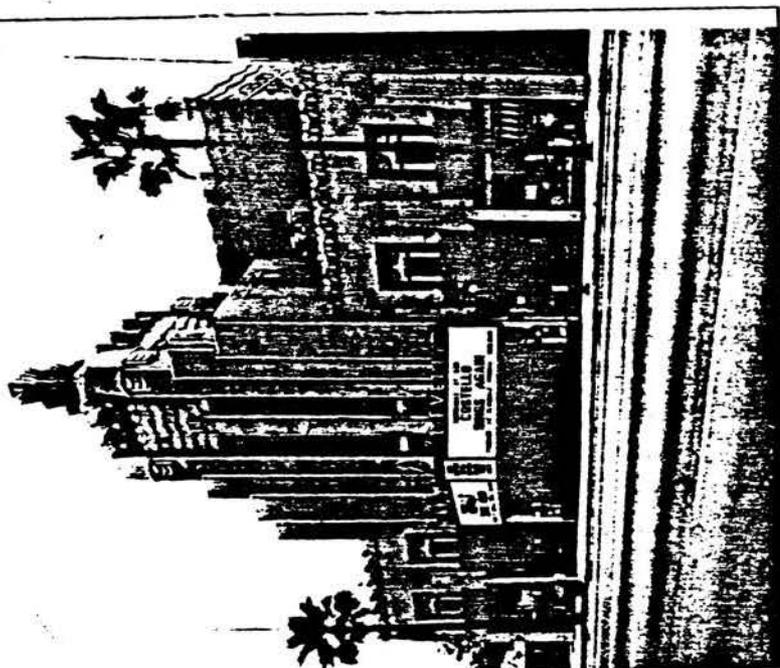
1. Common name: Beverly Theatre
2. Historic name: Warner Brothers Theatre
3. Street or rural address: 9400 Wilshire Boulevard  
City Beverly Hills Zip 90212 County Los Angeles
4. Parcel number: 4331-001-002
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Theatre Original use: Theatre

DEMO'D

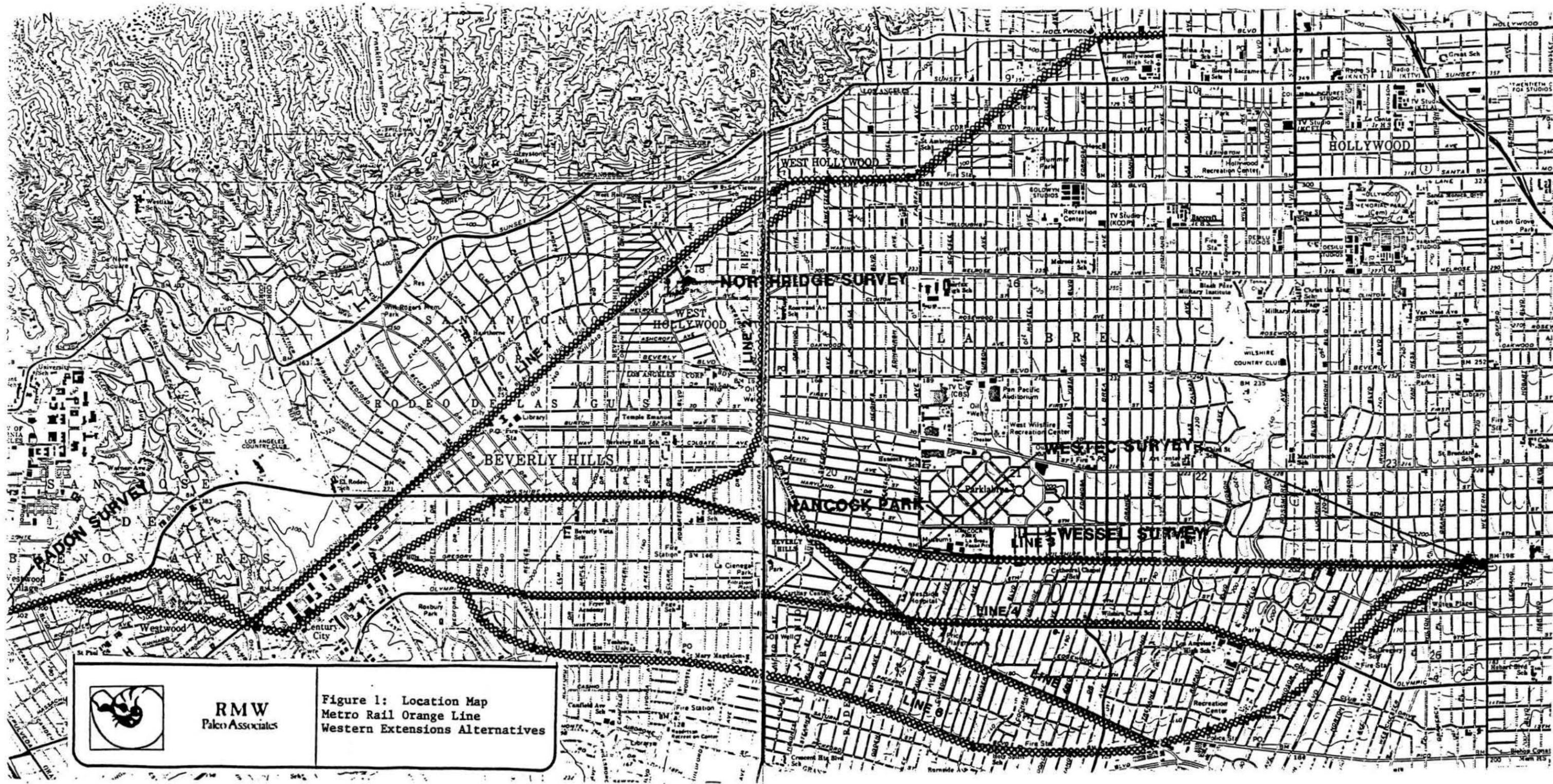
DESCRIPTION

- 7a. Architectural style: Art Deco
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

Recently restored, the Warner Brothers Beverly Hills Theatre (The Beverly) is an outstanding example of Art Deco theatre design. A central tower, which once culminated in a spire, keynotes the design of the reinforced concrete structure. Stepped, fluted, and smooth piers frame the tower, which rises above the altered theatre entrance and the replaced marquee. Two vertical shafts, containing oriel windows at the bottom surmounted by decoratively patterned screens, lead up to a frieze zone embellished with a chevron with lozenge motif. A shield and leaf molding in high relief and the tiered base of the spire crown the tower. To either side of the tower two storefronts are topped by bays filled by ornately framed metal casement windows. Reeded piers with volute and sunburst capitals divide the bays. The storefronts are unaltered, metal-framed, and contain display windows over tiled bases and transoms over glazed doors. Chevron and floral motifs are used in the window surrounds, spandrels, storefront frames, tile, and the cornice that circles the second story. A parapet with a chevron pattern wraps the auditorium. Although more utilitarian, the



8. Construction date: 1930  
Estimated \_\_\_\_\_ Factual X
9. Architect E. Marcus Priteca
10. Builder McDonald & Driver
11. Approx. property size (in feet)  
Frontage 104 Depth 158  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986



**RMW**  
Palco Associates

Figure 1: Location Map  
Metro Rail Orange Line  
Western Extensions Alternatives

to high potential, because undiscovered pockets of fossiliferous tar sand may be present in the area (Figure 2). Thus, the area is more likely to contain fossil remains. The Fernando Formation and Puente Formation have a moderate paleontological sensitivity. Recent alluvial deposits are too young geologically to contain fossils and have no paleontological sensitivity. Based on the past production of fossils in the vicinity, the Pico (Short) Alternative has a moderate paleontological sensitivity.

#### The Pico (Long) Alternative

The Pico (Long) Alternative will require excavation of Recent alluvial deposits, Pleistocene age rock units, the Fernando Formation, and the Puente Formation. The Pleistocene deposits have a moderate paleontological sensitivity. The Fernando Formation and Puente Formation have a moderate paleontological sensitivity. Recent alluvial deposits are too young geologically to contain fossils and have no paleontological sensitivity. Based on the past production of fossils in the vicinity, the Pico (Long) Alternative has a moderate paleontological sensitivity.

#### Discussion of Impacts

The impacts on paleontological resources will come from the excavations for tunnels, stations, support facilities, or footings for pilings supporting the aerial rails. The potential impacts on the paleontological resources for all the alternatives is moderate, except for the aerial segment of the Wilshire Alternative which has a high potential. As a result none of the alternatives are sufficiently sensitive for paleontological resources to exclude them from consideration.

The excavations for any of the alternatives are likely to expose fossil remains, however unless proper mitigation measures are implemented these remains will be destroyed. The destruction of these remains would represent an adverse impact on the region's paleontological resources. The Memorandum of Agreement

among ACHP, SHPO, UMTA, and SCRTRD provides a framework for the development of mitigation measures.

As stated at the beginning of this section it is very difficult to determine the significance of fossils within the study area. It is assumed that most fossils have the potential to make a significant contribution to the region's paleontological data base. Once a deposit is exposed it's significance can better be determined. Therefore, it is useful to sample deposits as they become exposed.

#### MITIGATION MEASURES

The Memorandum of Agreement among ACHP, SHPO, UMTA, and SCRTRD (MOA) was developed for earlier Metro Rail studies but the provisions in it will satisfy the mitigation measures needed for the Western Extension of Metro Rail. The MOA provides a framework for the development of specific mitigation measures when a preferred alternative is selected. This framework provides for an Identification Study and a Data Recovery Program.

The Identification Study should be conducted well in advance of construction, especially along the aerial segment of the Wilshire alternative where footings for pilings may encounter significant RanchoLabrean deposits. In this alternative the identification study should concentrate on areas of high paleontological sensitivity and may be conducted with foundation testing studies. Along the remainder of the Wilshire Alternative and other alternatives the objectives of the identification studies should be to determine the distribution of the various rock units in the subsurface and to determine if fossiliferous deposits are present within the alternative.

The specific recommendations of a Data Recovery Program will depend entirely on the alternative selected. The following are general measures that should be included in the Data Recovery Program to reduce the adverse impacts of the construction of any of the alternatives to acceptable levels. These measures have protected the region's paleontological resources, while allowing the timely completion of the many projects throughout southern California.

deposits, the Pleistocene rock units, the Fernando Formation, and the Puente Formation. The record of fossil production in these rock units indicates a moderate paleontological sensitivity. Construction of these two segments will have a moderate impact on the paleontological resources.

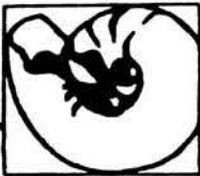
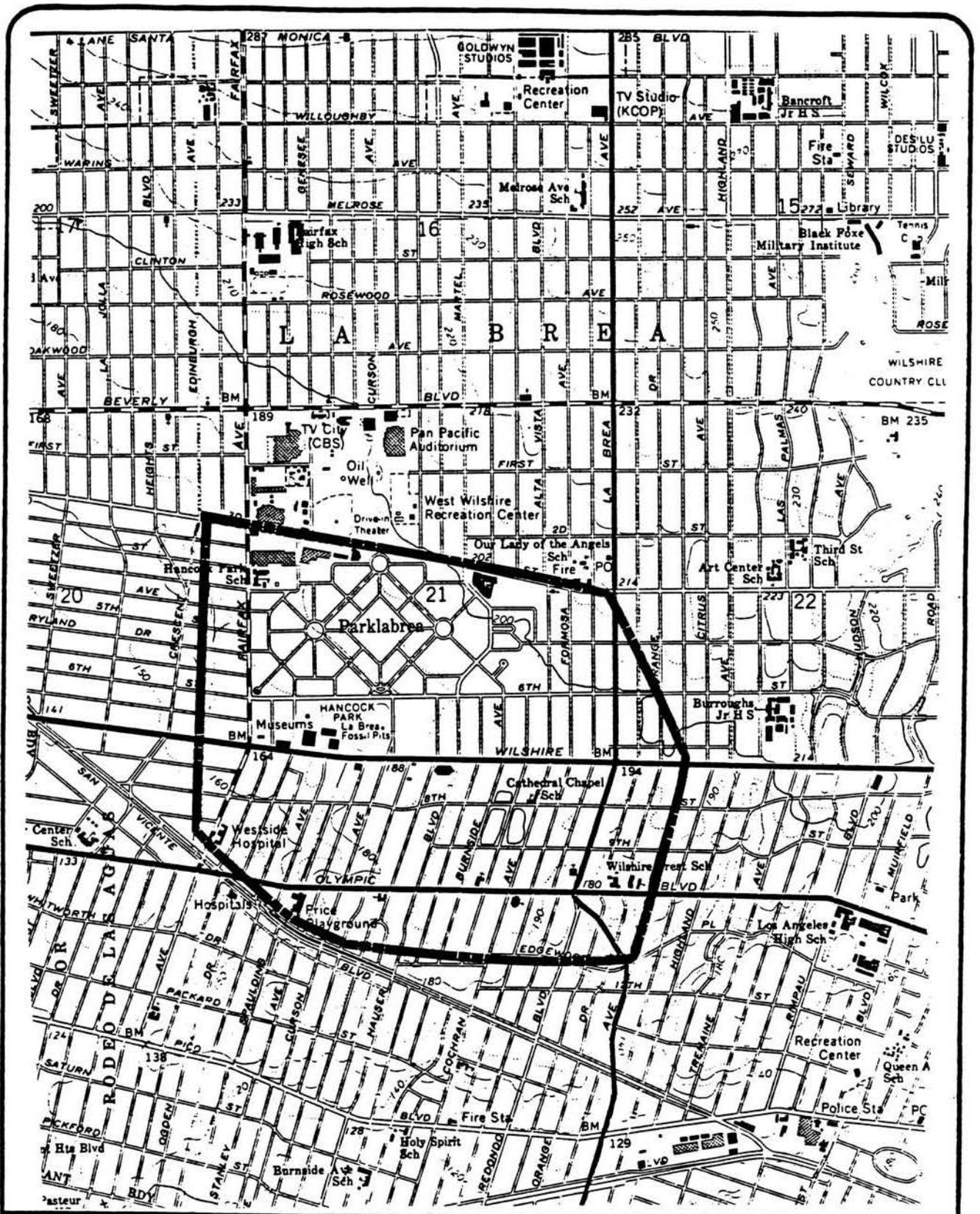
Within the aerial segment it is well documented that the Pleistocene age deposits contain abundant significant fossils. These rock units have a high paleontological sensitivity. The area of highest sensitivity is between Burnside and Fairfax (Figure 2). Because the construction of the aerial alternative will be restricted to the Pleistocene age deposits, it will have a greater potential for impact on the paleontological resources than the construction of an underground alternative would. Impacts will come from excavations for columns supporting the rails, stations, and other support facilities. Until the exact location of these facilities is known construction in the area on Figure 2 should be considered to have a high potential for impact on paleontological resources.

#### The Olympic (Short) Alternative

Excavations for this alternative will encounter Recent alluvial deposits, Pleistocene age rock units, the Fernando Formation, and the Puente Formation. The Pleistocene deposits have a moderate paleontological sensitivity. The Fernando Formation and Puente Formation have a moderate paleontological sensitivity. Recent alluvial deposits are too young geologically to contain fossils and have No paleontological sensitivity. Based on the past production of fossils in the vicinity, the Olympic (Short) Alternative has a moderate paleontological sensitivity.

#### The Pico (Short) Alternative

Cut and cover operations and tunneling operations will encounter Recent alluvial deposits, Pleistocene age rock units, the Fernando Formation, and the Puente Formation. The Pleistocene deposits have a moderate paleontological sensitivity. Near Olympic Boulevard the Pleistocene age deposits have a moderate



**RMW**  
Palco Associates

Figure 2. Area of possible "Tar Pit" deposits in the vicinity of Rancho La Brea High Paleontological Sensitivity

the area known to contain deposits related to the La Brea Tar Pits.

#### The Pico (Long) Alternative

Excavations for this alternative are likely to encounter Recent alluvium, Pleistocene age rocks, the Fernando Formation, and the Puente Formation. Recent deposits are exposed at the surface from the intersection of Pico and San Vicente to Hauser Boulevard, between La Cienega and Doheny, and north of Olympic. Pleistocene age deposits are exposed between Hauser and La Cienega and between Doheny and Olympic. Beneath the Recent deposits are Pleistocene age rock units and under the entire alternative at a depth of at least 50 feet is the Fernando Formation. The Puente Formation may be present beneath the eastern end of the study area near Western Avenue. There are no recorded fossil occurrences along this alternative. There are several fossil occurrences in the same rock units as those in the study area to the north and south of this alternative.

#### IMPACTS

The following assessment of impacts on paleontological resources addresses the potential for the discovery of fossil remains during excavations. It does not address the individual significance of the fossils, because it is impossible to assess the importance of individual fossils until they have been excavated, cleaned, and studied. The potential for the discovery of fossils is based on the past discovery of fossils in a given rock unit within the vicinity of a proposed project. Five paleontological sensitivity ratings or zones have been developed by paleontologists. A rating of no paleontological sensitivity is for most volcanic or granitic rocks, which because of their molten origins will not contain fossils. Rocks that are very young geologically, less than 10,000 years old, also have no paleontological sensitivity. A low paleontological sensitivity rating suggests little likelihood that fossils will be

encountered during development. A moderate paleontological sensitivity implies that fossils may be encountered during development. A high paleontological sensitivity indicates that it is extremely likely that fossils will be encountered during development. An undetermined paleontological sensitivity is a reflection of the lack of adequate information on a formation's paleontological resources to place it in one of the four other ratings. Areas of undetermined paleontological sensitivity are treated as having a moderate paleontological sensitivity until they can be fully evaluated.

#### The Santa Monica Alternative

Excavations north of Santa Monica Boulevard may be restricted to Recent alluvium and Pleistocene age deposits, south of Santa Monica Boulevard tunneling operations are likely to encounter Pleistocene age deposits and the Fernando Formation. Cut and Cover operations will penetrate Recent and Pleistocene age deposits north of Santa Monica Blvd. and all three units south of Santa Monica Blvd. The Recent alluvium is too young geologically to contain fossils. However, the boundary between Recent alluvium and Pleistocene age deposits is indistinct. Fossils may be present in rocks that are considered Recent alluvium, but are really Pleistocene in age. Therefore, the Recent alluvium will be treated as Pleistocene age deposits for excavations greater than 5 feet. The Pleistocene age rock units contain fossils within the study area and throughout the Los Angeles Basin. The Fernando Formation contains fossils at several locations in the Los Angeles area. Based on this record of fossil production, the Santa Monica Alternative has a moderate paleontological sensitivity.

#### The Wilshire Alternative

Because of the nature of the proposed alternative with both underground and aerial segments the impacts on the paleontological resources will vary with the segment. In the two underground segments excavations will encounter recent alluvial

report was prepared we have assumed that the excavations will extend to 100 feet below the present surface.

#### The Santa Monica Boulevard Alternative

Excavations for this alternative are likely to encounter Recent alluvium, Pleistocene age rocks, and the Fernando Formation. The 1987 Metro Rail DEIS reported that the Recent alluvium was 75 to 100 feet thick north of Santa Monica Blvd. South of Santa Monica it appears that the younger alluvium thins to a few tens of feet and is absent south of Wilshire Blvd. A fossil occurrence is recorded at the corner of Bedford and Santa Monica in older (Pleistocene age) alluvium. At this occurrence Pleistocene vertebrates were recovered from an excavation at a depth of 8 feet.

#### The Wilshire Alternative

Excavations for this alternative are likely to encounter Pleistocene age rocks, the Fernando Formation, and the Puente Formation. The Puente Formation contains fossils of marine vertebrates and invertebrates. This unit may be encountered in the area between Western Avenue and La Brea at depths of greater than 60 feet below the present surface. The Fernando Formation underlies the area from La Brea Blvd. west to the end of this alternative at depths of 50 to 60 feet. Pleistocene age deposits are exposed at the surface and extend down to bedrock at depths of 50 to 60 feet. The paleontological resources of these deposits are well documented both in the scientific literature and previous Metro Rail EISs'. Between Fairfax Avenue and Burnside Avenue are deposits that contain the world famous La Brea Tar Pits. Related fossil deposits occur sporadically as far east as Sycamore. These occurrences have produced over 1 million vertebrate fossils, plant remains, and invertebrates. This collection provides one of the clearest pictures of life during the Pleistocene. Pleistocene age deposits that are not related to Rancho La Brea contain fossil along Wilshire Boulevard with

occurrences reported from the intersection of Highland and Wilshire and on Tremaine south of Wilshire.

#### The Olympic (Short) Alternative

Excavations for this alternative are likely to encounter Recent alluvium, Pleistocene age rocks, the Fernando Formation, and the Puente Formation. Pleistocene age rocks are exposed at the surface along most of the alternative. Recent alluvium is exposed in two small areas near Highland Avenue and near Crenshaw Boulevard. Beneath these deposits are Pleistocene age deposits of the Palos Verdes Sand and San Pedro Formation. Throughout the study area the Fernando Formation underlies the younger deposits at depths of at least 50 feet. The Puente Formation may be present in the area near Western Avenue. Three fossil occurrences are reported from the Pleistocene age rocks near this alternative. The closest is at the intersection of Sycamore and La Brea one block south of the alternative. The other two are located approximately six blocks west of the end of the alternative at Alvira Street and Olympic and at Foster and Olympic. All have produced the remains of large Ice Age land animals. All three were in excavations for buildings or utility trenches.

#### The Pico (Short) Alternative

Excavations for this alternative are likely to encounter Recent alluvium, Pleistocene age rocks, the Fernando Formation, and the Puente Formation. Exposed at the surface along this alternative are Pleistocene age rocks, except for a small area near Pico Boulevard where Recent alluvium is exposed. The thickness of the Pleistocene deposits is unknown but they are at least 50 feet thick in this area and perhaps as much as 100 feet thick. Beneath these deposits are the siltstones of the Fernando Formation. The Puente Formation may be present near Western Avenue. Two fossil occurrences are reported from Pleistocene age deposits near the intersection of San Vicente and La Brea. In addition this alternative passes along the southern boundary of

## EXISTING CONDITIONS

This discussion of existing condition includes a description of the rock units exposed at the surface and those likely to be encountered during excavations for the tunnels and stations. The subsurface information is based on published geologic reports on the area. Detailed studies of the geologic conditions along each of the alternatives were not available during this study.

The rock units that are present within the Orange Line study area range in age from the present to the Upper Miocene age (5+ million years ago). At the surface are the more recent deposits, while the older deposits are likely to be encountered in deeper excavations. The rock units present in the study area have a varied history of production of fossils within and near the study area.

The youngest rocks within the study area are Quaternary age (less than 1.8 million years old) alluvium. This material was deposited by streams flowing across the area in the recent geologic past. Portions of these deposits are too young geologically to contain significant fossils. The alluvium is up to 100 feet thick within the study area. The greatest thickness is in the northern portion of the study area, becoming thinner to the south and west, where older deposits are exposed at the surface. The boundary between these alluvial deposits and the older Pleistocene age deposits is indistinct thus some deposits mapped as Recent (less than 10,000 years old) alluvium may be of Pleistocene age and may contain the fossil resources described below.

Pleistocene age deposits are common throughout the study area. These rocks represent the sediments left by streams flowing across the region and the sea that occupied the area more than 10,000 years ago. All the fossil remains recovered within the study area have come from these rocks. Pleistocene age rocks have been divided into several named units by various authors. The three most commonly used are; unnamed Pleistocene deposits, the Palos Verdes Sand, and the San Pedro Formation. The unnamed deposits are scattered throughout the area capping some areas of

higher elevations. These units contain remains of Pleistocene "Ice Age" land animals at several locations within and near the study area. The Palos Verde Sand includes deposits of both marine and nonmarine origins. These rocks contain the tar deposits that trapped the animals that have been recovered at the La Brea Tar Pits. This formation has produced numerous fossils in the Rancho La Brea area and elsewhere in the Los Angeles Basin. The Palos Verdes Sand extends to depths of 50 to 60 feet. Below the Palos Verdes Sand is the San Pedro Formation. This rock unit is of marine origin and contain marine invertebrates and vertebrate fossils in the Los Angeles Basin. The San Pedro Formation extends to depths of up to 120 feet below the present surface. These deposits will be collectively identified as Pleistocene age deposits in this report, because the subsurface data is insufficient to separate the rocks into their respective units.

Underlying the Pleistocene age sediments are Late Pliocene age marine sediments that have been assigned to the Pico, Repetto, or Fernando Formation. Resolution of this conflict in nomenclature is beyond the scope of this report, therefore, we will follow the terminology of earlier geotechnical consultants to Metro Rail and assign the bedrock formations to the Fernando Formation. The Fernando Formation was deposited in a gradually shallowing sea that occupied the Los Angeles Basin 2 to 3 million years ago. Fossil invertebrates are reported from several localities in the Los Angeles area. Recently fossil vertebrates have been recovered from the Fernando Formation in the southeastern Los Angeles Basin.

Exposed in the study area near Western Avenue is the late Miocene age (3 to 8 million years ago) Puente Formation. This marine unit was deposited in deep seas that occupied the region. The Puente Formation contains the fossil remains of marine vertebrates, especially fishes, and occasional fossils of land animals in Puente Hills area.

Because the depth of the tunnels and station excavations for the various alternatives were not available at the time this

HISTORIC RESOURCES INVENTORY

Ser. No. 0213-90  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 4 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 11-30116 D-3020300 B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

1. Common name: \_\_\_\_\_
2. Historic name: California Bank Building
3. Street or rural address: 9429 Wilshire Boulevard  
City Beverly Hills Zip 90210 County Los Angeles
4. Parcel number: 4343-013-011
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Retail/office Original use: Retail/office

DESCRIPTION

- 7a. Architectural style: Art Deco
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

Representative of the Art Deco style preferred for "skyscrapers" in the late 1920s, the California Bank Building is a six story bank, retail, and office structure. Built of reinforced concrete, the exterior is sheathed in architectural terra cotta. Four setbacks give the design a characteristic massing. The ground floor, which has been re-sided and re-glazed, follows the unusual contours of the site and acts as a base for the upper stories. The first setback begins with the second floor, where seven bays comprise the principal (south) elevation. Five bays are located on the fifth and sixth floors, while the penthouse is a little more than one bay in breadth. Reeded piers with sunburst capitals divide the bays into vertical channels which are in turn subdivided by continuous mullions. Each bay contains a pair of casement windows topped by transoms. Vertically articulated spandrels reinforce the overall emphasis of the design. Slightly stepped back parapets with floral friezes mark the top of each setback. The central bay is distinguished above the sixth floor by decorated spandrels and by sculpted eagles atop the piers. Fluted piers with chevron (see continuation sheet)



8. Construction date: 1929  
Estimated \_\_\_\_\_ Factual X
9. Architect John & Donald Parkinson
10. Builder Scofield-Swinnerton Co.
11. Approx. property size (in feet)  
Frontage 164 Depth 153  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 50 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A \_\_\_\_\_ B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

**HISTORIC RESOURCES INVENTORY**

**IDENTIFICATION**

1. Common name: Wilshire Boulevard Specialty Stores--Thematic Grouping
2. Historic name: \_\_\_\_\_
3. Street or rural address: See continuation sheets  
City Beverly Hills Zip 90212 County Los Angeles
4. Parcel number: See continuation sheets
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Commercial retail Original use: Commercial retail

**DESCRIPTION**

- 7a. Architectural style: See continuation sheets
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

The spine of the Beverly Hills commercial district, Wilshire Boulevard, is currently the site of four specialty department stores, three of which occupy historically significant buildings. A fourth structure, now occupied by Gumps, was originally part of this thematic cluster, but has been too altered to contribute to it. All of the buildings, located between Rodeo and Roxbury Drives, are multi-storied, ranging in visible height from three to seven stories. Fashionable and sophisticated in their designs, the stores exhibit stylized characteristics associated with the "Georgian," Moderne, Neo-Classical, and French modes. although alterations and additions have occurred on each building, they retain a high degree of historic design integrity.

See continuation sheets for individual building descriptions.

Attach Photo(s) Here

See continuation sheets

8. Construction date: Multiple  
Estimated \_\_\_\_\_ Factual X
9. Architect \_\_\_\_\_  
See continuation sheets
10. Builder \_\_\_\_\_  
See continuation sheets
11. Approx. property size (in feet)  
Frontage \_\_\_\_\_ Depth \_\_\_\_\_  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

# HISTORIC RESOURCES INVENTORY

Ser. No. 0213-102

HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 114 B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

## IDENTIFICATION

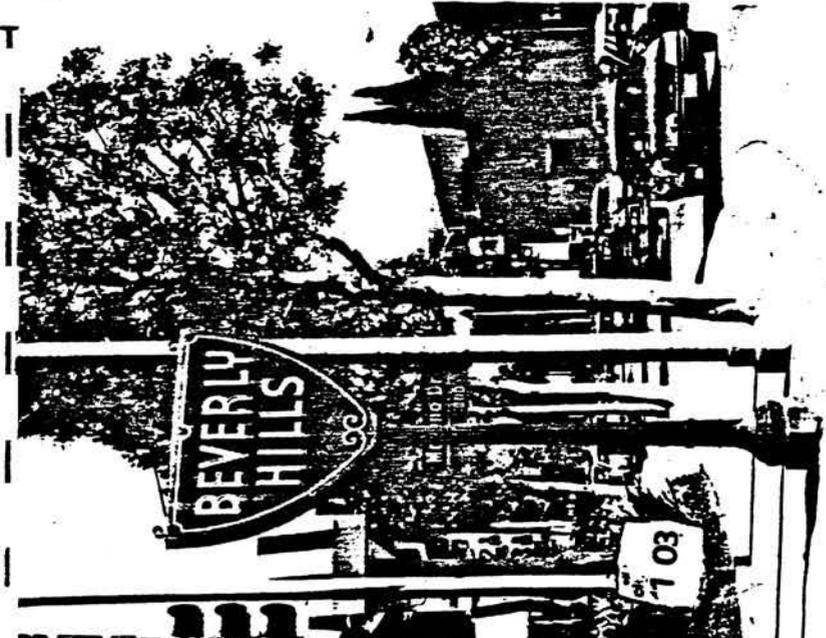
1. Common name: Entry signs/Street lamps
2. Historic name: \_\_\_\_\_
3. Street or rural address: Sunset Boulevard, Santa Monica Boulevard, Wilshire Boulevard  
City \_\_\_\_\_ Zip \_\_\_\_\_ County \_\_\_\_\_
4. Parcel number: \_\_\_\_\_
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: \_\_\_\_\_ Original use: \_\_\_\_\_

## DESCRIPTION

- 7a. Architectural style: \_\_\_\_\_
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

Sandwiched within the larger metropolis of Los Angeles, Beverly Hills is distinguished by its different development patterns, its street trees and names, and by its entry signs. Located at each major street terminus of the city, the signs are distinctive brown shields set atop fluted iron poles. Moldings embellish the bases of the poles, and wrought iron adorns the shields. The name "Beverly Hills," executed in gold-tone block letters and picked out in neon tubing, fills the face of each shield.

On two of the City's major thoroughfares, Santa Monica Boulevard and Wilshire Boulevard, distinctive street lamps also identify Beverly Hills. The lights along Santa Monica are an unusual design, combining two globes, one atop a pole, the other suspended from an arm overhanging the street. Associated with Beverly Gardens, these lights are documented on that form. The Wilshire street lamps marry two eras. Their decorated terra cotta bases and iron standards are a remnant of earlier times, while the "cobra" arms and lights are of recent vintage. Some of the bases retain their plaques with incised names of the appropriate cross streets.



8. Construction date:  
Estimated \_\_\_\_\_ Factual \_\_\_\_\_
9. Architect \_\_\_\_\_
10. Builder \_\_\_\_\_
11. Approx. property size (in feet)  
Frontage \_\_\_\_\_ Depth \_\_\_\_\_  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

HISTORIC RESOURCES INVENTORY

Ser. No. \_\_\_\_\_  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 50 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A \_\_\_\_\_ B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

1. Common name: Santa Monica Boulevard Commercial Grouping
2. Historic name: \_\_\_\_\_
3. Street or rural address: 7900-7936 W. Santa Monica Boulevard  
City West Hollywood Zip 90046 County Los Angeles
4. Parcel number: 5529-09-26,27,28,29,30
5. Present Owner: Multiple Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private X
6. Present Use: \_\_\_\_\_ Original use: \_\_\_\_\_

DESCRIPTION

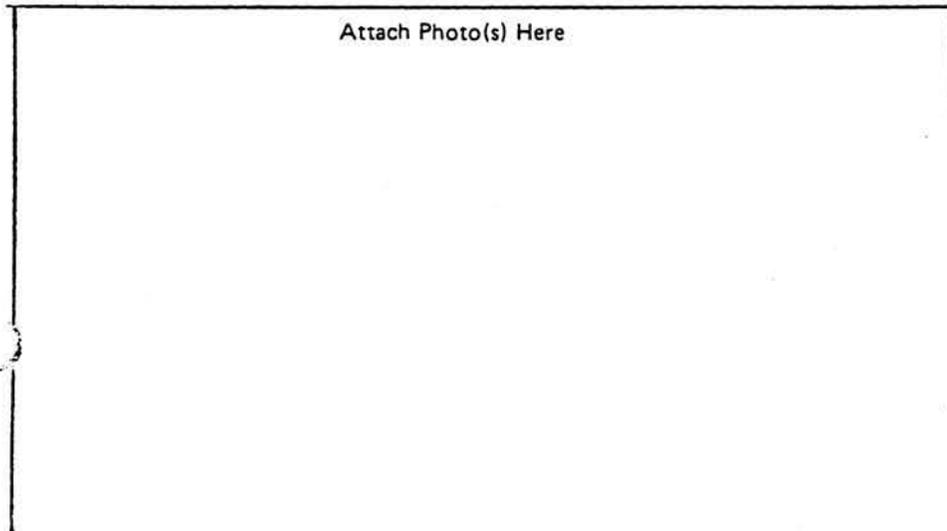
- 7a. Architectural style: Classical and Spanish Colonial Revival
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

7900-7936 W. Santa Monica Boulevard

The south side of the 7900 block of Santa Monica contains four buildings which form an intact streetscape illustrative of vernacular commercial architecture in the 1920s and 1930s. Variations on two styles are represented, Classical Revival influenced and Spanish Colonial Revival. Exterior materials vary between brick and stucco and roofs between flat and hip or gable, according to the dictates of style. Two story adjoining facades with no setbacks line the Santa Monica frontage. Most of the buildings contain multiple storefronts, with retail uses at ground level and office or residential functions above.

Although some alterations, mostly to storefronts and signage, have occurred, the block is notable for its relative integrity and good condition.

(continued on attached page)



8. Construction date: 1925-9  
Estimated \_\_\_\_\_ Factual X
9. Architect \_\_\_\_\_
10. Builder \_\_\_\_\_
11. Approx. property size (in feet)  
Frontage 292.65 Depth 125  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1987

HISTORIC RESOURCES INVENTORY

Ser. No. \_\_\_\_\_  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A \_\_\_\_\_ B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

1. Common name: Emser Tile Building
2. Historic name: Bekins Storage Warehouse
3. Street or rural address: 8431 W. Santa Monica Boulevard  
City West Hollywood Zip 90069 County Los Angeles
4. Parcel number: 5554-26-38
5. Present Owner: Emser Tile Company Address: 8431 W. Santa Monica  
City West Hollywood Zip 90069 Ownership is: Public \_\_\_\_\_ Private X
6. Present Use: commercial/office Original use: warehouse

DESCRIPTION

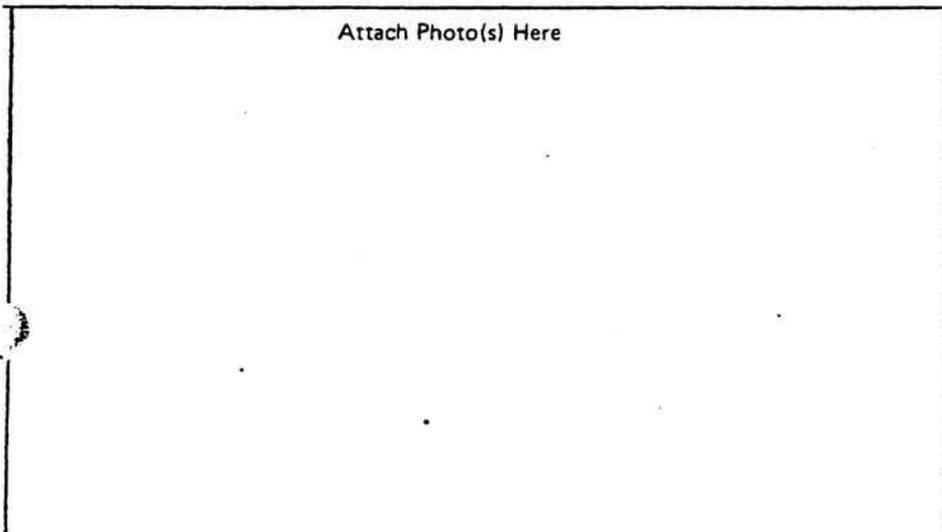
- 7a. Architectural style: Art Deco
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

8431 Santa Monica Boulevard - "The Emser Building"

A seven story concrete building rises dramatically from a focal corner on Santa Monica Boulevard. Drawing on elements of the Gothic style, the flat-roofed rectangular building stands at street level on its northeastern corner at Olive Drive. A faintly rusticated first story acts as a base to six stories of vertical Gothic spandrels. The facades are divided into five bays on Olive and three bays facing Santa Monica Boulevard. The rusticated first floor extends to additional one story bays along Santa Monica forming a wall. The center of the three one story bays opens with a flat arch to the parking service area behind.

On the south (Santa Monica) and west (Olive) facades, a large ground floor Tudor arch marks the base of each bay. Arches are filled with recessed multi-paned windows and sunburst

(continued on attached page)



8. Construction date: 1926  
Estimated \_\_\_\_\_ Factual X
9. Architect unknown
10. Builder unknown
11. Approx. property size (in feet)  
Frontage 150 Depth 86  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1987

HISTORIC RESOURCES INVENTORY

Ser. No. _____	
HABS _____	HAER _____
NR <u>3</u>	SHL _____
Loc _____	
UTM: A _____	B _____
C _____	D _____

IDENTIFICATION

1. Common name: None
2. Historic name: None
3. Street or rural address: 8701-13 W. Santa Monica Boulevard  
City West Hollywood Zip 90069 County Los Angeles
4. Parcel number: 4339-7-11,12
5. Present Owner: Wetherly Limited Address: 8900 Beverly Boulevard  
City West Hollywood Zip 90048 Ownership is: Public \_\_\_\_\_ Private x
6. Present Use: commercial Original use: commercial

DESCRIPTION

- 7a. Architectural style: Spanish Colonial Revival
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

8701 Santa Monica Boulevard

A one and two story Spanish Gothic Revival commercial building stands on the northwest corner of Santa Monica and Westbourne. A large square and hipped roof tower section at the southeast corner of the building is flanked by a long one story side gabled row of storefronts along Santa Monica Boulevard and a shorter, two story, side gabled wing along Westbourne. The hipped and gabled roofs are red clay tile with no overhanging eaves and have decorative wrought iron brackets supporting rain gutters. The reinforced concrete building is covered in stucco resembling roughly textured stone blocks "cut" in varying sizes and shapes. Stepped stone blocks act as a base. The square corner tower has a molded cornice. A small, square turret projects from the western tower facade at the peak in the gabled roof. The turret has a steep metal roof topped by a finial and ornamental cresting along its cornice. Trifoil arches are centered on each face of the turret. An

(continued on attached page)

Attach Photo(s) Here

8. Construction date: 1928  
Estimated \_\_\_\_\_ Factual X
9. Architect Morgan, Walls & Clements
10. Builder unknown
11. Approx. property size (in feet)  
Frontage 110 Depth 120  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1987

HISTORIC RESOURCES INVENTORY

Ser. No. 0069-56  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 11/372 465/3772330  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

1. Common name: \_\_\_\_\_
2. Historic name: First National Bank of Sherman
3. Street or rural address: 8811 Santa Monica Boulevard  
City West Hollywood Zip 90069 County Los Angeles
4. Parcel number: 4339-012-020
5. Present Owner: Mary W. Davis Address: 515 N. La Cienega Blvd.  
Los Angeles CA 90048  
City Los Angeles CA Zip 90048 Ownership is: Public \_\_\_\_\_ Private X
6. Present Use: commercial Original use: commercial

DESCRIPTION

- 7a. Architectural style: Classical Revival
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

8811 Santa Monica Boulevard

At the corner of Santa Monica and Larrabee stands a two story, flat roofed commercial structure. The building is stucco with a half level of brick at ground level. A molded coping runs around the building at the roofline. The Larrabee facade contains a single entrance, surrounded by glass block and three very large circular arched windows. The windows are multi-paned with heavy mullions. Paired 6 over 6 double hung windows separated by turned wood columns additionally punctuate the facade. All windows are deeply recessed and have heavy stucco lintels. The building is heavily canted at the corner. A large circular arched opening containing a flat arched door and multi-pane transom above, surrounded by quoining fills the canted section. A medallion is centered on the keystone above the arch. The entrance is also deeply recessed. On Santa Monica, a set of three large circular arched windows - the center being the taller - dominate the facade. The windows duplicate the pattern of heavy mullions found on the Larrabee facade. Additionally, small, single pane windows covered by decorative grillwork punctuate the facade. The building is intact with only minor alterations and is in good condition.

Attach Photo(s) Here

8. Construction date: 1922 Estimated \_\_\_\_\_ Factual X
9. Architect unknown
10. Builder unknown
11. Approx. property size (in feet)  
Frontage 80 Depth 120  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1987

HISTORIC RESOURCES INVENTORY

Ser. No. \_\_\_\_\_  
HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A \_\_\_\_\_ B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

IDENTIFICATION

1. Common name: None
2. Historic name: West Hollywood Professional Building
3. Street or rural address: 8851 W. Santa Monica Boulevard  
City West Hollywood Zip 90069 County Los Angeles
4. Parcel number: 4339-19-5
5. Present Owner: Don Belcher & William Larkin Address: P.O. Box 69548  
City West Hollywood Zip 90069 Ownership is: Public \_\_\_\_\_ Private X
6. Present Use: commercial Original use: commercial

DESCRIPTION

- 7a. Architectural style: Classical Revival Commercial
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

8851 W. Santa Monica Boulevard

A two story brick commercial structure stands at the corner of Santa Monica Boulevard and Larrabee Street. The flat roofed building is set at ground level and is divided into four bays along Larrabee and three bays along Santa Monica. The corner is heavily canted. Each bay is comprised of a large window opening and heavy stone lintel with dentillated molding. A heavy molded string course runs between the first and second floors. Paired casement windows with transoms punctuate the second floor. Flat arched entrance openings are topped by wide lintels with low relief shield and floral ornamentation. Centered above each entrance is a small medallion. On the second floor, above entrances are paired casement windows with transom flanked by stone pilasters and topped by a broken-ogee pediment.

(continued on attached page)

Attach Photo(s) Here

8. Construction date: 1926  
Estimated \_\_\_\_\_ Factual X
9. Architect Gable & Wyatt
10. Builder unknown
11. Approx. property size (in feet)  
Frontage 50 Depth 92  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1987

HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5 SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 11-310360-301050 B \_\_\_\_\_  
C \_\_\_\_\_ D \_\_\_\_\_

**HISTORIC RESOURCES INVENTORY**

**IDENTIFICATION**

1. Common name: Writers and Artists Building
2. Historic name: \_\_\_\_\_
3. Street or rural address: 9501 Santa Monica Blvd.  
City Beverly Hills Zip 90210 County Los Angeles
4. Parcel number: \_\_\_\_\_
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Office Original use: Office

**DESCRIPTION**

- 7a. Architectural style: Spanish Colonial Revival
- 7b. Briefly describe the present physical description of the site or structure and describe any major alterations from its original condition:

The Writers and Artists Building occupies the northwest corner of the Rodeo Drive and Santa Monica Boulevard intersection. It is a four story commercial structure in the Spanish Colonial Revival style. Flat-roofed, the building is of brick construction. Although denuded of some of its original decoration, other elements remain, including wood balconies and balconets, molded sills and hoods, and pierced stucco grilles. Other remnants of the ornamentation can be found on the rear (north) elevation, including decorative panels between the third floor windows. The principal and largest elevation faces south and is fenestrated differently on each level. Storefronts on the ground level are topped by clusters of three recessed, flat-headed windows on the second story, and by single openings on the third and fourth floors. Ornate Panels and engaged, spiralled colonnettes once adorned the upper floors. The corner section is distinguished by a change in height and by the treatment of its windows. A centered double casement of exaggerated scale is on the fourth floor of the east elevation, indicating an interior with a high ceiling. Changes to the building include altered storefronts, some ground level re-siding, and removal of a molded cornice.



8. Construction date: 1924  
Estimated \_\_\_\_\_ Factual X
9. Architect Roy Seldon Price
10. Builder H.S. Belland
11. Approx. property size (in feet)  
Frontage 317 Depth 35  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

HISTORIC RESOURCES INVENTORY

Ser. No. 0213-074-9999

HABS \_\_\_\_\_ HAER \_\_\_\_\_ NR 5D SHL \_\_\_\_\_ Loc \_\_\_\_\_  
UTM: A 11/370900/3769730 B 11/370900/3769510  
C 11/370140/3769510 D 11/370140/3769730

IDENTIFICATION

1. Common name: Tract 7710 Residential Grouping
2. Historic name: None
3. Street or rural address: See continuation sheets  
City Beverly Hills Zip 90212 County Los Angeles
4. Parcel number: See continuation sheets
5. Present Owner: \_\_\_\_\_ Address: \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ Ownership is: Public \_\_\_\_\_ Private \_\_\_\_\_
6. Present Use: Residential Original use: Residential

DESCRIPTION

- 7a. Architectural style:
- 7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

The Tract 7710 district is a neighborhood of dwellings bounded by the south side of Gregory Way, the alley north of Olympic Boulevard, the east property lines of the east side of El Camino Drive, and the west property lines of the west side of South Linden Drive. 157 homes out of a possible 196 contribute to the historic character of the one-block segments of the eight streets included in the district. Sixty feet wide, the level streets are lined by parkways and punctuated by street trees. Fifteen-foot alleys bisect the blocks between the rear property lines. Lot frontages vary from fifty to sixty feet, while depths average 125 feet. Consistency in lot dimensions is reinforced by the setbacks and scale of the homes built on each parcel. The majority of the residences are amply-sized, two story homes, whose massing tends to fall into a handful of subtypes such as courtyard or rectangular block. Spanish Colonial Revival styling, more than any other characteristic of the district, is its unifying feature. Thus, most houses are stuccoed, tile-roofed, and display a common vocabulary of forms. Virtually all of the homes are complemented by landscaping. (see continuation sheet)



8. Construction date: Multiple  
Estimated \_\_\_\_\_ Factual \_\_\_\_\_
9. Architect See continuation sheets
10. Builder See continuation sheets
11. Approx. property size (in feet)  
Frontage \_\_\_\_\_ Depth \_\_\_\_\_  
or approx. acreage \_\_\_\_\_
12. Date(s) of enclosed photograph(s)  
1986

***Survey Forms***

The survey forms in Appendix C document surveys made by Michael Brandman Associates in October 1989 to identify potential historic structures along the proposed alignments. The buildings included in this inventory may or may not have been officially determined to be historic, but were included based on whether they appeared or were known to be 50 years old or older. They have been identified by literature review, field studies and building permit searches at Los Angeles, Beverly Hills, and West Hollywood City Halls. This preliminary search was prepared in November 1989 and only those buildings that were dated 1939 or before, or whose age could not be determined, have been included. Further research is necessary to determine any additional potentially historic buildings. Some buildings may have been overlooked and those built in 1940 which were not included previously are eligible in 1990 for historic status.

Field Survey Forms  
Potentially Historic Properties

Address: 9311<sup>west</sup> Rio Blvd

Historic Name:

Common Name: Young Israel 2<sup>nd</sup> Century City

needs more research

Year Built: ~~1978~~ 1956

Architect: —

Builder: —

Architectural Style: Spanish Churrigueresque tile roof terra cotta trim

Original Owner: Foster and Kleiser

~~Present Owner:~~

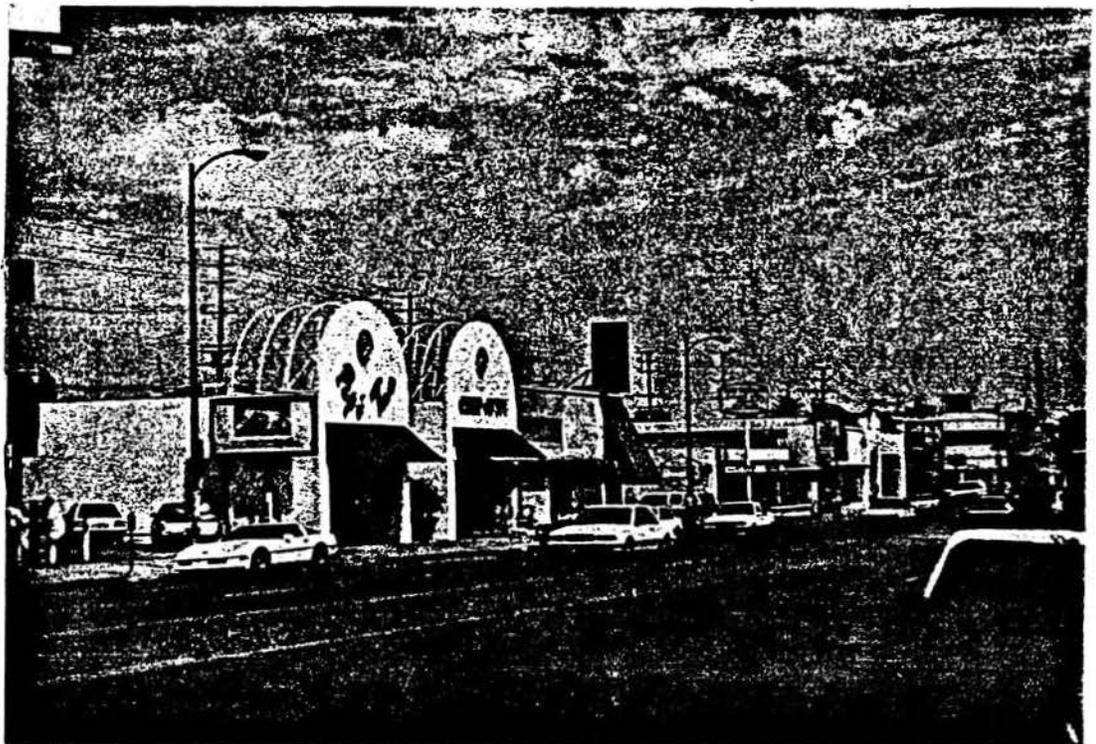
Parcel Number: 1340 Tract 6380

Original Use: shelter and sign-accessory bld

Present Use:

Condition: Excellent \_\_\_ Good \_\_\_ Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations: glass brick added  
marble doors



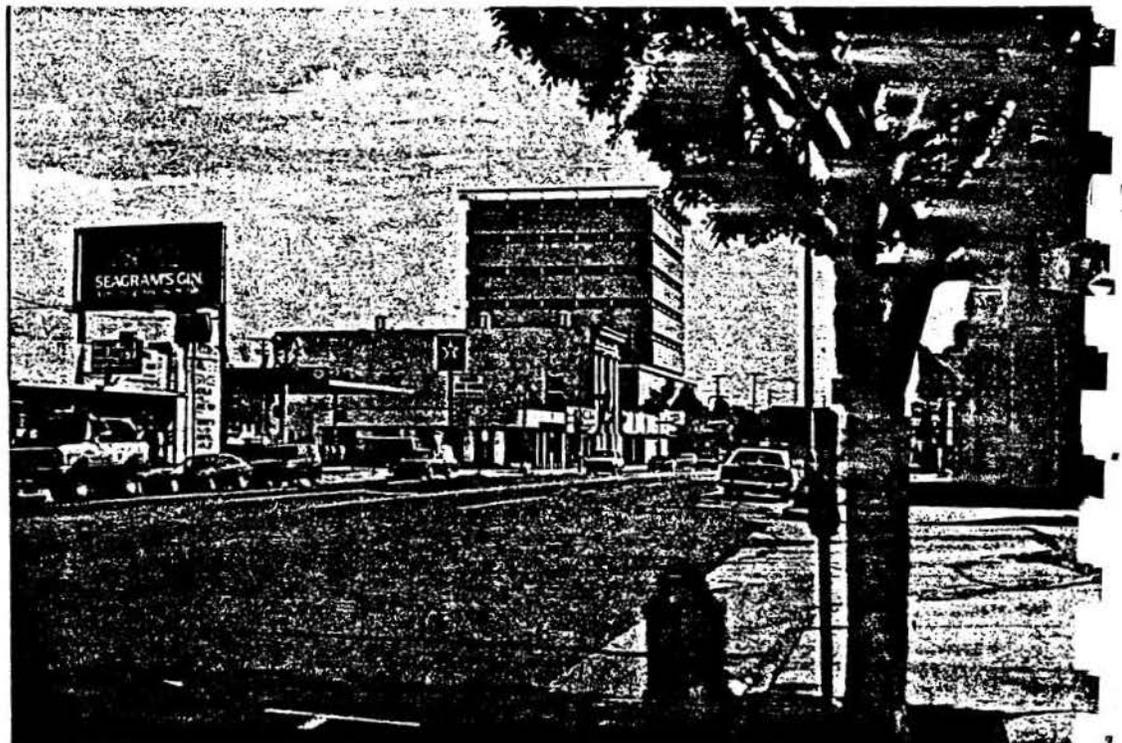
NOV 1989



National Jewish Post-Opinion Association

Field Survey Forms  
Potentially Historic Properties

Address: Pico 5812 - 5814 (south side)  
Historic Name: Street lamps  
Common Name: Union metal 1747  
Year Built: 1927 (south side one 1930)  
Architect:  
Builder:  
Architectural Style:  
Original Owner:  
~~Present Owner:~~  
Parcel Number:  
Original Use:  
Present Use: Street lamps  
Condition: Excellent \_\_\_ Good  Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_  
Alterations:



OV 1989



National Brandman Association

Field Survey Forms  
Potentially Historic Properties

Address: 9428 W. Pico South side of Beverly Dr.

Historic Name:

Common Name:

Year Built: 1926

Architect: Wase Hueson

Builder: G. O. Merritt

Architectural Style: Classic/Roman Revival Storefront

Original Owner: Geo Stall

~~Present Owner:~~

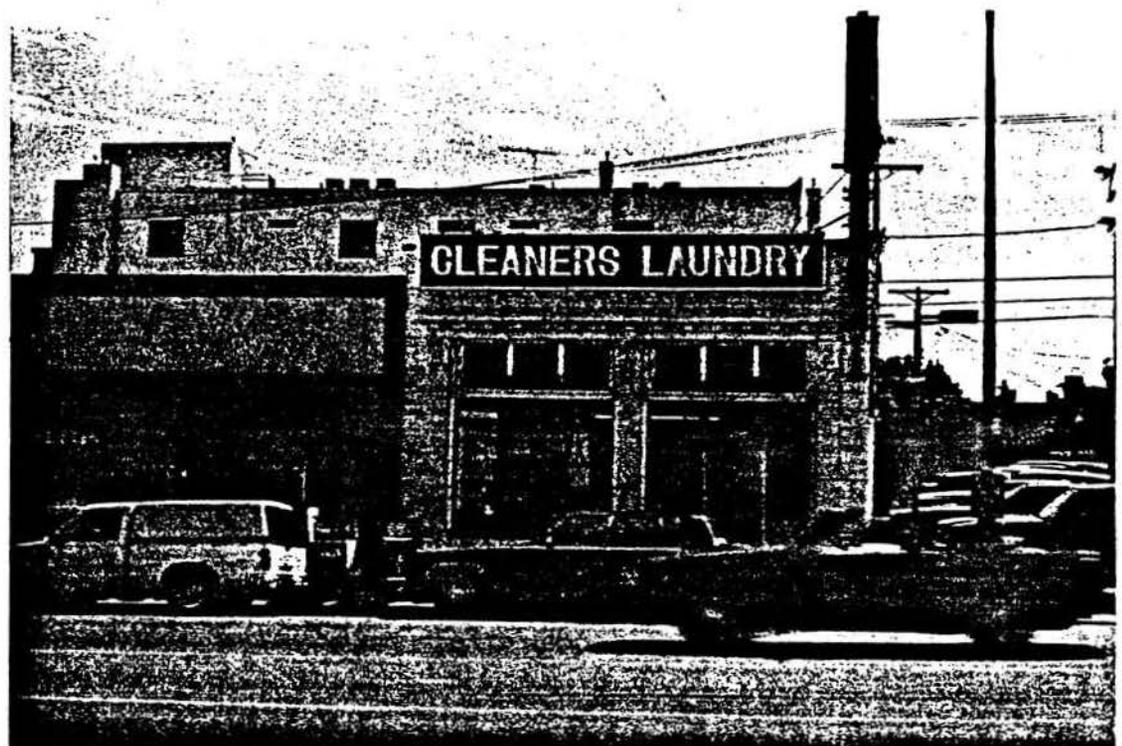
Parcel Number: tract 7671 Lot 16

Original Use: Stores

Present Use: Chinese laundry

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:



VNY 1989



Brandman Association

Field Survey Form  
Potentially Historic Properties

Address: 5040 PICO

Historic Name:

Common Name:

Year Built: 1930

Architect:

Builder: CHRIS THORON

Architectural Style: Art Deco

Original Owner: M. and BOCK

~~Present Owner:~~

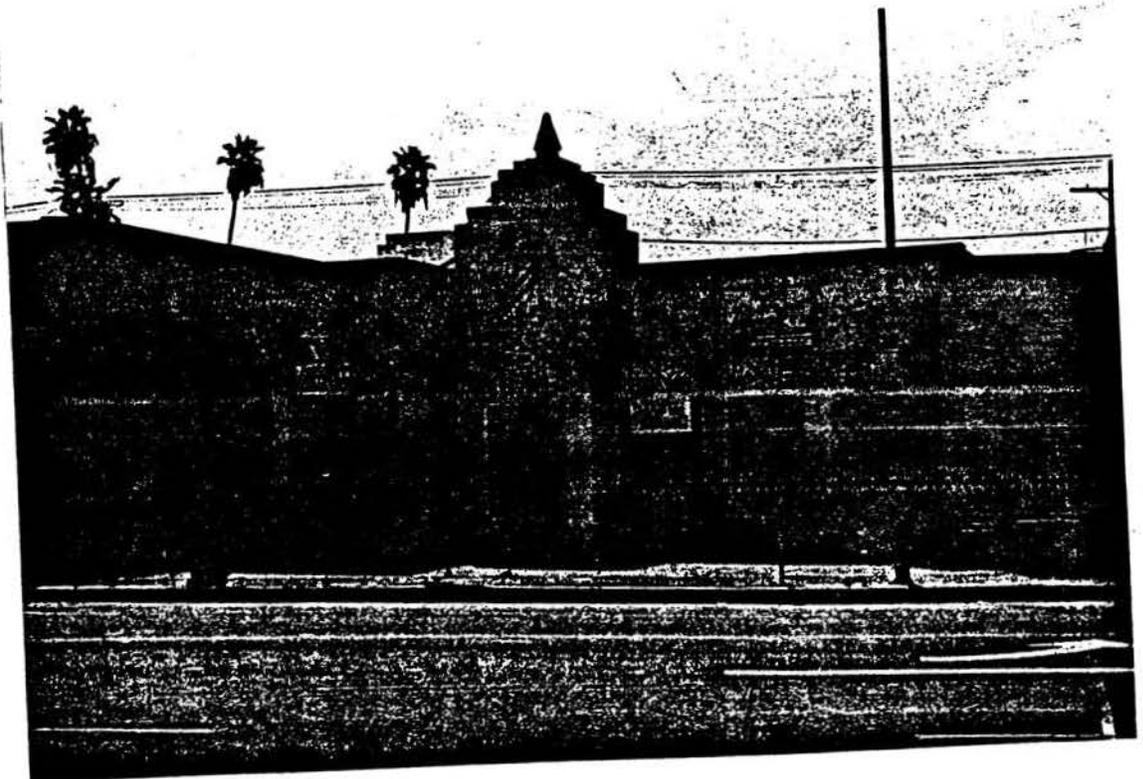
Parcel Number:

Original Use: office

Present Use: most recently

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: Signage added, iron bars/grille,  
doorway? window bay decoration?



NOV 1989



National Trust for Historic Preservation

Field Survey Forms  
Potentially Historic Properties

26

Address: 5030 Pico

Historic Name: Delman Theater

Common Name: Delman Theater

Year Built: 1920 / 1922

Architect:

Builder: ~~Sare~~ (maybe - owner) / George P. Keene

Architectural Style: Art Deco ~~Streamline Moderne~~

Original Owner: Warren E. Wolfe

~~Present Owner:~~

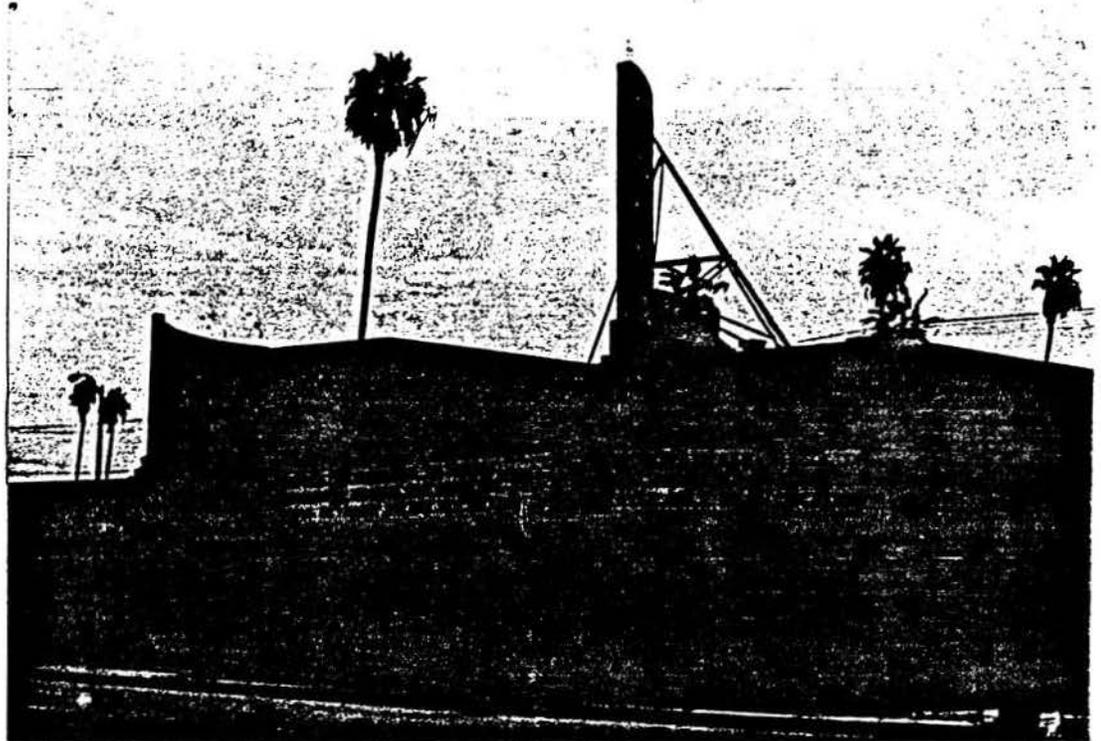
Parcel Number:

Original Use: Garage / RE Office

Present Use:

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: 1 front bay bricked-in



NOV 1989



National Trust for Historic Preservation

Field Survey Forms  
Potentially Historic Properties

①

Address: 6067 Wilshire Blvd.

Historic Name: Navy Company Building

Common Name: Navy Company Building

Year Built:

Architect:

Builder:

Architectural Style: Art Deco

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use: department store

Present Use: department store

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

NOV 1989



Michael Brandman Associates

4

Field Survey Forms  
Potentially Historic Properties

Address: 8400 block - Wilshire at La Cienega

Historic Name: WILSHIRE INN

Common Name: Same

Year Built:

Architect:

Builder:

Architectural Style: Art Deco

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: theatre / office?

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

NOV 1989



Field Survey Forms  
Potentially Historic Properties

Address: 8554 Wilshire Blvd.  
Historic Name: Fine Arts Theatre Complex  
Common Name: Fine Arts Theatre Complex  
Year Built:  
Architect:  
Builder:  
Architectural Style: Art Deco  
Original Owner:  
~~Present Owner:~~  
Parcel Number:  
Original Use:  
Present Use: theatre/apartments  
(motel?)  
Condition: Excellent \_\_\_ Good  Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_  
Alterations:

NOV 1989



Field Survey Forms  
Potentially Historic Properties

Address: 206 N. - Beverly Dr.

Historic Name: Beverly Theatre

Common Name: Israel Discount Bank

Year Built: 1925

Architect: L. A. Smith

Builder:

Architectural style: Art Deco / sculptural

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use: Theater

Present Use: bank

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: marble entrance may have been added. Severe exterior alt.  
Interior preserved.

NOV 1989



Field Survey Forms  
Potentially Historic Properties

7

Address: .9528  
9500 Wilshire Blvd.

Historic Name: Beverly Wilshire Hotel

Common Name: Beverly Wilshire Hotel

Year Built: 1926

Architect: Walker & Eisen

Builder:

Architectural Style: Italian <sup>Renaissance</sup> ~~Chicago Commercial~~ <sup>Beaux Arts</sup>

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use: hotel

Present Use: hotel

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: possible addition to the bottom,  
left, hand entrance area



106

Field Survey Forms  
Potentially Historic Properties

450 N. Crescent Dr.

Address:

Historic Name: Beverly Hills City Hall

Common Name: Beverly Hills City Hall

Year Built: 1932

Architect: William J. Gage

Builder:

Architectural Style: ~~Art Deco~~ Spanish Renaissance Italian bell tower

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: city hall

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: currently undergoing renovation

1989



Field Survey Forms  
Potentially Historic Properties

8

N.E. corner

Address: : 9424  
5600 block - Wilshire Blvd. at Beverly  
Blvd Dr.

Historic Name:

Common Name: Sterling Plaza

Year Built:

Architect:

Builder:

Architectural Style: Art Deco

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: be improved to become "Sterling Plaza"

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: improvement/alteration to  
bottom floor (store fronts)

1989



Field Survey Forms  
Potentially Historic Properties

13a

470 N. Canon Dr  
7420 Santa Monica Blvd. at Canon Dr.

Address:

Historic Name:

Common Name: Beverly Hills Post office

Year Built: 1933

Architect: Ralph C. Flewelling

Builder:

Architectural Style: ~~Spanish Colonial~~ Italian Renaissance

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: post office

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: may have been removed

NOV 1989



Michael Brandman Associates

Field Survey Forms  
Potentially Historic Properties

LA HCM# 319

Address: 10567 - 10579 Santa Monica Blvd

Historic Name: The Grove

Common Name: The Grove

Year Built:

Architect: Allen Siple and later, Edla Muir

Builder: Jans Development Co.

Architectural Style: French Revival cottages

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use:

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

*prob. 1910*

*1 blk east*

OV 1989



*S-M line*

Field Survey Forms  
Potentially Historic Properties

9

Address: 9844 Santa Monica Blvd. at Wilshire

Historic Name:

Common Name: Wilson's (house of suede and leather)

Year Built:

Architect:

Builder:

Architectural Style: Art Deco with a Queen Anne  
cornice tower

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: retail

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

1989



15  
Field Survey Forms  
Potentially Historic Properties

Address: 4025 Olympic & Bronson

Historic Name:

Common Name: Helen's Knit Studio and surrounding buildings

Year Built: (probably pre 1905- no record)

Architect:

Builder:

Architectural Style: Chicago Commercial

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: retail

Condition: Excellent \_\_\_ Good  Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations: store fronts

NOV 1989



Field Survey Forms  
Potentially Historic Properties

11  
14751 Santa Monica Blvd.  
Address: NE block Ensley / Santa Monica  
Historic Name: (across from Century City Shopping)  
Common Name: FOX Building  
Year Built: (Emil's Swiss Pastry)  
Architect:  
Builder:  
Architectural Style:  
Original Owner:  
~~Present Owner:~~  
Parcel Number:  
Original Use:  
Present Use: retail / bachelor apts.  
Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use   
Alterations: store fronts

NOV 1989



14

Field Survey Forms  
Potentially Historic Properties

Address: 4103 W. Olympic at Bronson

Historic Name:

Common Name: King Nao Restaurant

Year Built: 1941 (?) <sup>Earliest</sup> ~~latest~~ permit on record

Architect:

Builder: C.W. Jameson

Architectural Style: Chicago Commercial

Original Owner: Mr. W. Swohead / Southern (?)

~~Present Owner:~~

Parcel Number:

Original Use: Barber Shop

Present Use: restaurant

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

entrance and windows



Field Survey Forms  
Potentially Historic Properties

22

Address: 5831 Pico

Historic Name:

Common Name: Show case shoe Repair

Year Built: no record - pre 1905

Architect:

Builder:

Architectural Style: Art Deco

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: Napa Power Tools, West LA TV services, Salon 21

Condition: Excellent \_\_\_ Good \_\_\_ Fair  Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations: signage & some windows

Street lamps

NOV 1989



Field Survey Forms  
Potentially Historic Properties

5769<sup>W</sup> Pico Blvd  
~~NE corner~~ Pico/Orange Grove

Address:

Historic Name: Department of Water and Power

Common Name: Distributing Station 43

Year Built: 1927

Architect:

Builder:

Architectural Style: Greek Revival

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use:

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: doors?  
windows?



Field Survey Forms  
Potentially Historic Properties

17

Address: 5812-5814 Pico

Historic Name:

Common Name: Columbia Auto Stereo

Year Built: 1939

Architect: NONE

Builder: NONE

Architectural Style: art Deco → Streamline Moderne

Original Owner: M. Wilner

~~Present Owner:~~

Parcel Number:

Original Use: store building

Present Use: Commercial - Stereo

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: 1 bay of windows walled off; facade fascia  
obliterated, brick added

NOV 1989



Field Survey Forms  
Potentially Historic Properties

Address: 5431 W. Pico

Historic Name: Horgan Building

Common Name: ~~None~~

Year Built: 1928

Architect:

Builder:

Architectural Style:

Original Owner: George Jborcan

~~Present Owner:~~

Parcel Number: Tract 8818 Lot 3

Original Use: Real Estate Office

Present Use:

Condition: Excellent \_\_\_ Good \_\_\_ Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations:

1969



16

Field Survey Forms  
Potentially Historic Properties

Address: San Vicente Boulevard  
Historic Name: Coral Trees on S-V Blvd  
Common Name: "  
Year Built:  
Architect:  
Builder:  
Architectural Style:  
Original Owner:  
~~Present Owner:~~  
Parcel Number:  
Original Use:  
Present Use:  
Condition: Excellent  Good \_\_\_ Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_  
Alterations:

1989



ref. Gerhard & Miller

Field Survey Forms  
Potentially Historic Properties

LA Historic  
Cultural  
Monument  
# 81

Address: 4625 W. Olympic Blvd  
 Historic Name: Memorial Library  
 Common Name: Memorial Library  
 Year Built: 1930  
 Architect: Austin, <sup>John C.</sup> and Ashley, F. M.  
 Builder:  
 Architectural Style: Tudor and Gothic  
 Original Owner:  
~~Present Owner:~~  
 Parcel Number:  
 Original Use: Library  
 Present Use: Library  
 Condition: Excellent  Good  Fair  Deteriorated   
 No Longer in Use   
 Alterations:

NOV 1989



Olympic Line

Field Survey Forms  
Potentially Historic Properties

Address: 8801 W. Pico

Historic Name: Whitworth Bld.

Common Name: Same

Year Built: 1929

Architect: Unreadable

Builder: Victor C. Shade

Architectural Style:

Original Owner: Whitworth

~~Present Owner:~~

Parcel Number: Tract 8440 Lot 54

Original Use: Stores and Apartments

Present Use:

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

1989



Field Survey Forms  
Potentially Historic Properties

Address: 8560-66 W. Pico

Historic Name:

Common Name:

Year Built:

Architect:

Builder:

Architectural Style:

Original Owner:

~~Present Owner:~~

Parcel Number: Tract 6006 Lots 1, 2, 3, 4

Original Use:

Present Use: Rattan Imports

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

Original Permit not available.

Misc. Affidavit from 1946 for operating  
Superintendent. for Saks Fifth Avenue.

1989



Field Survey Forms  
Potentially Historic Properties

23

Address: 6100 Pico - ~~1200~~ + La Cienega (?) at Alfred

Historic Name:

Common Name:

Year Built: no record - pre 1905

Architect:

Builder:

Architectural Style: Art Deco - Streamline Moderne

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: 20/20 Video, Toy Warehouse, Newberry's

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: Doors & windows newly renovated Nice

NOV 1989



Field Survey Forms  
Potentially Historic Properties

19

Address: 587A  
5900 block Pico

Historic Name:

Common Name: Albee's

Year Built:

Architect:

Builder:

Architectural Style: Streamline Moderne - Deco

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use: commercial?

Present Use: commercial - storefronts

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: storefronts, illuminated sign added to parapet.

Field Survey Forms  
Potentially Historic Properties

20

5843  
~~5843/4~~ PICO (next door to Independent German Au  
Address: Northwest corner of PICO = ~~5843/4~~ Orange Grove

Historic Name:

Common Name: Dependable Carpets

Year Built: 1940

Architect: Leonard L. Joris

Builder: NONE

Architectural Style: Streamline Moderne

Original Owner: Morris Wilner

~~Present Owner:~~

Parcel Number:

Original Use: Wholesale plumbing supplies

Present Use: Carpet store

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations: signage, lighting (?)

NOV 1989



Field Survey Forms  
Potentially Historic Properties

13

Address: Part of 7900 block  
1069 Fairfax Ave. at Santa Monica Blvd.

Historic Name:

Common Name: Big Man & Shop (building in which it is located)

Year Built:

Architect:

Builder:

Architectural Style: Beaux Arts influence (arched windows)

Original Owner:

~~Present Owner:~~

Parcel Number:

Original Use:

Present Use: retail / apts.

Condition: Excellent \_\_\_ Good  Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations: store fronts

NOV 1989



Field Survey Forms  
Potentially Historic Properties

Address: 5907 W. Pico

Historic Name:

Common Name: Carthay Studios

Year Built: 1923

Architect: —

Builder: —

Architectural Style:

Original Owner: J.A. McNeil

~~Present Owner:~~

Parcel Number: Tract 7603 Lot 174-178

Original Use:

Present Use:

Condition: Excellent \_\_\_ Good \_\_\_ Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations:



25

Field Survey Forms  
Potentially Historic Properties

Address: 9407<sup>NE</sup> or 9300 - Pico, corner of Elm

Historic Name:

Common Name: J. Roth Bookseller

Year Built: no record - pre 1905

Architect:

Builder:

Architectural Style: Spanish revival

Original Owner:

~~Present Owner:~~

Parcel Number:

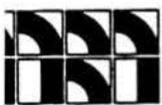
Original Use:

Present Use:

Condition: Excellent \_\_\_ Good \_\_\_ Fair \_\_\_ Deteriorated \_\_\_  
No Longer in Use \_\_\_

Alterations: windows? doors

judica - Pico Jewish Community



Field Survey Forms  
Potentially Historic Properties

Address: 8906 W. Pico  
Historic Name: <sup>2</sup> B'nai David Judea Congregation  
Common Name:   
Year Built: 1931  
Architect: Belle Brothers  
Builder: William Sinpura Construction  
Architectural Style: Moorish / Art Deco  
Original Owner: West Coast Hollywood Theatres  
~~Present Owner:~~  
Parcel Number: Tract 6800 Lots 14, 15, 16, 17  
Original Use: Theatre  
Present Use: Synagogue  
Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use   
Alterations: 1



3

Field Survey Forms  
Potentially Historic Properties

Address: 6101 Wilshire Blvd.

Historic Name: John's Coffee Shop Restaurant

Common Name: same

Year Built: 1928 - Alteration Permit

Architect:

Builder:

Architectural Style: ?

Original Owner:

~~Present Owner:~~

Parcel Number: Block 1 Lot 41

Original Use: restaurant Real Estate office - at the time - 1928

Present Use: restaurant

Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use

Alterations:

1989



Field Survey Forms  
Potentially Historic Properties

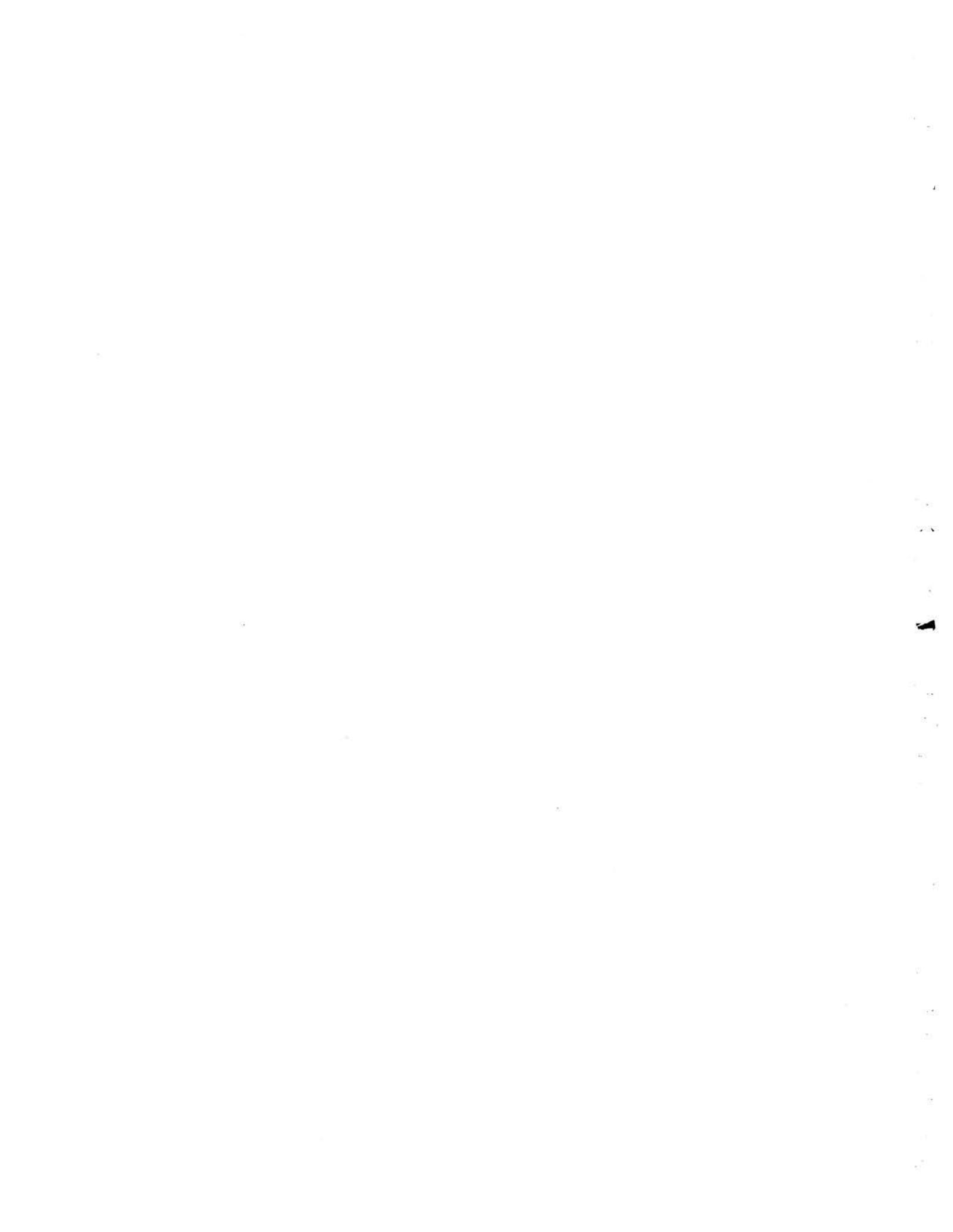
(12)

Address: <sup>7900</sup>~~8700~~ block - Santa Monica Blvd. @ San  
Historic Name: Vicente  
Common Name:  
Year Built:  
Architect:  
Builder:  
Architectural Style: 20-30's commercial (Chicago)  
Original Owner:  
~~Present Owner:~~  
Parcel Number:  
Original Use:  
Present Use: retail  
Condition: Excellent  Good  Fair  Deteriorated   
No Longer in Use   
Alterations: store fronts (windows)

NOV 1989



***Appendix D***  
***Archaeological Resources Report***



Cultural Resources Literature Review of  
Metro Rail Orange Line Western Extension Alternatives,  
Los Angeles, Los Angeles County, California

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8 November 1989  
Revised 23 January 1990

### MANAGEMENT SUMMARY

The Metro Rail Orange Line Western Extension Alternatives study area is in a region that has long been urbanized. Consequently, very little archaeological data has been generated in the area. The only archaeological material recovered near any of the routes was found in the La Brea Tar Pits. However, there is no reason to suspect that archaeological site density is less than elsewhere in southern California.

Numerous historic properties are known to exist within one isolated section of the study area. Historic reports for the balance of the study area are not available at the Archaeological Survey, University of California, Los Angeles. Given the early date of area urbanization it is probable that many properties of historic significance exist within and near the proposed alternative routes.

A study to identify all significant historic properties within and near the proposed alternative routes is required.

All ground disturbing activity must be monitored by an archaeologist. Any archaeological or historical deposit encountered must be analyzed to determine its significance. Management decisions are to be based on the results of the analysis. Appropriate ethnic community consultation must be accomplished when an archaeological deposit is encountered.

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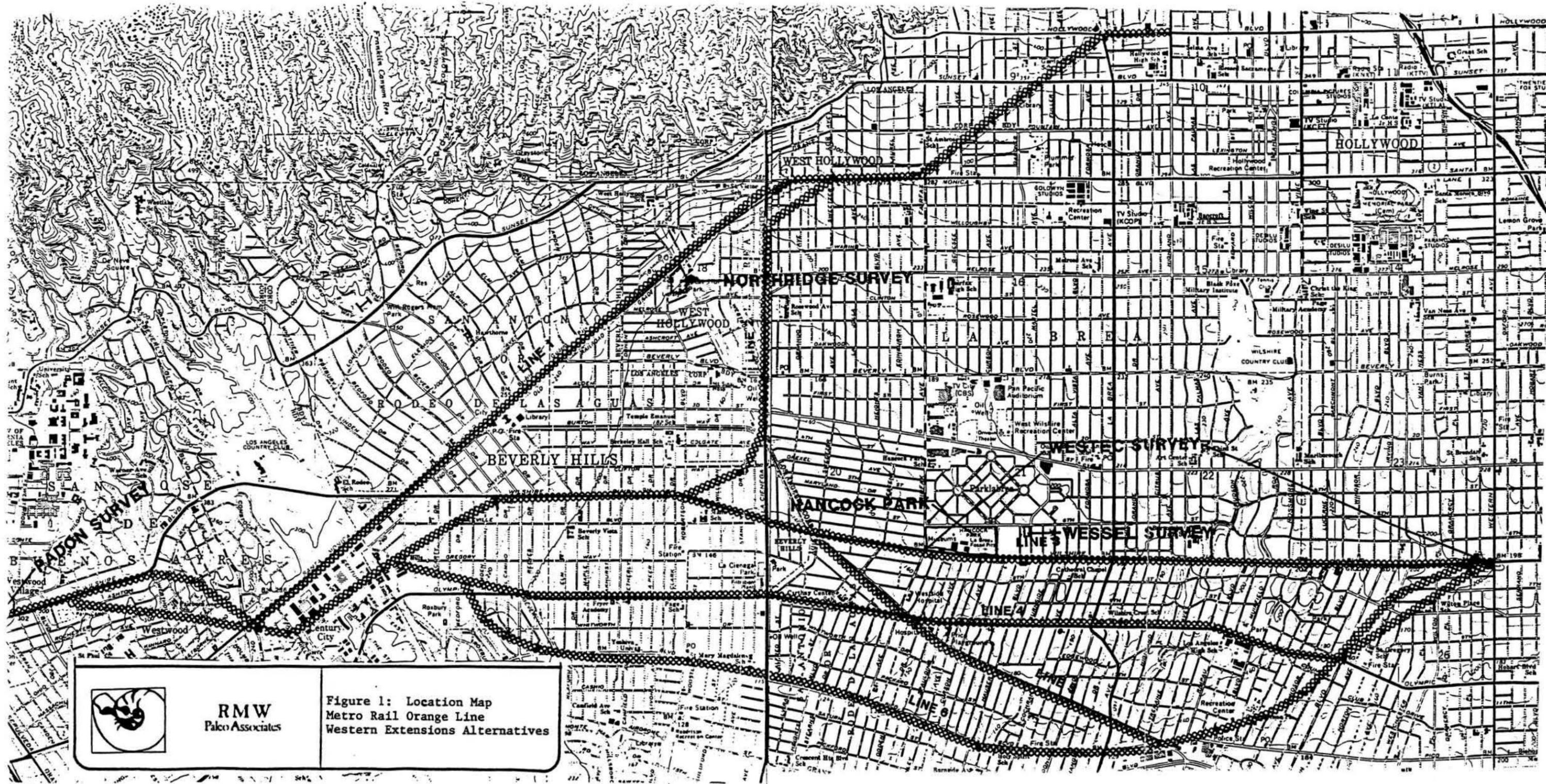
## INTRODUCTION

The Metro Rail Orange Line Western Extension Alternatives generally follow major street alignments, but some significant departures from the street rights-of-way are being considered. The general routes are shown on Figure 1, page 2, and are described below:

WILSHIRE ALTERNATIVE: The Wilshire Boulevard Route Alternative begins at the western terminus of phase two, at Western Avenue. The alignment extends westward along Wilshire Boulevard to Beverly Drive where the line shifts southwesterly to Century City. The line then continues northwest to its terminus in Westwood Village at Wilshire Boulevard and Veteran Avenue.

PICO (SHORT) ALTERNATIVE: The Pico (Short) Alternative begins on Wilshire Boulevard at the western terminus of phase two. The alignment extends westward along Wilshire to Crenshaw Boulevard where it shifts south along Crenshaw to Pico Boulevard. The alignment continues for a short distance along Pico to San Vicente Boulevard where the alignment continues northwest to Wilshire Boulevard. At Wilshire Boulevard the line continues along the same route as the Wilshire Alternative to the terminus in Westwood Village.

PICO (LONG) ALTERNATIVE: The Pico (Long) route begins the same as the Pico (Short) line along Wilshire Boulevard at Western Avenue. The line continues along Wilshire Boulevard to Crenshaw Boulevard where the alignment shifts south to Pico Boulevard. The alignment continues west along Pico Boulevard to Beverly Drive where the line shifts northwest to Century City. The line terminates in Westwood along Wilshire Boulevard at Veteran Avenue.



**RMW**  
Palo Associates

Figure 1: Location Map  
Metro Rail Orange Line  
Western Extensions Alternatives

OLYMPIC (SHORT) ALTERNATIVE: This route begins along Wilshire Boulevard at Western Avenue. The line shifts southwest to Olympic Boulevard and continues to San Vicente Boulevard. The line then shifts northwest at Olympic Boulevard until Wilshire Boulevard, where the alignment continues to Beverly Drive. At Beverly Drive, the line shifts southwest to Century City and then northwest to Westwood.

SANTA MONICA ALTERNATIVE: The Santa Monica Alternative begins at Highland Avenue and Hollywood Boulevard. The line continues along Hollywood Boulevard to La Brea where the alignment shifts southwest to Santa Monica Boulevard at Fairfax Avenue. The alignment continues along Santa Monica to Beverly Glen where it shifts west to Wilshire Boulevard and Veteran Avenue in Westwood.

A glance at the map accompanying this report reveals that the study area is heavily urbanized. Little or nothing remains of the original environment. In prehistoric times the area would have hosted a sage scrub growth with riparian species found along the drainages. These relatively rich ecological communities, with the nearby coastal communities and the chaparral communities which once existed to the north would have provided all the resources required by a hunter gatherer society for food, clothing and shelter (Koerper, Drover and Langenwalter 1983).

#### CULTURAL SETTING

The Archaeological Era: The Metro Rail study area lies in the prehistoric area of a Native American group that has become known as the Gabrielino (Bean and Smith 1978). The name "Gabrielino" identifies those people who were under the control of the Spanish Mission San Gabriel. Therefore it does not identify a specific ethnic or tribal group. The names the native groups used to identify themselves have, for the most part, been lost. The Gabrielino and the Chumash to the north

and west were very advanced. For example, both groups had mastered the technology required to regularly cross expanses of open ocean to reach and colonize all the Channel Islands.

The Gabrielino language derived from the Takic family, part of the Uto-Aztecan linguistic stock. This feature was shared with the Juaneno and Luiseno, tribal groups very similar to the Gabrielino, located to the south in Orange and northern San Diego Counties. By contrast, the Chumash language is derived from Hokan stock of the Yuman language family, representing an origin quite different from that of the Gabrielino. The Chumash share this trait with groups located south of the Luiseno.

The Yuman family of languages is derived from the American southwest while the Takic family can be traced to the Great Basin area (Driver 1969). Linguistic analysis has established that the Hokan speakers of Ventura and San Diego Counties were separated sometime after 500 B.C. The implication is that the entire southern California coastal region once was filled with Hokan speakers who were gradually separated and displaced by Takic speaking migrants from the Great Basin area. The timing, extent and impact on local societies of the migration is not well understood, and any data related to it represents an important contribution to the understanding of local prehistory.

The archaeological heritage of California is quite rich, probably more so than any other North American region north of Mexico. However, the archaeology of California is not well understood. There are two major reasons for this state of affairs. First, the California Native Americans were generally peaceful and did not offer warlike resistance to European settlement. Consequently, they did not gain any great notoriety during the settlement period. The second reason the original Californians are not well known is that they were first under the control of the Spanish and only later, after most of their culture had been destroyed by disease and displacement, did they

come under the control of the United States. There was only a minor Native American presence remaining in California when it became a United States possession. Consequently, very little interest in the natives and their prehistory was generated. It was many years later when the size, complexity and extent of archaeological deposits in the state became apparent that interest in the archaeological record was kindled.

Koerper and Drover (1983) have produced a local chronology based on extensive excavations at CA-Ora-119-A, a large site in Orange County. The chronology table on the following two pages provides a very brief overview of what is known of the local archaeological sequence and is based primarily on the Koerper and Drover work.

The Historic Era: The first Europeans to see what would become Los Angeles County were members of the 1542 expedition of Juan Rodriguez Cabrillo. Cabrillo sailed along the coast and did not explore inland, but he and his crew undoubtedly saw portions of the current study area. Europeans did not return to the Los Angeles County area until 1769 when Gaspar de Portola led an overland expedition from San Diego to Monterey. This pioneering expedition of 63 persons passed through the study area in early August 1769. The Portola expedition spent the night of 1 August 1769 near the Indian village of Yang-na, at the site that eventually became Los Angeles. The Spanish travelers named the area Nuestra Senora la Reina de Los Angeles, Our Lady Queen of the Angels (Wilson 1880). By 3 August 1769 the Portola expedition was near the area now known as West Hollywood (Bolton 1927).

The first permanent European presence in the Los Angeles vicinity occurred as a result of a decision by Spain to more thoroughly colonize the area between Baja California and Monterey. Twelve families, consisting of 46 people, arrived in the area on 18 August 1781. Governor Felipe de Neve gave the community official status as the territory's second Pueblo on 4

FIGURE 2: CHRONOLOGY, BASED ON KOERPER AND DROVER (1983)

<u>PERIOD</u>	<u>TEMPORAL SPAN</u>	<u>MAJOR DIAGNOSTIC TRAITS</u>
<u>Early Man</u>	? to 7500 B.C. +/- ?	1. Lack of grinding implements. 2. Large, well made projectile points.

Characteristics and adaptations:

1. Subsistence through hunting of large Pleistocene game animals.
2. Temporary camps at large kills.
3. Group no larger than extended family.
4. Widespread. Covered most of North American continent, but no sites known locally.
5. Very small total population.

<u>Milling Stone</u>	7500 B.C. +/- ? to 1000 B.C. +/- 250	1. Predominance of manos and metates. 2. Ornaments made of stone. 3. Large and often crude projectile points. 4. Cogstones and discoidals. 5. Charmstones. 6. Some mortars and pestles near end of period.
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Characteristics and adaptations:

1. Heavy reliance on hunting in early part of period. Deer, rabbits and other small game associated with chaparral.
2. In middle to late part of period reliance was on hard seeds associated with chaparral.
3. Coastal groups utilized shellfish and near shore resources.
4. Seasonal round based on ripening vegetable resources rather than animal migrations. This caused increased isolation leading to noticeable differences in culture in much smaller geographic areas.
5. Probably about 50 persons in average group.
6. Very little noticeable change in last two thirds of period.
7. Colonization of Channel Islands near end of period.

Figure 2, Continued:

<u>Intermediate</u>	1000 B.C. +/- 250 to A.D. 750 +/- 250	1. Bone ornaments. 2. Wide use of mortars and pestles along with manos and metates. 3. Use of steatite begins. 4. Many discoidals. 5. Large projectile points trending to smaller in the last part of the period.
---------------------	---------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Characteristics and adaptations:

1. Heavy reliance on acorns as food resource. Hard seeds, small animals and coastal resources continue to be used.
2. Many more deep water ocean resources utilized.
3. First permanently occupied villages.
4. Large increases in local population.
5. Atlatl (spear thrower) in use. Bow and arrow probably introduced near end of period.
6. Some evidence of trade.

<u>Late Prehistoric</u>	A.D. 750 +/- to Spanish contact	1. Shell ornaments. 2. Mortar, pestle, mano and metate use continues. 3. Small, finely worked projectile points. 4. Wide use of steatite. 5. Some pottery vessels appear near the end of the period.
-------------------------	---------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Characteristics and adaptations:

1. Increased exploitation of all resources.
2. Large populations, some villages had as many as 1,500 persons.
3. Great increase in art objects.
4. Much evidence of trade.

September 1781. The San Gabriel Mission, some miles distant, had been established 10 years earlier. The name Gabrielino was given to all the Indians associated with the mission, regardless of their origins.

Growth of early Los Angeles was slow and haphazard. No documentation was kept of streets or building lots and the result was a very fragmented development. Lots of all shapes and sizes and streets that ran in odd directions led to a very confusing situation. The City was occupied by United States forces in 1847. In 1849 the City contracted with United States Army Lieutenant E.O.C. Ord to produce the first official map of the vicinity (Gunn 1902). Ord's map, reproduced in Fogelson (1967), shows only the eastern portion of the study area. This portion of the study area is under cultivation, but no structures are shown on Ord's map.

In 1850 Los Angeles was incorporated and established as the County Seat. Growth continued to be slow until arrival of the railroads from San Francisco in 1876 and from the eastern United States in 1885. The railroads were followed by a period of explosive growth in industry and agriculture. Numerous small local railroads were constructed to meet the transportation needs.

An 1896 map of the region, reviewed at the Map Library, University of California, Los Angeles reveals that many structures and streets existed in the study area by that date. A 1921 map revealed the study area as completely urbanized, with most major streets following their current alignments.

#### LITERATURE REVIEW

The following discussion is based on the results of a literature review completed by the author at the Archaeological Survey, University of California, Los Angeles on 7 November 1989. Other sources at the University of California, Los Angeles Library were also consulted. However, the time

permitted to complete research on this project was very restricted and did not allow complete assembly or examination of all available documentation. The following discussion must therefore be viewed as presenting only the vaguest of outlines regarding the cultural resources that exist within the study area. It also must be pointed out that while the Archaeological Survey, University of California, Los Angeles is the official local repository of the State of California Archaeological Survey, its completeness rests on the submission of reports by cultural resources researchers. There is no method to determine if a report exists unless it's author has seen fit to place it on file.

Westec Services (1983) completed an examination of Wilshire Boulevard from the downtown Los Angeles area west to Fairfax Avenue. The only prehistoric feature within the current study area discussed by Westec are the archaeological remains recovered from the La Brea Tar Pits. Some human skeletal material, wood artifacts and lithic artifacts have, to date, been recovered. This material has been recorded as part of archaeological site CA-LAn-159. The site record for CA-LAn-159 was prepared on 21 November 1949 by Robert L. Heizer. It is significant that wood artifacts in the form of dart shafts have been preserved at this site. Usually, wooden material rapidly decays to the point where it cannot be recovered. It is probable that many similar important artifacts remain to be discovered in the Tar Pits. The Westec survey area is shown on Figure 1, page 2.

Archaeological site CA-LAn-1261-H also exists in the La Brea Tar Pit area. This site was recorded on 8 May 1986 by Roy Salls. The site was discovered during excavation for new building construction. The deposit is a Civil War era asphalt mining pit that was subsequently filled by trash disposal. The trash may have originated at the Hancock house, which was located a short distance to the west. The portion of the

deposit that could be seen was about six by 10 meters in extent, with a depth of about 70 centimeters. A portion of the deposit could not be seen.

The Hancock Park area, containing the La Brea Tar Pits, CA-LAn-159 and CA-LAn-1261-H is shown on Figure 1, page 2.

Wessel (1984) examined a small parcel a short distance to the east of Hancock Park and north of Wilshire Boulevard. While nothing was seen on the surface, the recommendation was made that grading be archaeologically monitored, due to the high probability that important material has been preserved in the subsurface. The area examined by Wessel is shown on Figure 1.

Padon (1982) examined a small area near the western end of Wilshire Boulevard. Nothing was found during this project. The Padon survey area is shown on Figure 1.

The Northridge Center for Public Archaeology (1988) completed an examination of a small area adjacent to Santa Monica Boulevard. While nothing was found in the study area, within one mile are six properties on the National Register of Historic Places, three properties on the California Inventory of Historic Places and one California Historic Landmark. Included are the Hancock County Park, Rancho La Brea Adobe, Rocha House, Doheny Estate, Robinson/Virginia Estate, Pan-Pacific Auditorium, Storer House and Villa Bonita. The recommendation was made that ground disturbing work be monitored by an archaeologist since significant deposits were to be expected in the subsurface.

No other reports of cultural resources research projects within or near the current study area routes have been filed at the Archaeological Survey, University of California, Los Angeles.

#### DISCUSSION

It is obvious from the foregoing that very little cultural resources research has been completed within the study area. The primary reason for this is that the area was completely

urbanized prior to promulgation of the requirement for cultural resources research to precede construction. The density of historic properties near the Northridge survey area indicates that considerable historic research has been accomplished. Unfortunately, research that is primarily focused on historic matters seldom is filed at the Archaeological Survey, University of California, Los Angeles. Nevertheless, there is sufficient documentation to allow two observations:

1. Numerous recorded historic properties can be expected within and near the Metro Rail Alternatives.
2. It is reasonable to expect that many properties within and near the Metro Rail Alternatives that have not previously been recorded will be found historically significant.

Prior phases of the Metro Rail project have been preceded by detailed studies designed to identify all important historic properties along the routes. Such a study must be undertaken for the routes discussed in this report, and be completed well in advance of any ground disturbing activity.

Very little archaeological material has been recovered within or near the Metro Rail routes. The little such material that has been recovered is concentrated in the La Brea Tar Pits. This lack of archaeological data should not be interpreted to mean that prehistoric peoples did not utilize the region. Indeed, it is likely that the prehistoric environment was rich and would certainly have been utilized. There is no reason to believe that archaeological sites are less densely distributed within the study area than in undisturbed portions of southern California. The local sites were obscured by the early and rapid local urbanization.

Given the current state of archaeological technical means, there is no method of recovering the archaeological data other than monitoring during ground disturbing activity. Monitoring will undoubtedly lead to some grading delays when archaeological

material appears, since work must be halted until the significance of the site is determined and decisions regarding its future management made.

Projects requiring data recovery are of great concern to ethnic groups whose precursors were responsible for deposition of the artifactual material under study. Within the study area such groups are the Native American community, the Chinese community, and perhaps others. These groups must be included in the decision making process related to the preservation, recovery and/or disposition of the cultural resources encountered during the project.

A Mitigation Matrix that may be helpful in the decision making process related to cultural resources management is contained in the Appendix. The Mitigation Matrix outlines the preferred treatments, but any given archaeological deposit may have overriding considerations leading to alterations in the mitigation measures. The Mitigation Matrix is therefore to be used only as a guide.

#### RECOMMENDATIONS

1. A historic research project will be undertaken well in advance of construction to:
  - A. Identify all registered historic properties within and near the proposed Metro Rail Alternatives.
  - B. Identify all unregistered, significant properties within and near the proposed Metro Rail Alternatives. Full documentation will be prepared for each of these properties and submitted to the appropriate federal, state or local agency for a determination of their eligibility for registration.
2. All ground disturbing activity will be monitored by an archaeologist. The archaeologist will:
  - A. Collect sufficient material to permit determination of the significance of the deposit.

- B. Analyze the collected material and make appropriate recommendations for the management of the deposit.
- C. Accomplish the approved management recommendations.
- 3. Appropriate ethnic groups will be consulted whenever cultural resources are encountered during the project.
- 4. All work will be described in written reports that receive sufficient distribution to insure their availability to future researchers.
- 5. All material collected during the projects will be donated to a local institution that has the appropriate facilities for permanent curation, display and use of the material by interested scholars and the general public.

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Ronald M. Bissell  
Archaeologist

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APPENDIX

MITIGATION MATRIX



### MITIGATION MATRIX DEFINITIONS

Significant site: A site which has the probability of increasing our knowledge of the past. A site which can be shown to be eligible for inclusion in the National Register of Historic Places is significant. Significance is established through test excavation and analysis of material. Sites for which significance has not been established must be treated as significant.

Non significant site: A site which has been demonstrated through test excavation to not contain material which has a high probability of increasing knowledge of the past. Non significant sites still deserve excavation and reporting effort. However, it is not as important that non significant sites be preserved.

Test excavation: A test excavation is designed to determine whether or not a site is significant, and not to gain new archeological or historical insights. All test excavation work must have a determination of significance as the primary goal.

Data recovery excavation: A data recovery excavation is employed when a site must be destroyed. The data recovery excavation has as its goal the recovery of a statistically valid sample of site material. Data recovery excavations should follow a carefully thought out research design agreed to by all parties before the excavation is undertaken.

Non archaeological action: Any action taken to reduce the negative impacts to a deposit which does not involve data collection. Some examples are erosion control devices, burial under clean fill, planting of native vegetation and fencing.

Change planning: Planning is changed in order to remove a site from threat of damage by primary or secondary impact. Relocating construction away from a site is an example.

### MITIGATION MATRIX

Enter matrix at left with correct combination of site significance and expected impact. If a sequence of action ends with instruction to change site type, make the change and follow the sequence as indicated for the new site type. Applicable definitions are found on the previous page.

LETTER SEQUENCE: Complete all actions in letter sequence order.

NUMBER SEQUENCE: Complete one action. Numbers indicate preference priority.

<u>SITE TYPE</u>	<u>ACTION TO BE TAKEN</u>						
	<u>NO ACTION</u>	<u>TEST EXCAVATION</u> Notes 1, 3	<u>DATA RECOVERY EXCAVATION</u> Notes 1, 2, 3	<u>NON ARCHEO</u>	<u>CHANGE PLANNING</u>	<u>DETERMINE IMPACT</u>	<u>CHANGE SITE TYPE</u>
1A Significant, no impact	A						
2A Significant, natural impact			2	1			
3A Significant, primary impact			2		1		
4A Significant, secondary impact			3	2	1		
5A Significant, unknown impact						A	B
1B Non significant, no impact	A						
2B Non significant, natural impact			Note 4	Note 4			
3B Non significant, primary impact			1		2		
4B Non significant, secondary impact			1		2		
5B Non significant, unknown impact						A	B
1C Significance unknown, no impact		A					B
2C Significance unknown, natural impact		A					B
3C Significance unknown, primary impact		A					B
4C Significance unknown, secondary impact		A					B
5C Significance unknown, unknown impact		A				B	C

**Notes:**

1. Test and data recovery excavations may include collection of surface material and monitoring during ground disturbing activity.
2. Data recovery excavation implies recovery of a statistically significant sample from the site.
3. All test and data recovery excavation projects must include preparation of a report and arrangements for adequate curation of the collection.
4. The decision about which mitigation measure to apply in this case is economic. The least expensive option is usually taken.

***Appendix E***  
***Paleontological Resources Report***



PALEONTOLOGICAL LITERATURE REVIEW OF  
THE METRO RAIL ORANGE LINE WESTERN EXTENSION ALTERNATIVES  
LOS ANGELES COUNTY, CALIFORNIA

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MAY 1990



## SUMMARY

The excavations for the Metro Rail Western Extension alternatives will encounter nonmarine and marine deposits ranging in age from the Recent to at least 5 million years old. These rock units are known to contain the fossils of plants and animals that lived in the area during this time period. The Wilshire Alternative passes the world famous La Brea Tar Pits, at Hancock Park. Fossil remains are known throughout the study area from Pleistocene age deposits. These Pleistocene deposits and the Fernando Formation are most likely to be disturbed by excavations for Metro Rail.

Each of the Western Extensions has a moderate potential for the discovery of fossil remains, except the portion of the aerial segment of the Wilshire Alternative near Hancock Park that has a high potential for fossil discovery. The potential for adverse impacts on paleontological resources ranges from moderate for most of the study area to high for the aerial segment of the Wilshire Alternative.

Excavations for the Metro Rail Western extensions will destroy fossil remains. This is an adverse impact on the region's paleontological resources. Proper mitigation measures will reduce these adverse impacts to an acceptable level. A Memorandum of Agreement has been prepared to provide a framework for development of specific mitigation measures. Mitigation measures such as monitoring of excavations, salvage of exposed fossils, preparation, and curation of the fossils salvaged are typically necessary to reduce the adverse impacts to an acceptable level.

## INTRODUCTION

The following report presents the results of RMW's assessment of the paleontological resources within the Metro Rail Orange Line Western Extension study area. The study area has five east west alternatives. In this report the alternatives are: the Santa Monica Alternative, runs along Santa Monica Boulevard from the proposed Highland Avenue and Hollywood Boulevard Metro Rail station southwest to Wilshire Boulevard near Malcom Avenue; the Wilshire Alternative, runs west from the Western Avenue and Wilshire station along Wilshire turning south ending near Gregory and Linden; the Olympic (Short) Alternative, begins at the Western and Wilshire station then running southwest to Olympic Blvd. turning west along Olympic ending near Gregory and Linden; the Pico (Short) Alternative, begins at the Western and Wilshire station turns south to San Vicente at Pico and then runs north along San Vicente to Wilshire Blvd.; and the Pico (Long) Alternative, begins at the Western and Wilshire station turns south to Pico at San Vicente then it runs west along Pico Blvd. before it turns north ending near Olympic and Bedford (see Figure 1 ).

## METHODS

The purpose of this report is to determine the extent of known paleontological resources and the potential for the discovery of additional paleontological resources within the study area. This assessment is based on a review of the published and unpublished paleontological and geological literature. A review of the locality records housed at the Natural History Museum of Los Angeles County (LACM) and George Page Museum provided information on the known occurrences of fossils. Finally, interviews with paleontologists familiar with the study area provided additional information on the abundance of fossils in the area. No field survey was conducted during this study. In this report each alternative is treated separately when describing existing conditions and impacts. In the summary there is a comparison of the alternatives.

1. If the Identification Study locates significant fossil deposits along the alternative, provisions for salvage before or during construction should be included as a part of the Data Recovery Program.

2. All excavations including tunneling, cut and cover, and any other excavations shall be monitored by a qualified paleontological observer. The duration and frequency of these inspections will depend on the sensitivity of the area, the rate of excavation, and the frequency of the discovery of fossils.

3. The paleontologist shall be allowed to salvage of exposed fossil remains, if they are determined to be significant.

4. Provisions for preparation of the collected remains shall be made before the beginning of excavations.

5. All fossils shall be cataloged and curated so they can be integrated into the collections of the Page Museum or the Natural History Museum of Los Angeles County.

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