

**Regional Connector Transit Corridor
Draft Environmental Impact Statement/
Draft Environmental Impact Report**

APPENDIX Y



CULTURAL RESOURCES -
ARCHEOLOGY (UPDATED)

LOCALLY PREFERRED ALTERNATIVE IMPACTS TO ARCHEOLOGICAL AND PALEONTOLOGICAL RESOURCES

The Draft Technical Memoranda for Archaeological Resources and Paleontological Resources were included with the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) that was released for public comment on September 3, 2010. This addendum serves to finalize the draft report. Two variations of the Fully Underground LRT Alternative (Little Tokyo Variation 1 and Little Tokyo Variation 2) were analyzed in this report. Little Tokyo Variation 2 was subsequently dropped from consideration, and Little Tokyo Variation 1 became the sole alignment for the Fully Underground LRT Alternative.

On October 28th, 2010, Metro's Board of Directors approved staff's recommendation to designate the Fully Underground LRT Alternative described in the publicly reviewed Draft EIS/EIR for the Regional Connector Transit Corridor as the Locally Preferred Alternative (LPA). After the close of the Draft EIS/EIR comment period, refinements were made to the LPA to reduce impacts and address comments received. This addendum incorporates those refinements. The LPA would provide a direct connection from 7th Street/Metro Center Station to the Metro Gold Line near 1st and Alameda Streets. The Metro Gold, Blue and Expo light rail lines would be connected allowing trains to operate between Claremont and Long Beach, and from Santa Monica to the Eastside. In the action for approval, the Board also directed staff to remove the property located on the southeast corner of 2nd and Spring Streets from the list of potential acquisitions as well as eliminate the station at 5th and Flower Streets. This was due to its close proximity to the existing 7th Street/Metro Center Station and a need to reduce costs. The designated LPA thus includes three new stations instead of the original four described in the Draft EIS/EIR. On January 4th, 2011, the Federal Transit Administration (FTA) authorized Metro to initiate Preliminary Engineering as part of FTA New Starts funding program. In its authorization, FTA requested that Metro among other items pursue the identification of appropriate mitigations and realize potential cost savings. Consistent with FTA's authorization, refinements to the Locally Preferred Alternative have been identified and are to be analyzed as part of the development of the Final EIS/EIR.

This addendum to the Technical Memoranda was developed to describe the project refinements to the LPA. The effects on archeological and paleontological resources are the same as what was described in the Draft Technical Memoranda.

1.0 UPDATED PROJECT DESCRIPTION

On October 28th, 2010, the Metro Board of Directors concurred with staff's recommendation to designate the Fully Underground LRT Alternative as the LPA. The LPA alignment is

essentially the same as the Fully Underground LRT Alternative, except it does not include the Flower/5th/4th Street station and has a modified route through Little Tokyo. However, it still travels under the intersection of 1st and Alameda Streets rather than crossing at-grade, and connects to the Metro Gold Line within 1st Street and north of Temple Street.

LPA refinements made since the Draft EIS/EIR to reduce impacts include:

- Relocation of the proposed tunnel boring machine (TBM) insertion site to the Mangrove property northeast of 1st and Alameda Streets in order to reduce community disruption due to construction activities
- Elimination of cut and cover construction on 2nd Street in Little Tokyo
- Extension of TBM machine operation from 2nd/Hope Street station to 4th and Flower Streets, allowing an additional block of cut and cover construction to be eliminated
- Slight modifications to tunnel depths
- Rerouting of the tunnels beneath Japanese Village Plaza in order to reduce acquisitions on the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street

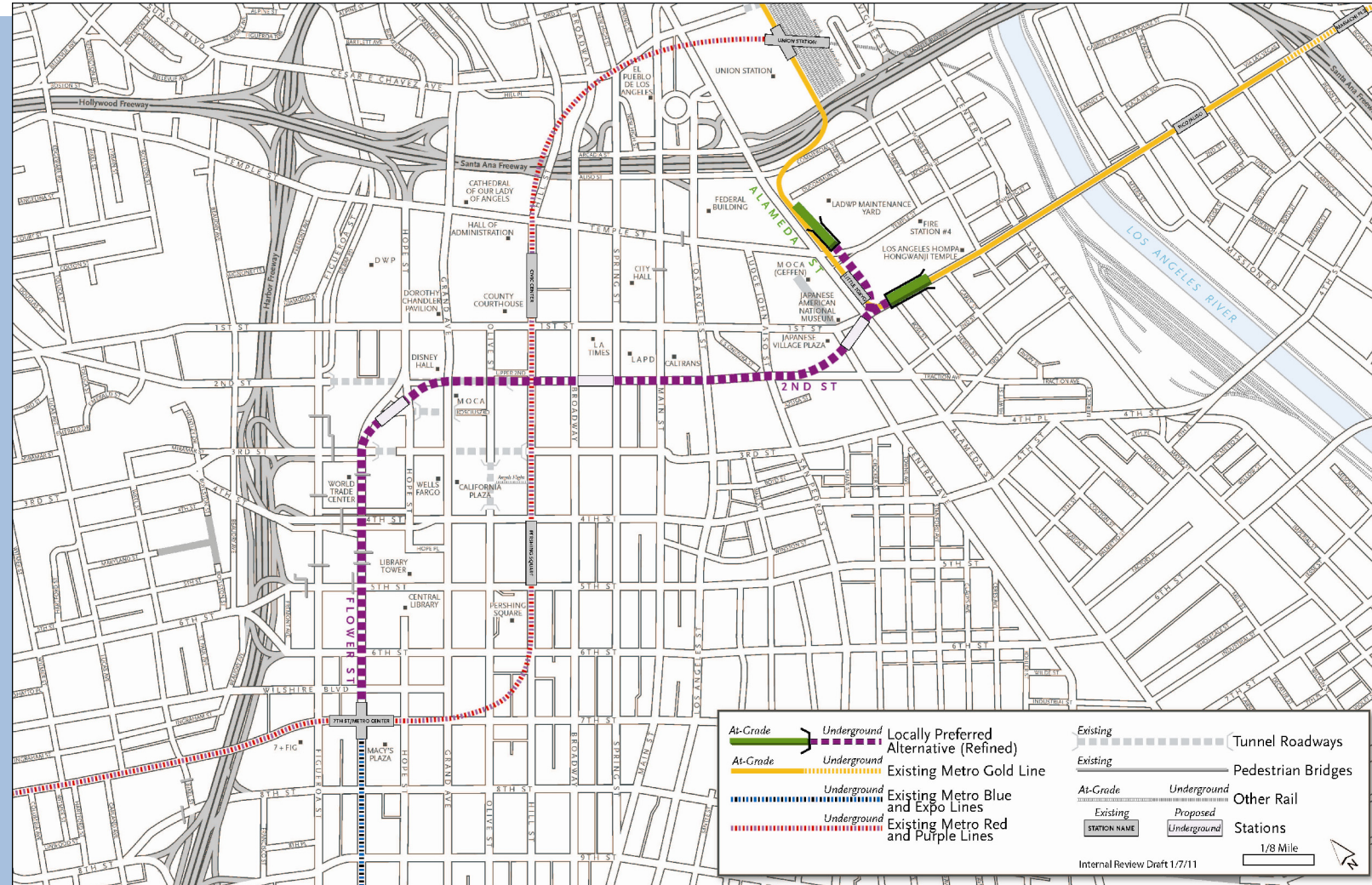


Figure 1 –Locally Preferred Alternative

1.1 Route Overview

The LPA alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station and would run underneath Flower Street. An enhanced pedestrian walkway would be provided along Flower Street from the 4th Street and Flower Street area to the existing 7th Street/Metro Center Station entrance at 7th and Flower Streets, which would improve the pedestrian connection between the Financial District and the 7th Street/Metro Center Station. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets. A new underground station would be located just southwest of the intersection of 2nd and Hope Streets.

At 2nd and Hope Streets, a new pedestrian connection would be made to Upper Grand Avenue. A pedestrian plaza connecting to Upper Grand Avenue is currently planned above General Thaddeus Kosciuszko Way as part of the Broad Museum. Metro would construct an elevator from the station entrance to the plaza if one is not already provided. If the plaza is not built, Metro would build a pedestrian bridge to connect the elevator to Upper Grand Avenue.

Tracks would then head east underneath 2nd Street to the next proposed underground station between Broadway and Spring Street (2nd Street/Broadway station). The tracks would continue east underneath 2nd Street to just west of Central Avenue at approximately the pedestrian signal to the JVP, where the alignment would then veer northeast under privately held property and Central Avenue to a newly proposed Little Tokyo/Arts District underground station (1st/Central Avenue station). The proposed underground station would be partially located within Central Avenue and the northern half of the block bounded by 1st Street, Central Avenue, 2nd Street, and Alameda Street. The Señor Fish, Weiland Brewery, the former Café Cuba (The Spice Table), and associated parking would need to be acquired for construction of this station. However, the remaining businesses on that block would remain, including the Office Depot and associated parking. This station may include a small building at ground level on the southwest corner of 1st and Alameda Streets to house ventilation fans. This shallow station may potentially be built without a roof or mezzanine, leaving the below-grade platform level exposed.

An underground junction would be constructed beneath the intersection of 1st Street and Alameda Street. Two new portals would be located to the north and east of the junction, where trains would rise to the surface to connect to the Metro Gold Line heading north to Claremont and east to I-605.

One portal would be located north of Temple Street, northeast of the existing at-grade Little Tokyo/Arts District Station and Metro Gold Line tracks. This portal would rise to the north within the maintenance yard of the City of Los Angeles Department of Water and Power (LADWP) and connect to the existing LRT bridge over US 101, allowing a connection to the Metro Gold Line to Claremont. Tracks would run from the junction under 1st and Alameda Streets through a new tunnel crossing beneath Temple Street and the Mangrove property (the parcel on the northeast corner of 1st and Alameda Streets) to the new portal. This new tunnel

would run immediately east of the existing Little Tokyo/Arts District Station and Metro Gold Line tracks.

The second portal would be located within 1st Street between Alameda and Garey Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate this second portal and maintain the existing number of through lanes. The widening would start at Alameda Street and continue east, significantly tapering down as it crosses Hewitt Street, returning to the existing condition prior to the Los Angeles Homba Hongwanji Buddhist Temple, to join the existing 1st Street LRT tracks, just west of the 1st Street Bridge.

Access to property northeast of 1st and Alameda Streets, the Mangrove property, would need to be acquired for insertion of the TBM, to stage construction of both portals, to connect to the Metro Gold Line LRT bridge, and to construct the tunnels beneath Temple Street and the Mangrove property. During construction, tracks would be installed in this area at-grade to allow service to proceed on the Metro Gold Line while construction activities occur within the project area. Figure 2-10 provides a map of this alternative.

The existing Metro Gold Line Eastside Extension and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction with intermittent disruptions related to construction activities. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles and the existing, at-grade Little Tokyo/Arts District Station would terminate. In its place, Metro would initiate operations on two routes:

- Between Claremont and Long Beach
- Between East Los Angeles and Santa Monica

Crossovers could be located just east of the proposed station at 2nd and Broadway Streets, underground beneath 1st Street just east of the intersection of 1st and Alameda Streets, and underground beneath the Mangrove property, north of the rail junction. In addition, a pocket track, which could also serve as a crossover, would be located beneath Flower Street between 5th and 6th Streets. The crossovers and pocket track may not be needed at these locations and may ultimately be placed in other locations. Tunnel boring machines cannot be used for construction of crossovers since underground crossover locations require cut and cover construction. More information on these construction methods is provided in the Description of Construction, Appendix K.

1.2 Operating Characteristics

The Fully Underground LRT Alternative (LPA) consolidates the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

East-West Route (Santa Monica to I-605 via the Metro Expo Line, Regional Connector, and Metro Gold Line Eastside Extension tracks): Metro Expo Line trains from Santa Monica would travel on existing Flower Street tracks north of the junction at Washington and Flower Streets. After stopping at the existing 7th Street/Metro Center Station, the trains would continue north along the new Regional Connector tracks to a new junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to a new portal on 1st Street, and continue along the Metro Gold Line Eastside Extension tracks to I-605.

North-South Route (Claremont to Long Beach via the Metro Gold Line, Regional Connector, and Metro Blue Line tracks): After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to a new junction beneath 1st and Alameda Streets. Trains would then travel to a new portal on the LADWP maintenance yard site, and continue along the Pasadena Metro Gold Line and the Foothill Extension to Claremont.

The east-west and north-south routes would each operate with five minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

2.0 LPA EFFECTS, IMPACTS AND MITIGATION FOR ARCHAEOLOGICAL RESOURCES

Construction of the Fully Underground LRT Alternative (LPA) has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles Zanja System, and sites CA-LAN-3588, P-19-003338, and P-19-003339 (Details regarding these resources can be found in the body of the Technical Memorandum for Archaeology).

Archaeological features associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect. Implementation of mitigation measures described in Sections 1.2.2.1 and 1.2.2.2 would reduce potential direct impacts to identified and previously unidentified archaeological resources to a less than significant level. The LPA would not result in operational impacts to both identified and previously unidentified archaeological resources.

Given that implementation of the mitigation measure described in Section 1.2.2.1 would reduce potential construction impacts to previously unidentified archaeological resources to a less than significant level, the LPA would not contribute to a cumulative impact on unidentified archaeological resources.

Potential destruction of portions of the Los Angeles Zanja System could contribute to a cumulative impact to this resource. Implementation of the mitigation measure described in Section 1.2.2.1.2 would reduce both direct and cumulative impacts to known archaeological resources, including the Zanja System, to a less than significant level.

2.1 NEPA Finding and CEQA Determination

Construction of the LPA has the potential to affect previously unknown resources. With implementation of mitigation measures, potential construction and cumulative impacts would not be adverse or significant under NEPA or CEQA. The LPA would not result in adverse or significant operational impacts to archaeological resources.

2.2. Mitigation Measures

Construction of the Regional Connector Transit Corridor project may impact one or more NRHP- or CRHR-eligible archaeological sites along with an unknown number of previously unidentified archaeological resources.

Since operational impacts to archaeological resources, including both previously recorded and undiscovered resources, are not expected for any of the project alternatives, mitigation for operation would not be required for this project.

In the event that resource avoidance is not possible, and to mitigate impacts to previously unidentified archaeological resources, the following mitigation measures related to construction activities are recommended.

Mitigation measures are also documented in the Mitigation Monitoring and Reporting Program (MMRP), which is part of the Final EIS/EIR.

2.2.1 Treatment of Undiscovered Archaeological Resources

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementing this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementing a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected.

If cultural resources are discovered or if previously identified resources are affected in an unexpected manner, the CRMMP would ensure that such resources receive mitigation to reduce the impact to a less than significant level. This plan would include, but not be limited to, the following elements:

- Worker training
- Archaeological monitoring
- The scientific evaluation and mitigation of archaeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains

- Reporting of monitoring and mitigation results

Worker Training

Prior to initiating ground-disturbing activities, a qualified archaeologist would conduct a short awareness training session for all construction workers and supervisory personnel. The session would explain the importance of and legal basis for protecting significant archaeological resources.

Each worker would also learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and the immediate contact of the supervisor and the archaeological monitor.

This worker education session could include visual representations of artifacts (prehistoric and historic) that might be found in the project vicinity, and it could take place on-site immediately prior to the start of ground disturbance.

Supervisory personnel may benefit from longer training sessions, while a brief training would suffice for non-supervisory workers. The brief (approximate 30- to 45-minute) training session may be conducted on-site by video, PowerPoint presentation, or similar media.

Archaeological Monitoring, Evaluation, and Mitigation

Due to poor surface visibility and high archaeological sensitivity of the direct APE, an archaeological monitor would be present during ground-disturbing activities in archaeologically sensitive areas. This would reduce the potential level of impact to buried archaeological resources to a less than significant level. This work would be completed under the direction of an archaeologist who meets the Secretary of the Interior's Standards for archaeologists. An adequate number of monitors would be present to ensure that all earth-moving activities are observed and would be on-site during all grading activities for areas to be monitored.

During the original excavation of previously undisturbed soils, the archaeological monitor(s) would be on-site at a frequency determined by the lead archaeologist. Inspection frequency may vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. Full-time monitoring is warranted within one-half block of potentially significant archaeological resources that are known or suspected to be present within the direct APE.

If potentially significant archaeological resources are exposed during ground-disturbing activities, the project manager would be notified immediately. Archaeological monitor(s) would have the authority to divert or temporarily halt ground-disturbing operations in the area of discovery to allow the resources to be evaluated. Excavation work would halt until the archaeological monitor makes a determination of the significance of the archaeological resource. Construction activities may continue in other areas.

Evaluation of such resources is typically accomplished by a test-level excavation designed to determine the horizontal and vertical extent of the resource, and to characterize its contents. If the discovery proves to be potentially eligible for listing on the NRHP or the CRHR and project plans cannot be altered to avoid affecting the site, then an adverse effect would result within the project area. This adverse effect may be resolved by implementing a Memorandum of Agreement (MOA) between Metro and the SHPO.

Before construction activities are allowed to resume in an affected area, artifacts would be recovered and features recorded using professional archaeological methods. The lead archaeologist operating under the direction of the MOA would determine the amount of material to be recovered for an adequate artifact sample for analysis.

All cultural material collected during the construction monitoring program would be processed using professional archaeological methods. An appropriate sample of recovered materials, selected by the lead archaeologist, would be curated at a curation facility that meets federal standards per 36 CFR Part 79 and made available to other archaeologists and researchers for further study.

Native American Participation

If Native American cultural resources (i.e., prehistoric or ethnohistoric-period artifacts, food remains, or features associated with Native Americans) are exposed during project-related ground disturbance, Metro would contact the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation. Both groups have expressed interest in the project. One or both of these groups would be asked to provide the services of a trained Native American consultant to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as-needed basis, and would be intended to ensure that Native American concerns are taken into account during the construction process.

Human Remains

The discovery of human remains is always a possibility during ground disturbance. For example, an unmarked early Spanish period Native American cemetery was recently discovered near the APE (Applied Earthworks 1999).

The State of California Health and Safety Code Section 7050.5 addresses what should be done when human remains are found during construction. This code section states that when human remains are encountered, no further disturbance would occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner would be immediately notified of the find.

If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a Most Likely Descendant (MLD). The MLD shall complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts to human remains may remain significant even after mitigation.

Reporting

If cultural resources are not discovered in the course of construction monitoring, a brief letter to that effect would be prepared by the consulting archaeologist, indicating that the monitoring activities have been satisfied. If previously unidentified cultural resources are discovered in the course of construction monitoring, a report would be prepared following Archaeological Resource Management Report (OHP 1990) guidelines that documents field and analysis results and interprets the data within an appropriate research context.

2.2.2 Treatment of Known Archaeological Resources

Destruction of a resource that is eligible for listing in the NRFP or CRHR would be a significant adverse effect. This effect may be resolved through by implementing an MOA between FTA, Metro, and the SHPO, as well as other interested parties.

Four archaeological sites that are either within or immediately adjacent to the direct APE are presumed eligible for listing on both the NRHP and the CRHR. These include the Los Angeles Zanja System (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjas) and sites CA-LAN-3588, P-19-003338, and P-19-003339.

Effects to the data potential of archaeological sites can be mitigated to a less than significant level by preparing and implementing a data recovery plan under Section 106 and CEQA. The actual mitigation measures agreed upon in the MOA may vary in substance and degree, but the MOA would include a process to resolve any adverse effects upon archaeological resources within the direct APE that are eligible for listing in the NRHP or CRHR. The treatment of sites CA-LAN-3588, P-19-003338, and P-19-003339 may include systematic and scientific exposure, evaluation, and if necessary, archaeological data recovery.

Los Angeles Zanja System

The Los Angeles Zanja system was an extensive and integrated water conveyance network that served large areas of the City for multiple generations. Generally speaking, previous construction projects in downtown Los Angeles have unexpectedly encountered and documented limited exposures of a single zanja segment, often after the segment has been damaged by construction equipment. This incomplete approach does not permit the overall Zanja system to be evaluated, given the requirements that the OHP clarified in its recent letter (Toffelmier 2009).

It is likely that other projects (such as emergency utility repair) have damaged segments of the Zanja system without documentation. This repeated damage (both monitored and unmonitored construction impacts) constitutes a cumulative effect that should be mitigated. Construction monitoring alone is insufficient mitigation to address this effect, particularly given the likelihood of damaging the zanjas prior to discovery during project construction process.

Inadvertent project-related damage to the zanjas may constitute an adverse effect under the Criteria of Adverse Effect, “physical destruction or damage” (36 CFR Part 800.5(a) (2) and material impairment as defined in CEQA. This action would contribute to, rather than mitigate, these cumulative effects.

Both Section 106 of the NHPA (as amended) and CEQA require identification, documentation, and evaluation of historic properties/historic resources in a project area (or direct APE). For a poorly mapped and buried linear resource like the Zanja system, identification alone is challenging.

Rather than a costly archaeological excavation program or a remote sensing (ground-penetrating radar, etc.) survey that is unlikely to produce clear-cut results, a proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner is recommended.

This would include using additional documentary research to identify, as accurately as possible, the precise alignments of the zanjas within the APE. Where these alignments are expected to be affected by the proposed project, particularly where cut-and-cover or other near-surface construction techniques (as opposed to tunneling 20 or more feet below the ground surface) are planned in the vicinity of mapped zanja segments, full-time archaeological monitoring would be instituted to ensure documentation.

The archaeological monitors would work closely with equipment operators to ensure that every effort is made to avoid damaging zanja segments prior to their adequate documentation.

Documenting and evaluating the Los Angeles Zanja system would be best accomplished with a system-wide approach that incorporates historical, archaeological, and engineering research and documentation. This systemic approach to documentation and evaluation is a particularly appropriate mitigation measure for the Regional Connector Transit Corridor project, which has the potential to impact multiple zanja segments. Documentation of the zanja segments' alignments and slopes would have the added benefit of enabling future projects to more accurately predict the location of zanja segments outside of the project area.

To mitigate potential impacts to the Los Angeles Zanja system, the project MOA would provide that the system be adequately documented under the direction of an experienced archaeologist and an experienced historical architect, architectural historian, or historian, both meeting the Secretary of the Interior's qualification standards. This documentation would include a combination of historical research, archaeological testing, and architectural documentation, and would be followed by a formal evaluation of NRFP and CRHR eligibility.

It should be noted that substantial documentation already exists for the Zanja system in the form of maps and engineering records, published books and articles, unpublished technical reports, and site records. The collation of available data for the system as a whole would accomplish much of the documentation effort that is proposed here, while intensive, original research would be restricted to the zanja segments that cross the direct APE.

Research and documentation may include such specific measures as:

- Historical research using historical maps, photographs, and other written sources to document creation, maintenance, modification, and abandonment of the system.
- Archaeological research to establish the physical condition, presence of associated features and artifacts, and precise location of each zanja segment within the project's direct APE by using physical exposure through controlled excavation following its discovery during construction monitoring. Resources would be documented using DPR series 523 primary and detail forms, maps, and photographs. The results would be presented in a detailed technical report following Archaeological Resource Management Report (OHP 1990) guidelines. The report would address research questions and assess the NRHP and CRHR eligibility of the system.

- Architectural documentation of exposed zanja segments by producing narrative records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity.
- Preserving the results of the historical, archaeological, and historic architectural studies in repositories (e.g., the local main library branch, the lead agency headquarters library, and with identified non-profit historic groups interested in the subject matter).
- Interpretation of the Los Angeles Zanja system for the public through signage along the project alignment, visual representations of zanja alignments using colored pavement, or other appropriate means such as a dedicated internet website.

3.0 LPA EFFECTS, IMPACTS AND MITIGATION PALEONTOLOGICAL RESOURCES

The LPA involves ground disturbance associated with excavations to construct three new stations and an entirely underground tunnel located from the 7th Street/Metro Center Station to east of the intersection of 1st and Alameda Streets. Any ground disturbances in areas of high sensitivity will have the potential to impact paleontological resources at the surface and at depth; areas of ground disturbance in areas of sensitivity ranging from low to high have the potential to impact paleontological resources at a depth of 5 feet or more below the ground surface. In areas where mitigation measures can be implemented, potential impacts can be reduced to a less than significant level. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources would not be feasible resulting in significant and unavoidable impacts.

The LPA would not result in operational impacts to paleontological resources.

In areas where mitigation measures can be implemented, potential impacts can be reduced to a less than significant level thus reducing any cumulative impact on paleontological resources to less than significant. In areas where mitigation measures cannot be implemented, such as in areas where new underground TBM segments would be constructed, cumulative impacts may be unavoidable.

3.1 NEPA Finding and CEQA Determination

The LPA could have adverse effects on paleontological resources. With implementation of mitigation, potential construction and cumulative impacts would not be adverse under NEPA. The LPA would not have significant effects on paleontological resources with implementation of proposed mitigation measures with the exception of areas where tunneling operations cannot be mitigated. In areas where new underground TBM segments would be constructed, mitigation for paleontological resources would not be feasible and thus construction and cumulative impacts would be significant and unavoidable.

The LPA would not result in adverse or significant operational impacts to paleontological resources.

3.2 Mitigation Measures

3.2.1 Construction Mitigation Measures

The following mitigation measures have been developed in accordance with the SVP (1995) standards and guidelines and meet the paleontological requirements of CEQA. Mitigation measures are also documented in the Mitigation Monitoring and Reporting Program (MMRP), which is part of the Final EIS/EIR.

- A qualified paleontologist would produce a Paleontological Monitoring and Mitigation Plan for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring would include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor would have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data.
- All project-related ground disturbances that could potentially affect the Puente Formation, Fernando Formation, and Quaternary older alluvium and terrace deposits would be monitored by a qualified paleontological monitor on a full-time basis (where feasible) because these geologic sediments are determined to have a high paleontological sensitivity (Figure 4.12.3-3). Very shallow surficial excavations (less than 5 feet) within Quaternary younger alluvium would be monitored on a part-time basis to ensure that underlying sensitive units are not adversely affected (Figure 4.12.3-3). Construction monitoring during any tunneling activity is not warranted as any potential fossil specimens present within sensitive geologic units would be crushed and destroyed by the nature of tunneling methodology.
- At each fossil locality, field data forms would be used to record pertinent geologic data, stratigraphic sections would be measured, and appropriate sediment samples would be collected and submitted for analysis.
- Due to the likelihood of the presence of microfossils, matrix samples would be collected and tested within the Puente Formation and Fernando Formation. Testing for microfossils would consist of screen-washing samples (approximately 30 pounds) to determine if significant fossils are present. Productive tests would result in screen-washing of additional bulk matrix up to a maximum of 2,000 pounds per locality to ensure recovery of a scientifically significant sample.
- Recovered fossils would be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and repositied in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

- The paleontologist would prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository.

3.2.2 Operational Mitigation Measures

No mitigation is required because operational impacts to paleontological resources are not expected for any of the project alternatives.

California State Office of Historic Preservation Coordination

The Cultural Resources – Archaeology Technical Memorandum for the Regional Connector Transit Corridor project contained in this appendix was submitted to the California State Office of Historic Preservation. The State Historic Preservation Officer (SHPO) reviewed the technical memorandum including the determinations of eligibility for all potentially eligible properties within the Area of Potential Effect (APE). On June 1, 2010, the SHPO concurred with the determinations of eligibility and with the findings of effect from project alternatives. That concurrence letter is included in the following pages.

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



1 June 2010

Reply To: FTA090409B

Dolores Roybal Saltarelli
Project Manager, LACMTA
One Gateway Plaza
Los Angeles, CA 90012-2952

Re: Determinations of Eligibility and Finding of Effect for the Regional Connector Transit Corridor Project, Los Angeles, Los Angeles County, CA

Dear Ms. Saltarelli:

Thank you for your letter of 19 April 2010 continuing consultation on behalf of the Federal Transit Authority (FTA) for the above referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulation at 36 CFR Part 800. You are requesting that I review the determinations of eligibility and assessment of effects for the Regional Connector Transit Corridor Project.

After reviewing the enclosed cultural resources report, I am able to concur with FTA's determinations of eligibility. 289 properties were identified in the APE for the project. Of those 289, 118 were of sufficient age to be considered for inclusion in the National Register of Historic Places (NRHP). Fifteen properties were previously listed in the NRHP and 33 were determined eligible by FTA. FTA has determined the following properties are eligible for inclusion in the NRHP:

1. Barker Brothers, 818 West 7th Street
2. Fine Arts Building, Global Marine House, 811 West 7th Street
3. 811 Wilshire Building, Tishman 615 Building, Wilflower Building, 811 Wilshire Boulevard
4. The California Club, 528 South Flower Street
5. 2nd Street Tunnel, Bridge# 53C 1318
6. Los Angeles Civic Center Historic District
7. Los Angeles Department of Water and Power Building, John Ferraro Office Building, 111 North Hope Street
8. Ahmanson Theater, 135 North Grand Avenue
9. Mark Taper Forum, 135 North Grand Avenue
10. Dorothy Chandler Pavilion, 135 North Grand Avenue
11. Los Angeles County Hall of Administration, Kenneth Hahn Hall of Administration, 500 West Temple Street, 222 North Grand Avenue
12. El Paseo de los Pobladores de Los Angeles, 224 North Grand Avenue
13. Los Angeles County Courthouse, Stanley Mosk Los Angeles County Courthouse, 111 North Hill Street
14. County of Los Angeles Central Heating and Refrigeration Plant, 301 North Broadway
15. Los Angeles County Hall of Records, 320 West Temple Street
16. Court of Historic American Flags, 224 North Hill Street, 100 block Hill Street
17. Los Angeles County Law Library, Mildred L. Lillie Building, 301 West 1st Street
18. Hall of Justice, Los Angeles County Jail, 211 West Temple Street

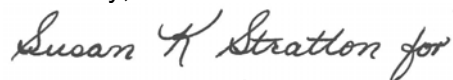
19. Clara Shortridge Foltz Criminal Justice Center, 210 West Temple Street
20. Los Angeles City Hall, 200 North Spring Street
21. City Health Building, City Hall South, 111 East 1st Street
22. Federal Building, North Los Angeles Field Office, 300 North Los Angeles Street
23. The Police Facilities Building, Parker Center, Motor Transportation Division, 150 North Los Angeles Street and 151 North Judge John Aiso Street
24. Mark Kuwata Real Estate, 301 East 1st Street, 104-106 North San Pedro Street, 104-106 Judge John Aiso Street
25. Koyasan Buddhist Temple, Koyasan Church, Koyasan Temple, 342 East 1st Street
26. John A. Roebling's Sons Co., Robert Arranaga & Company, Incorporated, 216 South Alameda Street,
27. Los Angeles Times Building, 202 West 1st Street
28. The Mirror Building (Site of Butterfield Stage Station), Los Angeles Times-Mirror Annex, Times Building South, Mirror-News Building, 145 South Spring Street
29. Cathedral of Saint Vibiana, 214 South Main Street
30. Cathedral of Saint Vibiana, Rectory, 114 East 2nd Street
31. J.R. Newberry Company Building, 900 East 1st Street
32. 1st Street Viaduct, 1st Street between Vignes Street and Mission Road
33. Walt Disney Concert Hall, 111 South Grand Avenue

I concur with the NRHP determinations but will not comment on those properties identified solely for CRHR determination. The remaining resources in the APE are not eligible for inclusion in the NRHP.

Only one historic property, the 2nd Street Tunnel will be adversely affected by the project. I concur with the FTA's determination of adverse effect. Once FTA has submitted a draft MOA for the consultation I can comment on the mitigation measures for the undertaking.

Thank you for considering historic properties in your planning process. If you have any questions, please contact Amanda Blosser of my staff at (916) 654-7372 or e-mail at ablosser@parks.ca.gov.

Sincerely,



Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

MWD:ab

This page left intentionally blank

**Regional Connector Transit Corridor
Cultural Resources - Archaeology
Technical Memorandum**

April 2, 2010

Prepared for

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, CA 90012

State Clearinghouse Number: 2009031043



This technical memorandum was prepared by:

CDM

523 West Sixth Street
Suite 400
Los Angeles, CA 90014
213-457-2200

SWCA Environmental Consultants

625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
626-240-0587

TABLE OF CONTENTS

1.0 Summary.....	1
1.1 Purpose and Scope.....	1
1.2 Dates of Investigation.....	1
1.3 Investigation Constraints	1
1.4 Summary of Findings	1
1.5 Potential Impacts.....	3
1.6 Recommendations.....	3
1.7 Disposition of Data.....	3
2.0 Introduction.....	5
2.1 Regulatory Setting.....	5
2.2 Report Format.....	6
2.3 Project Description	6
2.3.1 No Build Alternative	8
2.3.2 Transportation System Management (TSM) Alternative.....	8
2.3.2.1 Operating Characteristics	9
2.3.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative.....	9
2.3.3.1 Overview	9
2.3.3.2 Route Configuration.....	10
2.3.3.3 Operating Characteristics	12
2.3.4 Underground Emphasis LRT Alternative	13
2.3.4.1 Overview	13
2.3.4.2 Route Configuration.....	13
2.3.4.3 Operating Characteristics	15
2.3.5 Fully Underground LRT Alternative – Little Tokyo Variation 1	16
2.3.5.1 Overview	16
2.3.5.2 Route Configuration.....	17
2.3.5.3 Operating Characteristics	19
2.3.6 Fully Underground LRT Alternative- Little Tokyo Variation 2	20
2.3.6.1 Overview	20
2.3.6.2 Route Configuration.....	21
2.3.6.3 Operating Characteristics	24
3.0 Methodology for Impact Evaluation.....	25
3.1 Regulatory Framework and Standards of Significance.....	25
3.1.1 Federal.....	25
3.1.1.1 National Environmental Policy Act (NEPA)	25
3.1.1.2 National Historic Preservation Act (NHPA)	26
3.1.1.3 U.S. Department of Transportation Act (USDOT), Section 4(f)	29

3.1.1.4 Other Federal Regulations	30
3.1.2 State.....	30
3.1.2.1 California Environmental Quality Act (CEQA)	30
3.1.2.2 California Register of Historical Resources (California Register)	31
3.1.2.3 California Historical Landmarks	32
3.1.2.4 California Points of Historical Interest.....	33
3.2 Delineation of Area of Potential Effects	33
3.3 Native American Coordination	34
4.0 Affected Environment	39
4.1 Cultural Setting	39
4.1.1 Prehistoric Overview.....	39
4.1.1.1 Horizon I – Early Man (ca. 10,000–6,000 B.C.).....	40
4.1.1.2 Horizon II – Milling Stone (6000–3000 B.C.).....	40
4.1.1.3 Horizon III – Intermediate (3000 B.C.–A.D. 500)	42
4.1.1.4 Horizon IV – Late Prehistoric (A.D. 500–Historic Contact)	43
4.1.2 Ethnographic Overview	45
4.1.2.1 Gabrielino/Tongva	45
4.1.2.2 Native American Communities in Los Angeles	48
4.1.3 Historic Overview	49
4.1.3.1 Spanish Period (1769–1822).....	49
4.1.3.2 Mexican Period (1822–1848)	50
4.1.3.3 American Period (1848–Present).....	51
4.1.3.4 City of Los Angeles	52
4.2 CHRIS Literature Search.....	54
4.2.1 Previous Studies in 0.25-mile Radius of APE.....	55
4.2.2 Previously Recorded Archaeological Resources within 0.25-mile Radius of Project APE	59
4.2.3 Historic Maps	65
4.3 Sacred Lands Files Search.....	67
4.4 Archaeological Survey.....	71
4.4.1 Survey Methods	71
4.4.2 Survey Results	71
4.4.2.1 RC-1.....	73
4.4.3 Significance Evaluation.....	74
5.0 Impacts	77
5.1 No Build Alternative	77
5.1.1 Construction Impacts	77
5.1.2 Operational Impacts.....	78
5.1.3 Cumulative and Indirect Impacts.....	78

5.2 Transportation System Management (TSM) Alternative.....	78
5.2.1 Construction Impacts	78
5.2.2 Operational Impacts	78
5.2.3 Cumulative and Indirect Impacts.....	78
5.3 At-grade Emphasis Light Rail Transit (LRT) Alternative	79
5.3.1 Construction Impacts	79
5.3.2 Operational Impacts.....	79
5.3.3 Cumulative and Indirect Impacts.....	79
5.4 Underground Emphasis LRT Alternative	80
5.4.1 Construction Impacts	80
5.4.2 Operational Impacts.....	80
5.4.3 Cumulative and Indirect Impacts.....	80
5.5 Fully Underground LRT Alternative- Little Tokyo Variation 1	81
5.5.1 Construction Impacts	81
5.5.2 Operational Impacts.....	81
5.5.3 Cumulative and Indirect Impacts.....	81
5.6 Fully Underground LRT Alternative- Little Tokyo Variation 2	82
5.6.1 Construction Impacts	82
5.6.2 Operational Impacts.....	82
5.6.3 Cumulative and Indirect Impacts.....	82
6.0 Potential Mitigation Measures	83
6.1 Construction Impact Mitigation Measures	83
6.2 Operational Impacts Mitigation Measures	89
7.0 Conclusions	91
8.0 References Cited.....	93

Appendices:

- A Records Search Results
- B Sacred Lands File Search and Native American Consultation
- C CONFIDENTIAL California Department of Parks and Recreation Series 523 Forms
- D Project-Related FTA/SHPO Correspondence
- E Project Area of Potential Effects
- F Letter Regarding Zanja Madre National Register Nomination

Tables

3-1. Contacts with Native Americans	36
4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE	55
4-2. Previously Recorded Archeological Resources within 0.25-mile of the Direct APE	60
4-3. Archaeologically Documented Zanja Segments in the Project Vicinity	65

Figures

2-1. Project Location.....	7
2-2. Transportation System Management (TSM) Alternative	9
2-3. At-Grade Light Rail Transit (LRT) Alternative	11
2-4. Underground Emphasis LRT Alternative	15
2-5. Fully Underground Emphasis LRT Alternatives – Little Tokyo Variation 1 and Little Tokyo Variation 2.....	18
4-1. Archaeological Resources within Direct APE including the Los Angeles Zanja System (Approximate Alignment)	69

ACRONYMS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
California Register	California Register of Historical Resources
CDPR	California Department of Parks and Recreation
CEQA	California Environmental Quality Act
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
CRMMP	Cultural Resources Monitoring and Mitigation Plan
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HAER	Historic American Engineering Record
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LRT	Light Rail Transit
LRTP	Long Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority (LACMTA)
MLD	Most Likely Descendant
MOA	Memorandum of Agreement
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act

NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places (National Register)
OHP	California Office of Historic Preservation
PRC	Public Resources Code
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
TCP	Traditional Cultural Properties/Places
TPS	Transit Priority System
TSM	Transportation Management System
USDOT	US Department of Transportation

1.0 SUMMARY

1.1 Purpose and Scope

SWCA Environmental Consultants (SWCA) conducted a cultural resources inventory of the project area that may be affected by the proposed Regional Connector Transit Corridor project. The project is 1.9 miles in length and located in the City of Los Angeles, Los Angeles County, California.

The purpose of the Regional Connector project is to improve the region's public transit service and mobility. The overall goal of the project is to improve mobility within the corridor by connecting to the light rail service of the Metro Gold Line to Pasadena, the Metro Gold Line to East Los Angeles, the Metro Blue Line, and the Metro Expo Line. This link would serve communities across the region, allowing greater accessibility while serving population and employment growth in downtown Los Angeles.

1.2 Dates of Investigation

SWCA conducted an initial cultural resources records search for the project on February 10, 2009; additional data were requested and assessed between February 2009 and January 2010. The Native American Heritage Commission (NAHC) performed a Sacred Lands File search on February 11, 2009. SWCA conducted an intensive pedestrian survey of the direct Area of Potential Effects (direct APEs) on March 16 and April 7, 2009, and on January 7, 2010. This report was completed on January 11, 2010.

1.3 Investigation Constraints

Most of the direct APE is covered in buildings, pavement, or landscaping due to the urban nature of the project area. Consequently, ground-surface visibility ranges from extremely poor (0 to 5 percent) to good (70 percent) throughout the project area. Average visibility was extremely poor (less than 5 percent). Three parts of the direct APE were fenced to protect to active construction projects and not accessible to SWCA archeologists.

1.4 Summary of Findings

The records and literature search indicated that 24 previously recorded cultural resources are located within a 0.25-mile radius of the APE, including 21 historic archaeological sites, one prehistoric archaeological site, one multi-component site, and one historic isolate. Of the 24 previously recorded archaeological resources, five (CA-LAN-887H, CA-LAN-3588, P-19-003097, P-19-003338, and P-19-003339) are located within the project direct APE and four are adjacent (within one city block) to the direct APE.

The records and literature search also identified 143 previously conducted cultural resource studies within a 0.25-mile radius of the APE. Of these, 23 are located within the project direct APE, and 12 are adjacent to the direct APE.

Historic maps indicate that the direct APE was completely developed prior to 1888, and that several streets within the project area have been realigned over the past 120 years. The Los Angeles zanja system (the city's original water system, which operated from 1781 through the early 1900s) also crosses the direct APE in numerous locations.

The NAHC Sacred Lands File search indicated the presence of cultural resources important to Native Americans in the project area. The NAHC response included a list of five Native American contacts that may have knowledge of cultural resources in the project area. SWCA sent location maps, a description of the proposed project, and its APE to these five groups via U.S. mail; each letter was followed up with a telephone call.

Responses were received from two of the five Native American contacts. These responses are documented in Table 3-1. SWCA recommends that Metro consult with the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation.

In the course of the pedestrian survey, a single archaeological site (RC-1) within the direct APE was encountered. This resource consists of a historic brick alignment, likely representing part of a late nineteenth/early twentieth century structure foundation. Available evidence suggests that RC-1 lacks sufficient integrity; it is recommended not eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (California Register).

None of the five previously recorded archaeological sites within the direct APE were observed during the pedestrian survey. Site P-19-003097, a historic site consisting of nineteenth and twentieth century features and artifacts, was considered to be significant by its excavators.

Data recovery in 2002 indicated that impacts to this resource would be mitigated to less than significant levels and the site was subsequently destroyed. Site CA-LAN-3588, a historic site consisting of features and artifacts dating to ca. 1880–1935, is presumed eligible for listing on both the NRHP and California Register due to its association with earliest Japanese occupation of Little Tokyo.

Sites P-19-003338 and P-19-003339 are American period artifact deposits that have not been formally evaluated. For purposes of this analysis they are presumed eligible for both registers.

The Los Angeles zanja system (recorded as CA-LAN-887H, P-19-003103, and P-19-003352) crosses the direct APE in numerous places. A segment of the zanja system (P-19-003103) north of the APE was nominated for listing in the National Register under Criterion A at the local level of significance for its direct role in the development of Los Angeles between 1781

and ca. 1900. The system as a whole is presumed eligible for listing in the National Register and California Register for the same reason.

Resources are “presumed eligible” when, in the professional opinion of a qualified archeologist, there are reasons to believe that it may be eligible for listing in the National Register or California Register, but there are factors that inhibit excavation or direct examination of the resource. Therefore, resources presumed eligible may or may not ultimately be determined eligible.

1.5 Potential Impacts

The background research and archaeological survey results indicate that subsurface archaeological deposits are commonly encountered during construction projects in downtown Los Angeles. Consequently, most of the direct APE is considered highly sensitive for the presence of historical resources, including both prehistoric and historic archaeological sites.

Although the No Build Alternative would not affect archaeological resources, the remaining alternatives have the potential to alter, remove, or destroy both known and previously undiscovered archaeological resources within the APE. These potential impacts include direct construction impacts and cumulative impacts.

1.6 Recommendations

This evaluation identified four extant properties within the direct APE that are presumed to be eligible for listing in the National Register and California Register: the Los Angeles zanja system (CA-LAN-887H) and sites CA-LAN-3588, P-19-003338, and P-19-003339. The build alternatives have the potential to adversely affect these resources. Implementing two mitigation measures—Treatment of Previously Unrecorded Archaeological Resources (MM-A-1) and Treatment of Known Archaeological Resources (MM-A-2)—would reduce both direct and cumulative impacts to these resources. After mitigation, potential construction and cumulative impacts would not be significant under both the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

1.7 Disposition of Data

This report will be filed with the Federal Transit Administration (FTA), Metro, CDM, the South Central Coastal Information Center (SCCIC) located at California State University in Fullerton, and SWCA. All field notes and records related to the project will remain on file at the South Pasadena office of SWCA.

2.0 INTRODUCTION

This technical memorandum identifies and evaluates archaeological resources and potential effects of construction and implementation of the proposed Regional Connector Transit Corridor project. Historic built environment and paleontological resources are addressed in separate reports.

2.1 Regulatory Setting

National Environmental Policy Act (NEPA) guidelines include compliance with related federal laws that require identification of historic properties, and consideration of project-related effects on those properties. This report was prepared to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and with regulations contained in 36 Code of Federal Regulations (CFR) Part 800. These regulations require federal agencies to consider the effects of proposed projects on historic properties as part of the environmental assessment process.

Section 106 of NHPA requires federal agencies take into account effects of undertakings on historic properties and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those undertakings, following these regulations (36 CFR Part 800).

This technical memorandum was also prepared to comply with requirements of CEQA and the CEQA Guidelines (CERES 2009) as they apply to cultural resources. Under CEQA, it is necessary for a lead agency to evaluate proposed projects for the potential to cause significant impacts on “historical resources.” A proposed project that may affect historical resources is submitted to the State Historic Preservation Officer (SHPO) for review and comment prior to project approval by the lead agency and before any project-related clearance, demolition, or construction activities are commenced.

If a proposed project could be expected to cause substantial adverse change to a historical resource, environmental clearance for the project would require evaluating alternatives and/or implementing mitigation measures to reduce or avoid impacts. If a project is expected to result in an impact on historical resources, CEQA Guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most the basic objectives of the project and avoid or substantially lessen any significant impacts on the historical resource.

Properties that may be historic resources within the identified project APE were evaluated for National Register of Historic Places (National Register)-eligibility according to criteria set forth in 36 CFR Part 60.4. The age criterion for inclusion in the National Register is 50 years and older, except in cases of overriding significance (criteria consideration G).

Properties were also considered for California Register of Historical Resources (California Register) eligibility; although there is no established age threshold for the California Register, the same 50-year cutoff was used for this project. Under Public Resources Code (PRC) Section 5024.1, the California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources.

If a proposed project and its related impacts would adversely affect the values of an archaeological or built environment site that is either listed in or determined eligible for inclusion in the National or California Register, such effects and/or impacts would be considered adverse.

2.2 Report Format

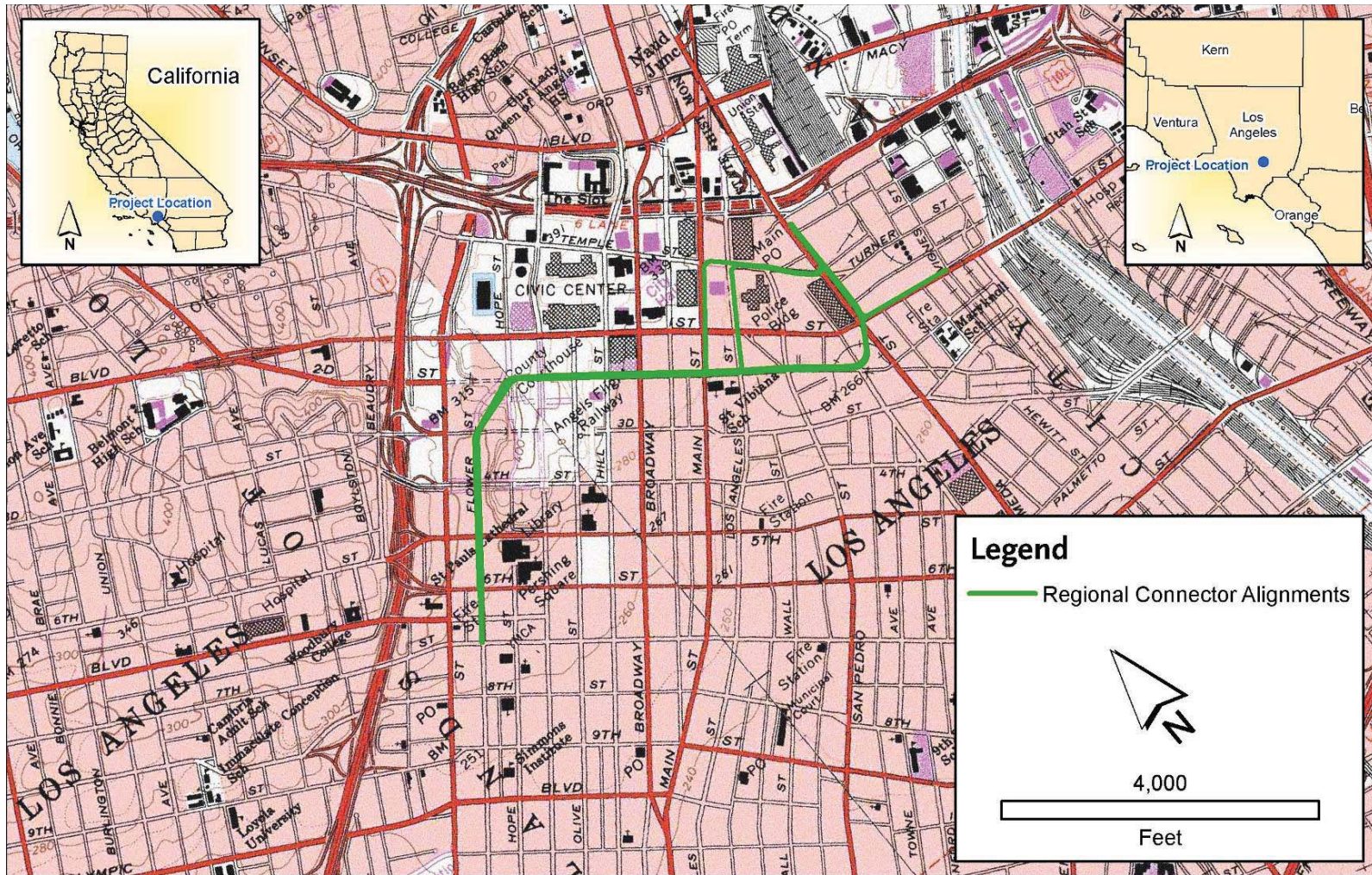
The report format used in this report follows *Archaeological Resource Management Reports: Recommended Contents and Format* (Office of Historic Preservation 1990). Archaeologist John Dietler, Ph.D., RPA was the principal investigator for this technical memorandum.

2.3 Project Description

The proposed project would extend 1.9 miles through downtown Los Angeles and provide enhanced Metro service throughout four distinct travel corridors that span over 50 miles across Los Angeles County (Figure 2-1). The proposed 1.9 miles of new dual-tracks in downtown Los Angeles would provide a direct link between the Metro Gold, Blue, and Expo Lines by bridging the gap in the regional light rail network between 7th Street/Metro Center Station at 7th and Flower Streets and the Little Tokyo/Arts District station at 1st and Alameda Streets. This would allow trains to travel directly from East Los Angeles to Culver City and from Long Beach to Pasadena. The project also includes construction of new stations in downtown that would allow all passengers on the Metro Gold, Blue, and Expo Lines to reach multiple destinations in the central business district without transferring.

The following alternatives are evaluated in this technical memorandum:

- No Build Alternative
- Transportation System Management (TSM) Alternative
- At-Grade Emphasis Light Rail Transit (LRT) Alternative
- Underground Emphasis LRT Alternative
- Fully Underground LRT Alternative- Little Tokyo Variation 1
- Fully Underground LRT Alternative- Little Tokyo Variation 2



Source: USGS

Figure 2-1. Project Location

2.3.1 No Build Alternative

Transit service under the No Build Alternative is focused on preservation of existing services and projects. The No Build Alternative does not include any major service improvements or new transportation infrastructure beyond what is listed in Metro's 2009 Long Range Transportation Plan (LRTP).

By the projection year of 2035, the Metro Expo Line and the Metro Gold Line to East Los Angeles will have opened, and a number of bus routes will have been reorganized and expanded to provide connections with these new rail lines. All bus and rail lines would operate using a fleet of vehicles similar to those currently in service or identified for purchase in the LRTP. The transit network within the project area will otherwise be largely the same as it is now.

2.3.2 Transportation System Management (TSM) Alternative

The Transportation System Management (TSM) Alternative includes all of the provisions of the No Build Alternative, plus two new express shuttle bus lines linking the 7th Street/Metro Center and Union Stations. These buses would run frequently, perhaps just a few minutes apart, especially during peak hours. Enhanced bus stops would be located every two to three blocks to maximize coverage of the area surrounding the routes. Rail service would remain the same as described for the No Build Alternative.

The two routes are described below and illustrated on Figure 2-2, TSM Alternative.

- Upper Grand Route – From the 7th Street/Metro Center Station, buses would proceed east on 7th Street, north on Olive Street, west on 5th Street, north on Grand Avenue, east on Temple Street, and then north on Los Angeles Street to Union Station. As a variation, buses could use Alameda Street between Temple Street and Union Station to allow a stop at Temple and Alameda Streets, near the Little Tokyo/Arts District Station. The alignment is assumed to follow the same route as part of the existing Los Angeles Department of Transportation (LADOT) DASH Route B service, proceeding from the 7th Street/Metro Center Station to Union Station using Grand Avenue, Temple Street, and Los Angeles Street. Shuttle buses would run less than eight minutes apart and provide coverage of the Bunker Hill and Civic Center areas.
- Lower Grand Route – This route would use the existing northbound bus-only lanes on Figueroa Street and mixed flow lanes on 2nd and 3rd Streets, which are lightly used by other bus lines. From the 7th Street/Metro Center Station, buses would proceed north on Figueroa Street, west on 2nd Street, and north on Alameda Street to Union Station. To return to 7th Street/Metro Center Station, buses would travel south on Alameda Street, west on 3rd Street, and south on Flower Street. The alignment passes by both

the Little Tokyo/Arts District Station and Union Station, and would provide good coverage of Little Tokyo and the southern edge of the Civic Center.

2.3.2.1 Operating Characteristics

The shuttle routes would be operated by Metro, and could use vehicles ranging from 30-foot shuttle buses to 60-foot articulated buses. Buses would run every few minutes during peak periods, and peak hour bus-only lanes would be created where possible by restricting parking on streets that do not already have dedicated all-day bus lanes. Similar to the Metro Rapid Bus lines, a Transit Priority System (TPS) that allows longer green lights to oncoming transit vehicles would be used where possible to increase bus speed and efficiency.

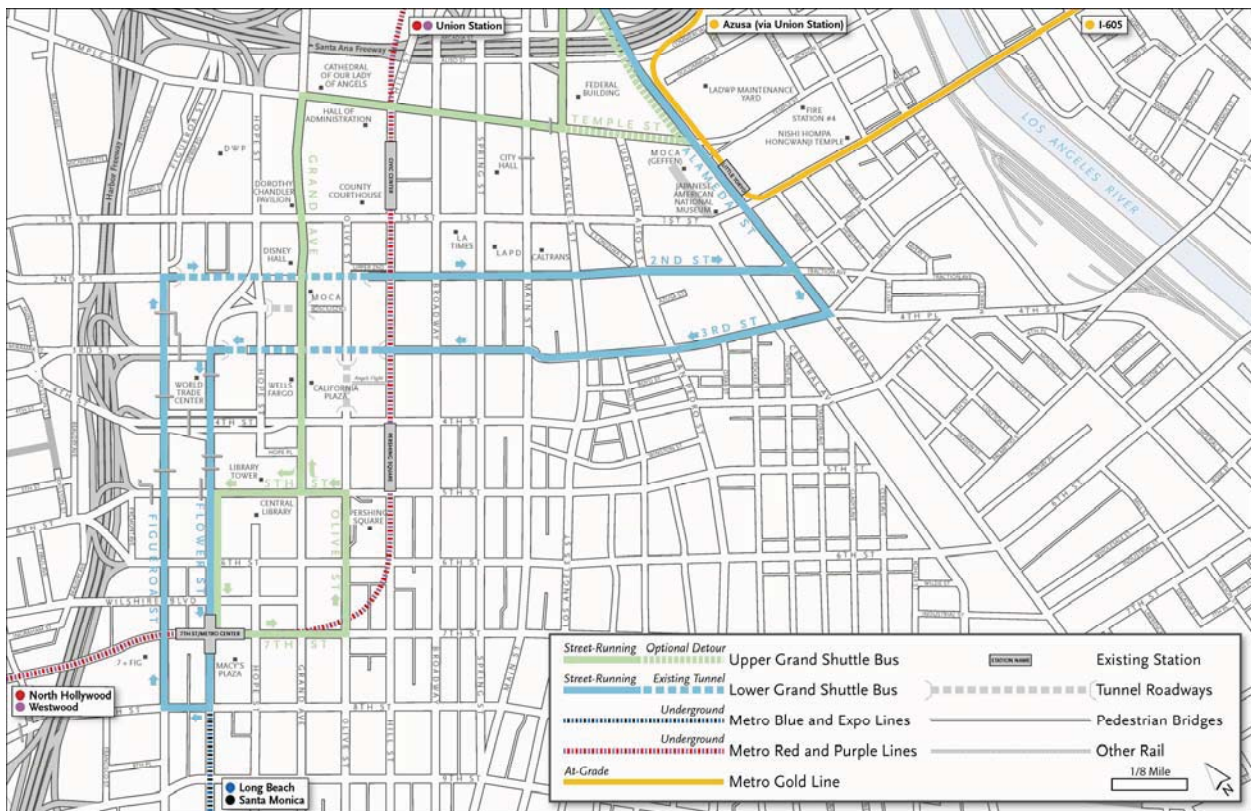


Figure 2-2. Transportation System Management (TSM) Alternative

2.3.3 At-Grade Emphasis Light Rail Transit (LRT) Alternative

2.3.3.1 Overview

The At-Grade Emphasis LRT Alternative would provide a direct connection from the existing underground 7th Street/Metro Center Station to the Metro Gold Line at Temple and Alameda Streets. Three new stations would be added, one would be a split station with single-direction platforms one block apart. This alignment includes a combination of underground and at-

grade segments, with 46 percent of the route underground. New stations would serve the Civic Center, Grand Avenue, and the Financial District. Conversion of 2nd Street to a pedestrian-friendly transit mall is assumed.

To implement this alternative, the number of traffic lanes and on-street parking spaces on 2nd Street would be reduced. As a result, traffic is likely to divert to adjacent parallel streets such as 1st and 3rd Streets, but the roadway capacity along these streets would remain unchanged, as with the No Build Alternative. Traffic congestion along these streets would likely increase. Figure 2-3 illustrates the At-Grade Emphasis LRT Alternative.

2.3.3.2 Route Configuration

From the existing platform at the 7th Street/Metro Center Station, the tracks would extend north underneath Flower Street to a new underground station just south of 5th Street. The tracks would then continue north, surface just south of 3rd Street, cross 3rd Street at grade, and veer northeast through a portal in the hillside to an underground station at 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The tracks would continue northeast, “punch” through the wall of the existing 2nd Street tunnel, and then travel east in the 2nd Street tunnel toward Hill Street.

This alignment would reduce the 2nd Street tunnel from four lanes to one (potentially two lanes, pending further detailed engineering). Trains would proceed east on 2nd Street to Main Street. 2nd Street would be transit-dedicated, with its current two travel lanes and two parking lanes reduced to a single travel lane primarily for access to parking lots and loading zones. This type of configuration would extend from Hill Street to Los Angeles Street.

At Main Street, the alignment would split into two single-track alignments. One track (for northbound trains) would continue east to Los Angeles Street and then north to Temple Street. The other track (for southbound trains) would travel north on Main Street and then west on Temple Street. Both tracks would have an at-grade station just north of 1st Street.

At Temple and Los Angeles Streets, the two tracks would rejoin and proceed west on Temple Street to Alameda Street, where the tracks would join the Metro Gold Line to East Los Angeles in a three-way (wye) junction. Before reaching Alameda Street, the tracks would shift to the south side of Temple Street to provide an adequate turning radius for trains turning north onto the Metro Gold Line’s existing ramp leading to the bridge over the US 101 freeway to Union Station. The ramp would need to be reconfigured to a steeper slope to facilitate turning movements in the three-way junction area. The intersection of Temple and Alameda Streets would also have a vehicular underpass for through-traffic on Alameda Street and a pedestrian bridge to reduce potential conflicts between pedestrians, trains, and automobiles. The pedestrian bridge could potentially have endpoints located on each of the intersection’s four corners.

At-grade crossovers could be located on 2nd Street between Hill Street and Broadway, and on 2nd Street between Broadway and Spring Street. Crossovers are mechanical track installations along the double-track alignment that allow trains traveling in either direction on either track to move to the other track and continue traveling in the same direction without stopping. Trains may also pass through the crossover without switching tracks. A wider right-of-way may be required in the vicinity of at-grade crossovers, thus potentially increasing the amount of roadway space needed for LRT facilities.

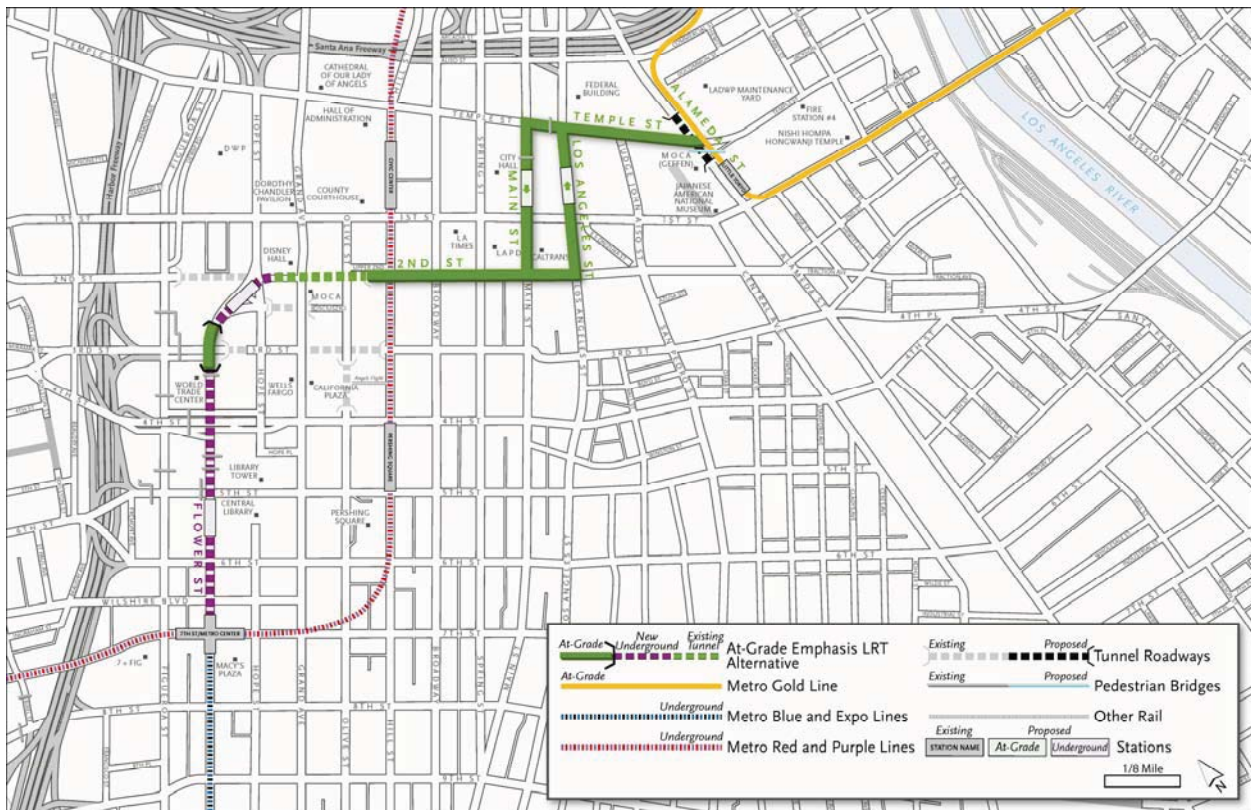


Figure 2-3. At-Grade Emphasis Light Rail Transit (LRT) Alternative

In summary, the At-Grade Emphasis LRT Alternative would connect the Metro Blue and Expo Line tracks at the 7th Street/Metro Center Station to the Metro Gold Line tracks at a new junction north of the Little Tokyo/Arts District Station. This would be accomplished using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated into two routes.

This report analyzes maximum potential effects for each station. Therefore, the actual effects may be smaller in magnitude than the impacts discussed in this analysis. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.3.3 Operating Characteristics

Two consolidated routes:

- East-West Route – Trains on the Metro Expo Line tracks from Santa Monica would use existing tracks to the 7th Street/Metro Center Station, continuing along the new Regional Connector tracks to the new three-way junction at Temple and Alameda Streets. The alignment would then continue east along the Metro Gold Line tracks to East Los Angeles.
- North-South Route – Trains on the Metro Blue Line tracks would travel from the 7th Street/Metro Center Station north along the new Regional Connector tracks to the new three-way junction at Temple and Alameda Streets. The alignment would then continue north along the existing Metro Gold Line tracks to Pasadena and the future Metro Gold Line extension to Azusa.

Vehicle and Pedestrian Circulation

For the at-grade segments of the At-Grade Emphasis LRT Alternative, the two LRT tracks would typically occupy a 26-foot-wide surface right-of-way bordered by mountable curbs. It is expected that this width would increase to 39 feet at center platform station locations.

Vehicular and pedestrian crossings would be limited to traffic signal–controlled intersections, with the signal phasing modified to provide adequate green time for the LRT vehicles to safely cross. For safety reasons, no uncontrolled mid-block vehicular crossings of the tracks would be permitted.

Access to existing parking structures, parking lots, loading docks, and commercial frontage would be affected by the at-grade LRT facilities. Left-turn parking access and egress is presently allowed at many downtown sites. However, the at-grade LRT facilities would prohibit uncontrolled mid-block left turns, thus modifying existing approach and departure traffic patterns.

The proposed At-Grade Emphasis LRT Alternative alignment would travel at-grade along 2nd Street. It is assumed that this street would be dedicated as a transit-only roadway between the tunnel and Los Angeles Street. This segment of 2nd Street may be closed to through traffic and provide only emergency vehicle access and local access to adjacent properties. As a result of this proposed change in street circulation, through traffic using 2nd Street would be diverted to parallel roadways such as 1st and 3rd Streets east of Los Angeles Street; 2nd Street would maintain its current physical features and operating characteristics.

The one-way transit couplet near City Hall along Main and Los Angeles Streets between 2nd and Temple Streets would consist of a single LRT track along each roadway. Both Main and Los Angeles Streets are wide enough to accommodate a single track and maintain acceptable

vehicular operations. The curb-to-curb width of Temple Street, between Main and Alameda Streets, is 62 to 71 feet, leaving one lane of traffic in each direction with potentially mountable curbs for use by emergency vehicles. Traffic operations along this segment of Temple Street would be affected by the lane reduction.

To minimize conflicts between rail, vehicular, and pedestrian traffic and minimize delays at the intersection of Temple and Alameda Streets, a vehicular underpass and a proposed pedestrian overpass are proposed along Alameda Street to route the through traffic beneath the rail tracks and Temple Street traffic. Temple Street and the rail tracks would remain at-grade and the existing at-grade segment of Alameda Street lowered to pass under Temple Street.

Through traffic traveling north and south on Alameda Street would operate unimpeded without being stopped or delayed at the intersection. Through traffic traveling east and west on Temple Street would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation. In addition, a one-lane southbound at-grade frontage road would be provided along Alameda Street to maintain access to the businesses and properties on the west side of the street.

2.3.4 Underground Emphasis LRT Alternative

2.3.4.1 Overview

The Underground Emphasis LRT Alternative would provide a direct connection from 7th Street/Metro Center Station to the Gold Line tracks at the Little Tokyo/Arts District Station, including three new station locations. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to a new portal on the parcel bounded by 1st Street, Alameda Street, 2nd Street, and Central Avenue.

It is expected that a portion of this property would need to be acquired to construct the portal and stage construction of the tunnels beneath 2nd Street. The tracks would then connect to the Gold Line tracks.

The Underground Emphasis LRT Alternative would be located entirely underground except for a single at-grade crossing at the intersection of 1st and Alameda Streets in the same type of three-way junction proposed for the At-Grade Emphasis LRT Alternative. Figure 2-4 illustrates this alternative.

2.3.4.2 Route Configuration

The Underground Emphasis LRT Alternative alignment would extend north from the existing platform at the 7th Street/Metro Center Station. Tracks would run underneath Flower Street to

the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue.

The tracks would then head east underneath 2nd Street to the next proposed station. There are two options for a station on 2nd Street. The Broadway Station option would place an underground station on 2nd Street between Broadway and Spring Street, and the Los Angeles Street Station option would include an underground station between Main and Los Angeles Streets.

The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast and surface in the lot bounded by 1st, Alameda, and 2nd Streets, and Central Avenue. The tracks would then enter an at-grade three-way junction in the intersection of 1st and Alameda Streets.

A new underpass would carry car and truck traffic along Alameda Street beneath 1st Street and the rail junction, and a proposed overhead pedestrian bridge structure would reduce most potential conflicts between pedestrians and trains. The pedestrian overpass could potentially have endpoints at each of the four corners of the intersection.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station on 2nd Street (whether it is between Broadway and Spring Street or between Main and Los Angeles Streets). Crossovers may not be needed at all of these locations and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel-boring machines cannot be used to construct underground crossovers.

In summary, the Underground Emphasis LRT Alternative would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line from a new junction just south of the Little Tokyo/Arts District Station at 1st and Alameda Streets. This would be accomplished using new light-rail right-of-way and new stations, enabling the consolidation of the Metro Gold, Blue, and Expo Line services into two routes.

This study analyzes maximum potential impacts for each station. Ultimate impacts may therefore be less in magnitude than the impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

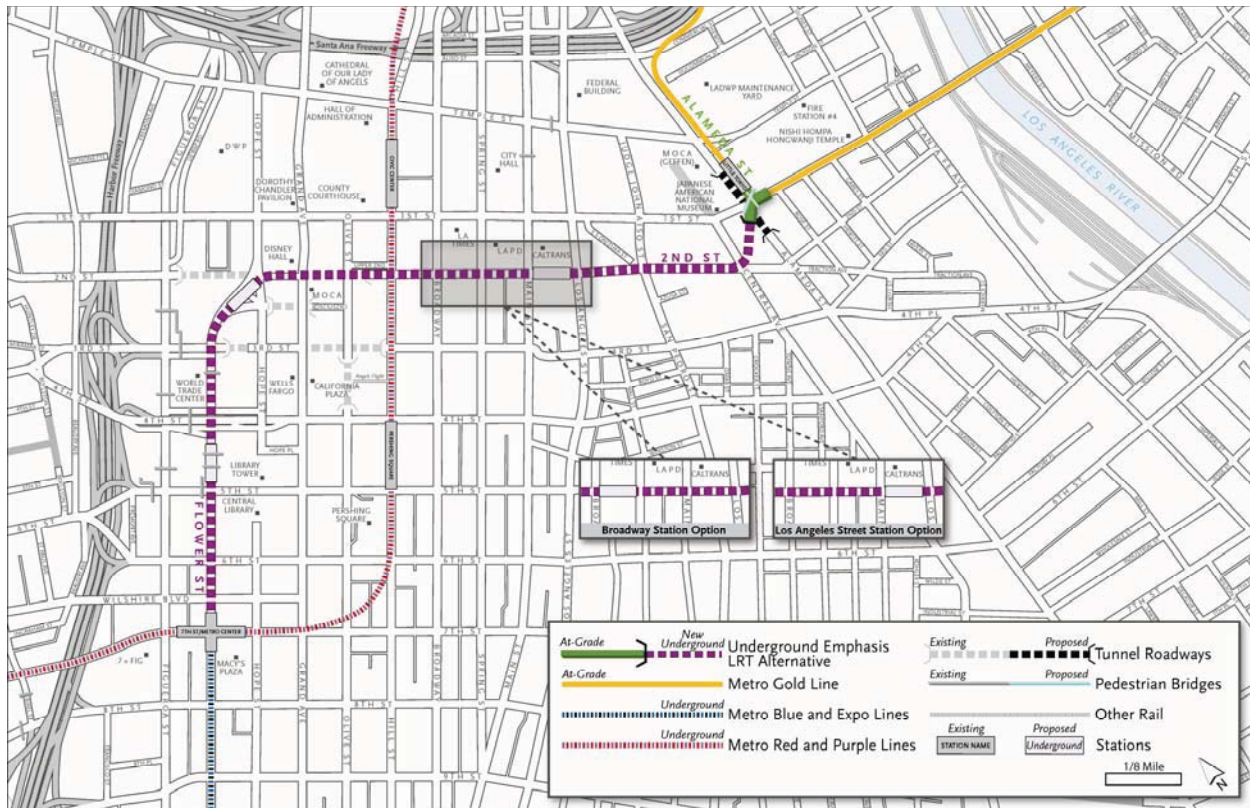


Figure 2-4. Underground Emphasis LRT Alternative

2.3.4.3 Operating Characteristics

Two consolidated routes:

- East-West Route – Trains on the Metro Expo Line tracks from Santa Monica would run on tracks to the 7th Street/Metro Center Station, then continuing north along the new Regional Connector tracks to the new three-way junction at the intersection of 1st and Alameda Streets. Trains would then turn east on 1st Street, bypassing the Little Tokyo/Arts District Station, and continue along the Metro Gold Line tracks to East Los Angeles.
- North-South Route – From the 7th Street/Metro Center Station, trains from Long Beach would continue north along the new Regional Connector tracks to the new three-way junction at 1st and Alameda Streets. The trains would then turn north on 1st Street and stop at the existing Little Tokyo/Arts District Station before continuing along the Metro Gold Line route to Pasadena and Azusa.

Vehicle and Pedestrian Circulation

The Underground Emphasis LRT Alternative alignment would not affect surface traffic or pedestrian circulation except at the intersection of 1st and Alameda Streets, where the LRT

alignment would operate in an at-grade configuration. Consequently, vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns.

The future roadway levels of service for this alternative would be the same as the No Build Alternative except at the intersection of 1st and Alameda Streets, where a vehicular underpass and pedestrian overpass are proposed to separate the heavy traffic volumes along Alameda Street from rail traffic to minimize delays. The proposed underpass would result in uninterrupted flow along Alameda Street in the north and south directions between 2nd and Temple Streets. Through traffic traveling east and west on 1st Street would continue to operate at-grade with a signal to control the movements between the vehicular and rail modes of transportation.

To maintain access to adjacent businesses and properties, at-grade frontage roads would be provided along both sides of Alameda Street south of the intersection and on the southbound side of the street north of the intersection. A full northbound frontage road crossing 1st Street is not feasible because of the location of the tracks and the Little Tokyo/Arts District Station on the east side of Alameda Street.

2.3.5 Fully Underground LRT Alternative – Little Tokyo Variation 1

2.3.5.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 1 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would extend underground from the 7th Street/Metro Center Station under Flower Street to 2nd Street. The tracks would then proceed east underneath the 2nd Street tunnel and 2nd Street to Central Avenue.

At 2nd and Central, the tracks would continue underground heading northeast under 1st and Alameda Streets. A three-way junction would be constructed underground beneath the 1st and Alameda intersection. To the north and east of the junction, trains would rise to the surface through two new portals to connect to the Metro Gold Line heading north to Azusa and east to the San Gabriel Valley. One portal would be located northeast of the Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the City of Los Angeles Department of Water and Power (LADWP) Maintenance Yard and connect to the existing LRT bridge over the US-101 freeway, allowing a connection to the Metro Gold Line to Azusa. The portal would be connected to the 1st and Alameda junction by a new tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets), running immediately east of the Little Tokyo/Arts District Station and tracks.

The second portal would be located within 1st Street between Alameda and Vignes Streets. Tracks would rise to the east within this second portal and connect at-grade to the existing Metro Gold Line tracks toward I-605. 1st Street would be widened to the north to accommodate the portal. Street widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street to join the existing 1st Street LRT tracks about one and half blocks west of the 1st Street Bridge.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and complete the tunnels beneath 2nd Street and the Nikkei Center property. The Fully Underground Alternative – Little Tokyo Variation 1 would be located entirely underground from east of the intersection of 1st and Alameda Streets to the 7th Street/Metro Center Station. Figure 2-5 illustrates this alternative.

2.3.5.2 Route Configuration

The Fully Underground LRT Alternative- Little Tokyo Variation 1 alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The bridge could begin at street level near the station entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

The tracks would then head east underneath 2nd Street to the next proposed station at Broadway. The 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street. The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new underground station, which would potentially be located within the property currently occupied by Office Depot and other small commercial uses.

The tracks would continue from the station under the 1st and Alameda intersection into a new underground three-way junction. Separating from the junction, one set of tracks would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station. These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the existing Metro Gold Line LRT bridge over the US-101 Freeway. This would allow trains to continue along the Metro Gold Line to Pasadena, which will be extended to Azusa per Metro's Long Range Transportation Plan. Traffic lanes on Alameda Street would be reconfigured temporarily during construction.

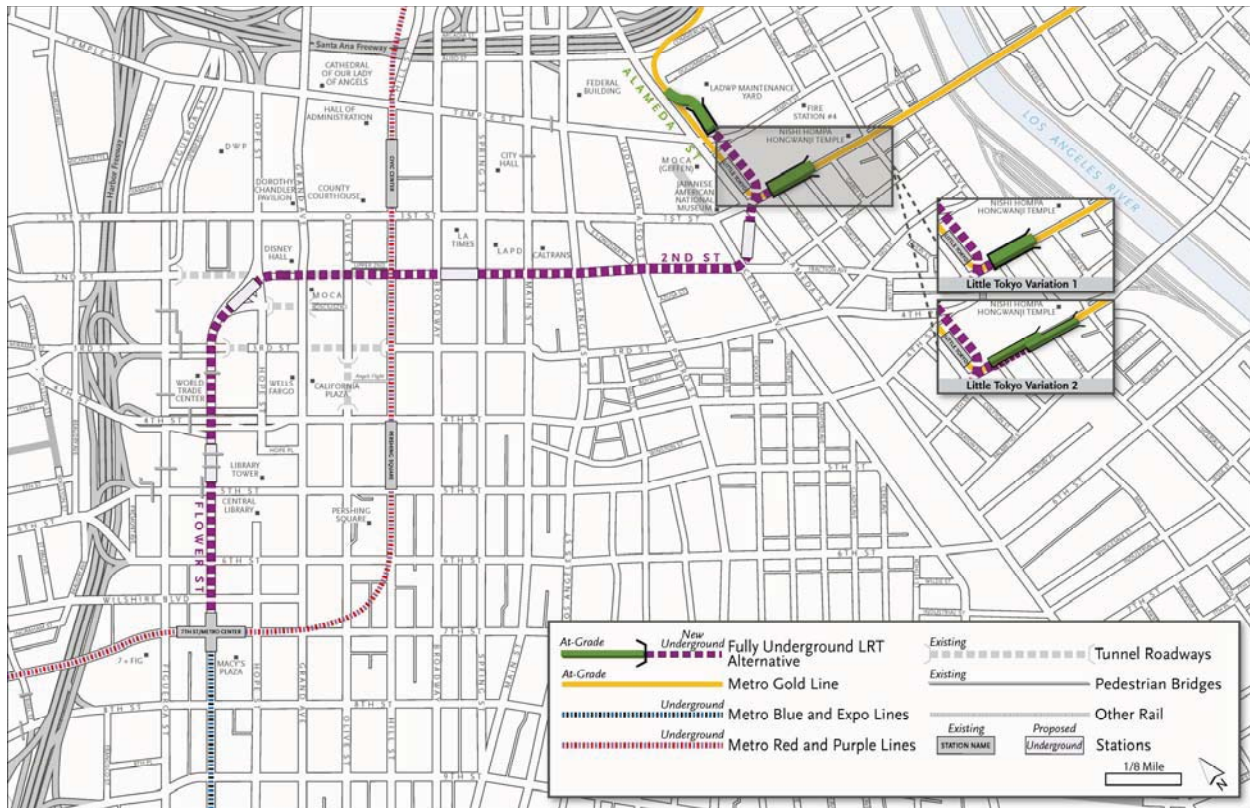


Figure 2-5. Fully Underground Emphasis LRT Alternative - Little Tokyo Variation 1 and Little Tokyo Variation 2

The other set of tracks leaving the three-way junction would rise to the east within 1st Street to accommodate a new portal as well as existing Metro Gold line tracks. 1st Street would be widened to the north to accommodate the portal. Street widening would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street to join the existing 1st Street LRT tracks, about one and half blocks west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold Line to East Los Angeles, which will be eventually extended to about I-605 per Metro’s Long Range Transportation Plan.

The signalized intersection of 1st and Hewitt Streets would be removed. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns at 1st and Hewitt would be prohibited. Right turns to and from Hewitt Street would continue to be permitted. Automobile access to the proposed Nikkei Center parcel would continue to be available from Temple and 1st Streets. However, access at any driveways into the parcel along 1st Street would be restricted to right turns only.

The existing Metro Gold Line and the Little Tokyo/Arts District Station surface tracks and station would be maintained for continued service during construction, with only intermittent disruptions related to construction activities. Once construction is complete, operation of the

current Metro Gold Line between Pasadena and East Los Angeles would terminate. Metro would initiate operations on two routes: between Azusa and Long Beach, and between East Los Angeles and Santa Monica.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway. Crossovers may not be needed at both of these locations, and may ultimately be placed in locations that are not adjacent to stations.

Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. More information on these construction methods is provided in the Description of Construction.

In summary, the Fully Underground LRT Alternative – Little Tokyo Variation 1 would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line from a new junction under 1st and Alameda Streets. This would be accomplished using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated.

This technical memorandum analyzes maximum potential impacts for each station. Ultimate impacts may therefore be smaller in magnitude than the impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.5.3 Operating Characteristics

Two consolidated routes:

The Regional Connector would consolidate the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes:

- East-West Route - Metro Expo Line trains from Santa Monica would run on the existing tracks north of the existing 7th Street/Metro Center Station, continuing north along new Regional Connector tracks to a new three-way junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to the new portal on 1st Street, and continue along the Metro Gold Line tracks to about I-605.
- North-South Route - After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to the new three-way junction beneath 1st and Alameda Streets. Trains would then travel to the new portal on the LADWP site, and continue along the Pasadena Metro Gold Line to Azusa.

The east-west and north-south routes would each operate with 5-minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector corridor.

Vehicle and Pedestrian Circulation

The Fully Underground LRT Alternative – Little Tokyo Variation 1 alignment would not affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns except where a newly installed traffic signal at 1st and Hewitt Streets would be removed. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Permanent roadway and lane reconfigurations around the proposed 2nd/Hope Street and Flower/5th/4th Street stations would also be needed. At the proposed 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be possible via the remaining connector roadways. At the proposed Flower/5th/4th Street station, one traffic lane would need to be removed from Flower Street to accommodate station entrances along the sidewalk.

2.3.6 Fully Underground LRT Alternative- Little Tokyo Variation 2

2.3.6.1 Overview

The Fully Underground LRT Alternative - Little Tokyo Variation 2 would provide four new stations and a direct connection from 7th Street/Metro Center Station to the existing Metro Gold Line tracks to the north and east of 1st and Alameda Streets. The alignment would be the same as the Fully Underground LRT Alternative – Little Tokyo Variation 1 from the 7th Street/Metro Center Station to 2nd Street and Central Avenue.

A new two-level underground junction would be constructed beneath the 1st and Alameda Streets intersection. Trains traveling north toward Azusa and east toward I-605 would use the lower level of the junction, and trains travelling south toward Long Beach and west toward Santa Monica would use the upper level. To the north and east of the junction, trains would rise to the surface through new portals to connect to the Metro Gold Line heading north to Azusa and east towards I-605.

One portal containing the northbound and southbound tracks would be located northeast of the Little Tokyo/Arts District Station and tracks. This portal would rise to the north within the

LADWP Maintenance Yard and connect to the existing LRT bridge over the US-101 freeway, allowing a connection to the Metro Gold Line.

This portal would be connected to the 1st and Alameda junction by a new cut-and-cover tunnel crossing beneath Temple Street and the property proposed for the Nikkei Center (the parcel on the northeast corner of 1st and Alameda Streets), running immediately east of the existing Little Tokyo/Arts District station and tracks. The new tunnel would feed southbound trains from the portal into the upper level of the junction, and carry northbound trains away from the lower level of the junction toward the portal.

Two portals, each containing one track, would rise to the east within the widened median of 1st Street to allow a connection to the Metro Gold Line towards I-605. The portal containing the westbound track would be located between Alameda and Garey Streets. The portal containing the eastbound track would be located adjacent to the westbound track between Hewitt and Vignes Streets.

1st Street would be widened to the north to accommodate the westbound portal. The widening would be initiated at Alameda and continue east, tapering down significantly as it crosses Hewitt Street. There, the new tracks would feed into the existing 1st Street LRT tracks, about a block west of the 1st Street Bridge. 1st Street would also be widened to the south between Hewitt and Vignes Streets to accommodate the eastbound track portal. The widening would taper down as it approaches Vignes Street. No modification to the 1st Street Bridge would be necessary.

Additional property would need to be acquired to stage construction of both portals, connect to the Gold Line LRT Bridge, and complete the tunnels beneath 2nd Street and the Nikkei Center property.

The Fully Underground Alternative – Little Tokyo Variation 2 would be located entirely underground from the 7th Street/Metro Center Station to west of the intersection of 1st and Alameda Streets. Figure 2-5 illustrates this alternative.

2.3.6.2 Route Configuration

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment would extend north from the existing LRT platform at 7th Street/Metro Center Station. Tracks would run underneath Flower Street to the next proposed station, just north of 5th Street. The tracks would then continue north underneath Flower Street and veer northeast near the intersection of 3rd and Flower Streets.

A new underground station would be located just southwest of the intersection of 2nd and Hope Streets. At this location, a new pedestrian bridge could be constructed to connect the station to Upper Grand Avenue. The bridge could begin at street level near the station

entrance and cross above the intersection and along Kosciuszko Way to reach Upper Grand Avenue.

From 3rd and Flower Streets, the tracks would head east underneath 2nd Street to the next proposed station at Broadway. The 2nd Street/Broadway station would be located under 2nd Street approximately between Broadway and Spring Street.

The tracks would then continue east underneath 2nd Street to Central Avenue, where they would veer northeast to a new underground station that would potentially be located within the property currently occupied by Office Depot and other small commercial uses.

As the tunnels turn northeast from 2nd Street, the northbound tunnel would descend and the southbound tunnel would rise so that the southbound tunnel would be stacked on top of the northbound tunnel. The new underground station near 2nd Street and Central Avenue would have two underground levels, each with a single-track platform. The northbound track with trains headed north and east would be on the lower level, and the southbound track with trains headed south and west would be on the upper level.

The tracks would continue from the station under the 1st and Alameda intersection into a new two-level underground junction. Separating from the junction, one track from the lower level (northbound) and one track from the upper level (southbound) would continue underground beneath the proposed Nikkei Center parcel (the parcel on the northeast corner of 1st and Alameda Streets), along the eastern side of the existing Little Tokyo/Arts District Station.

These tracks would travel under Temple Street before surfacing in the LADWP yard and rising to connect to the existing Metro Gold Line LRT bridge over the US-101 Freeway. This would allow trains to continue along the Metro Gold Line to Pasadena, which will be extended to Azusa per Metro's Long Range Transportation Plan. Traffic lanes on Alameda Street would be reconfigured temporarily during construction.

A second track (westbound) leaving the upper level of the junction would rise to the east within 1st Street between Alameda and Hewitt Streets and link to the existing Metro Gold Line track. Another track (eastbound) leaving the lower level of the junction would rise to the east within 1st Street between Hewitt and Vignes Streets, adjacent to the westbound track, and link to the existing Metro Gold Line track.

1st Street would be widened to the north and south to accommodate the portal and temporary tracks to maintain Metro Gold Line service during construction. Widening would be initiated at Alameda and continue east, tapering down significantly as the alignment crosses Hewitt Street and again at Vignes Street, where tracks would join the existing 1st Street LRT tracks, just west of the 1st Street Bridge. This would allow trains to continue along the Metro Gold

Line to East Los Angeles, which will be eventually extended toward I-605 per Metro's Long Range Transportation Plan.

The signalized intersection of 1st and Hewitt Streets would be removed. North-south traffic along Hewitt Street would no longer be able to cross 1st Street. All left turns at 1st and Hewitt would be prohibited. Right turns to and from Hewitt Street would continue to be permitted.

Automobile access to the proposed Nikkei Center parcel would continue to be available from Temple and 1st Streets. However, access at any driveways into the parcel along 1st Street would be restricted to right turns only. The existing Metro Gold Line and Little Tokyo/Arts District Station and surface tracks would be maintained for continued service during construction, with intermittent disruptions related to construction activities.

One lane of 1st Street would need to be temporarily closed during construction between Alameda and Vignes Streets to maintain these surface tracks. The surface tracks would not remain in place beyond construction. Once construction is complete, operation of the current Metro Gold Line between Pasadena and East Los Angeles would terminate. Metro would initiate operations on two routes: between Azusa and Long Beach, and between East Los Angeles and Santa Monica.

Crossovers could be located just north of the proposed station at 5th and Flower Streets and just east of the proposed station at 2nd Street and Broadway. Crossovers may not be needed at both of these locations and may ultimately be placed in locations that are not adjacent to stations. Underground crossover locations require cut-and-cover construction; tunnel boring machines cannot be used to construct underground crossovers. More information on these construction methods is provided in the Description of Construction.

In summary, the Fully Underground LRT Alternative – Little Tokyo Variation 2 would link the Metro Blue and Expo Lines at the 7th Street/Metro Center Station to the Metro Gold Line. The link would be provided by a new two-level junction under 1st and Alameda Streets using new light rail right-of-way and new stations, enabling Metro Gold, Blue, and Expo Line services to be consolidated.

This technical memorandum analyzes maximum potential impacts for each station. Ultimate impacts may therefore be smaller in magnitude than the impacts disclosed. Tunnel construction would be constrained by basements of existing buildings. No encroachments upon existing basements would occur except potentially at underground stations.

2.3.6.3 Operating Characteristics

Two consolidated routes:

- The Regional Connector would consolidate the Metro Gold Line, Metro Expo Line, and Metro Blue Line into the two following routes: East-West Route - Metro Expo Line trains from Santa Monica would run on the existing Flower Street tracks north of the junction at Washington and Flower Streets. After stopping at the existing 7th Street/Metro Center Station, they would continue north along the new Regional Connector tracks to the new two-level junction beneath the intersection of 1st and Alameda Streets. Trains would then travel to the new portals on 1st Street, and continue along the Metro Gold Line tracks towards I-605.
- North-South Route - After stopping at 7th Street/Metro Center Station, Metro Blue Line trains from Long Beach would continue north along the new Regional Connector tracks to the new two-level junction beneath 1st and Alameda Streets. The trains would then travel to the new portal on the LADWP site, and continue along the Pasadena Metro Gold Line to Azusa.

The east-west and north-south routes would each operate with 5-minute headways during peak hours, combining to yield trains every 2 ½ minutes in each direction along the Regional Connector.

Vehicle and Pedestrian Circulation

The Fully Underground LRT Alternative – Little Tokyo Variation 2 alignment would not permanently affect surface traffic or pedestrian circulation on 1st Street between Alameda Street and the 1st Street bridge, where the LRT alignment would rise within a portal to an at-grade configuration. Street widening and sidewalk modifications would be required in this area.

Vehicular circulation patterns along downtown streets adjacent to most of the alignment would continue to operate under current traffic flow patterns except where a newly installed traffic signal at 1st and Hewitt Streets would be removed. Through traffic movements along Hewitt Street would no longer be permitted at 1st Street, and no left turns to or from Hewitt Street would be possible.

Permanent roadway and lane reconfigurations around the proposed 2nd/Hope Street and Flower/5th /4th Street stations would also be needed. At the proposed 2nd/Hope Street station, a short connector roadway would be removed, but all existing traffic movements would still be possible via the remaining connector roadways. At the proposed Flower/5th /4th Street station, one traffic lane would need to be removed from Flower Street to accommodate station entrances along the sidewalk.

3.0 METHODOLOGY FOR IMPACT EVALUATION

This section describes the processes for identifying cultural resources, determining the significance of those resources, evaluating potential effects from construction and operation of the project, assessing potential permanent changes to historic properties and/or their contextual settings, and determining thresholds of significance that are applied to potential impacts. Section 4.0 describes the historic properties identified in the project area and their significance. Section 5.0 evaluates potential direct, indirect, and cumulative impacts to these resources from construction and operation.

3.1 Regulatory Framework and Standards of Significance

3.1.1 Federal

A number of federal laws address the protection of historic and cultural resources. The analysis of potential effects to built environment resources are primarily guided by the National Environmental Policy Act of 1969; Section 106 of the National Historic Preservation Act of 1966, as amended; and Section 4(f) of the U.S. Department of Transportation Act (USDOT Act) of 1966.

3.1.1.1 National Environmental Policy Act (NEPA)

The intent of NEPA is to protect the natural and built environment, including historic properties, from adverse effects resulting from federal actions. Before a federal agency may proceed with a proposed action, an environmental evaluation must be made to determine whether the action may have a significant effect on the environment. Effects on historic properties are usually assessed in coordination with the process established under Section 106 of the NHPA. The Section 106 process typically must be completed before an EIS can be finalized.

Under NEPA, historic and cultural resources generally include properties that are listed in or determined eligible for listing in the National Register. While NEPA does not provide specific definitions or criteria for determining the significance of historic properties, CEQA guidelines direct agencies to comply with Section 106 of the NHPA to be in compliance with NEPA.

NEPA requires federal agencies to evaluate the significance of potential project-related effects including both direct and tangible (e.g., demolition or alteration) and indirect effects (less tangible effects such as noise or visual). NEPA provides guidance for determining significance as a measure of impact intensity (Section 1508.27).

Intensity refers to the severity of impact. Decision-makers must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

- Impacts may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to expect a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historical resources.
- Whether the action threatens a violation of federal, state, or local laws or requirements imposed for the protection of the environment.

3.1.1.2 National Historic Preservation Act (NHPA)

This report was completed under the provisions of NHPA Section 106 (36 CFR 800) in its applications for determining “effects,” or impacts, as described in Part 800.5(a)(1). Section 106 of the NHPA requires that federal agencies take into account effects on “historic properties” that may be caused by undertakings, and that the Advisory Council on Historic Preservation be afforded an opportunity to comment on those undertakings (16 USC 470a, 36 Code of Federal Regulations, CFR Part 800). Section 106 requires that historic properties be identified, that effects be analyzed, and if adverse effects would be expected, that appropriate mitigation be identified and implemented under a Memorandum of Agreement (MOA).

Cultural resources (or “historic properties” under NHPA) include any district, site, building, structure, or object that is included in or eligible for listing in the National Register (36 CFR Part 800.1).

Section 106 defines a historic property as:

Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR Part 800 Protection of Historic Properties, Section 800.16 Definitions[1]).

Properties of traditional religious and cultural importance— also referred to as Traditional Cultural Properties/Places, or TCPs)—to Native Americans are considered under Section 101(d)(6)(A) of the NHPA. TCPs can be National Register-eligible under any of the criteria, described in the following section.

National Register of Historic Places

The National Register of Historic Places is the nation’s official list of districts, sites, buildings, structures, and objects worthy of preservation. The National Register currently includes approximately 80,000 listings, including icons of American architecture, engineering, culture, and history. Overseen by the National Park Service (NPS), under the Department of the Interior, the National Register was authorized under the NHPA, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.

For a property to be listed in or determined eligible for National Register listing, it must be demonstrated to have the quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet at least one of the following criteria:

- Be associated with events that have made a significant contribution to the broad patterns of our history;
- Be associated with the lives of persons significant in our past;
- Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in the National Park Service’s National Register guidance as the ability of a property to convey its significance. To be listed in the National Register, a property must not only be shown to be significant under the National Register criteria, but it also must retain integrity.

The National Register guidance asserts that properties be at least 50 years old to be considered for eligibility. Properties completed less than 50 years before they are evaluated must be “exceptionally important” (Criteria Consideration G) to be considered eligible for listing, or under certain circumstances they must be part of a historic district whose period of significance extends forward to a date less than 50 years ago.

Effects on historic properties under Section 106 of the NHPA are defined in the Assessment of Adverse Effects in 36 *CFR* Part 800.5(a) (1):

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

Adverse effects on historic properties are defined as and include, but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the *Secretary's Standards for the Treatment of Historic Properties* (36 *CFR* Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property’s use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 *CFR* Part 800.5(a) (2)).

To comply with Section 106, the criteria of adverse effect are applied to historic properties in the project Area of Potential Effects (APE), pursuant to 36 *CFR* Part 800.5 (a)(1). A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds set forth in the criteria of adverse effect, or in certain cases when the undertaking is modified to avoid or lessen effects, or conditions are imposed to ensure review of rehabilitation plans for conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (codified in 36 *CFR* Part 68). If adverse effects findings are made, mitigation would be proposed and resolution of adverse effects occurs through consultation pursuant to 36 *CFR* Part 800.6(a) to avoid, minimize, or mitigate adverse effects on historic properties.

Historic properties in the APE are described in Section 4. Sections 5 and 7 present the analysis of potential effects on historic properties in the APE. Recommended mitigation to reduce adverse effects is described in Section 6.

3.1.1.3 U.S. Department of Transportation Act (USDOT), Section 4(f)

Section 4(f) (23 *CFR* 774) of the USDOT Act of 1966, as amended (49 USC 1653[f]), defines impacts of transportation agency projects as the “use” of certain types of resources, including “historical sites.”

USDOT agencies, including FTA, cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and historical sites (defined as listed in or determined eligible for listing in the National Register) unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land.
- The action includes all possible planning to minimize harm to the property resulting from use (FHWA 2009).

In the Federal Highway Administration (FHWA) guidance “What is Section 4(f)?” the regulations are described as applying to “any publicly or privately owned historic site listed or [determined] eligible for listing on the National Register” (FHWA 2009). The guidance defers

to the definitions of “historical sites” found in the NHPA and its National Register criteria for historic properties as described in Section 3.1.1.2.

Impacts to 4(f) properties, defined as “use” of the property, must be either avoided, minimized, or mitigated, in that order. FTA follows FHWA procedures for resolving “*de minimis*” impacts through recorded administrative decisions, and mitigating impacts through 4(f) procedures (FHWA 2009).

3.1.1.4 Other Federal Regulations

Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others. Section 106 and NEPA procedures—particularly through involvement of Native American and other public constituents in the identification, evaluation, and mitigation processes—might address impact resolution through these other federal laws.

3.1.2 State

3.1.2.1 California Environmental Quality Act (CEQA)

Concurrently with the federal process, the California Environmental Quality Act (*Public Resources Code or PRC*, Section 5024) requires evaluation of proposed projects that may cause significant effects on historical resources. Under CEQA, “historical resources” must be identified, expected impacts must be analyzed, and mitigation must be identified and implemented as above, where necessary. For CEQA conformance, historical resources include the built environment as well as “unique paleontological resources” or “unique geologic features.”

CEQA guidelines define a “historical resource” as:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register) PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1 (g) of the Public Resources Code, shall be presumed to be historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered an historical resource, provided the

lead agency's determination is supported by substantial evidence in light of the whole record.

CEQA equates a “substantial adverse change” in the historic significance of a resource with a significant effect on the environment (PRC Section 21084.1). Thresholds of substantial adverse change are established in PRC Section 5020.1 as demolition, destruction, relocation, or “alteration activities that would impair the significance of the historic resource.”

If a project is expected to result in an effect on historic resources, CEQA guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain the most basic objectives of the project and avoid or substantially lessen any significant effects on the historical resource.

A proposed project that may affect historic resources is submitted to the SHPO for review and comment prior to project approval by the lead CEQA agency, and before any project-related clearance, demolition, or construction activities commence. If any CEQA impact conditions are met by the project's effects on historic properties, mitigation measures are recommended for avoidance, to minimize impacts, or to provide balanced compensation for adverse effects. See Sections 5.0 and 7.0 for an evaluation of project effects and impacts on those properties, and Section 6.0 for recommended mitigation measures.

3.1.2.2 California Register of Historical Resources (California Register)

Under California PRC Section 5024.1, the California Register was established to serve as an authoritative guide to the state's significant historic and archaeological resources. A resource is considered historically significant if it meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4852). For a property to be considered eligible for listing in the California Register, it must be found to be significant under at least one of the following four criteria by the State Historical Resources Commission. If the resource:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history

In addition to possessing one of the above-listed characteristics, resources must retain “substantial” integrity to their period of significance to be eligible for listing in the California Register. The seven aspects or qualities of integrity are the same as those applied to National Register-eligible properties: location, design, setting, materials, workmanship, feeling, and association.

The California Register also includes properties that:

- Have been determined eligible for listing in, or are listed in the National Register.
- Are registered State Historical Landmark No. 770 and all consecutively numbered landmarks above Number 770 (see Section 3.1.2.3).
- Are points of historical interest that have been reviewed and recommended to the State Historical Resources Commission for listing (see Section 3.1.2.4).
- Are city- and county-designated landmarks or districts (see Section 3.1.3). Historic Districts are a concentration of historic buildings, structures, objects, or sites within precise boundaries that share a common historical, cultural or architectural background. Individual resources within an historic district may lack individual significance but be considered a contributor to the significance of the historic district.
- Are identified as significant in a historic resource survey and meet the following criteria:
 - 1) The survey has been or will be included in the State Historical Resources Inventory.
 - 2) The survey and the survey documentation were prepared in accordance with California Office of Historic Preservation (OHP) procedures and requirements.
 - 3) The resource is evaluated and determined by the office to have a significance rating of category “1 to 5” on California Department of Parks and Recreation (CDPR) series 523 form.
 - 4) If the survey is five or more years old at the time of its nomination for inclusion in the California Register, it is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource (PRC Section 5024.1[g]).

3.1.2.3 California Historical Landmarks

Designated California Historical Landmarks (CHLs) are numbered sequentially as they are listed by the State Historical Resources Commission. CHLs numbered 770 and higher are

automatically listed in the California Register. According to PRC Section 5031 (a), to be eligible for California Historical Landmark designation, a property must be of “statewide historical importance” and must demonstrate its statewide significance by meeting one of the following three requirements:

- The property is the first, last, only, or most significant historical property of its type in the region. The regions are Southern California, Central California, and Northern California. If a property has lost its historic appearance (integrity), it may not be listed as a site.
- The property is associated with an individual or group having a profound influence on the history of California. The primary emphasis should be the place or places of achievement of an individual. Birthplace, death place, or place of interment shall not be a consideration unless something of historical importance is connected with his or her birth or death. If a property has lost its historic appearance (integrity), it may not be listed as a site.
- The property is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or is one of the more notable works, or the best surviving work in a region, of a pioneer architect, designer, or master builder.

3.1.2.4 California Points of Historical Interest

California Points of Historical Interest include “sites, buildings, features, or events that are of local (city or county) significance and have an anthropological, cultural, military, political, architectural, economic, scientific, or technical, religious, experimental, or other value.”

Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the California Register. To be designated, a property must meet at least one of the following criteria:

- The first, last, only, or most significant of its type within the local geographic region (city or county);
- Associated with an individual or group having a profound influence on the history of the local area; or
- A prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

3.2 Delineation of Area of Potential Effects

The project-specific APE (Figures E-1 through E-9, Appendix E) was established through consultation between the lead federal agency, FTA, the lead CEQA agency, Metro, the SHPO,

and other consulting parties in accordance with 36 CFR 800.16(d). Section 106 defines an APE as:

the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

The project APE was delineated to ensure identification of significant cultural resources that may be directly or indirectly affected by the project, and are listed in or eligible for inclusion in the National and/or California Register. The APE was established using methodology consistent with those of previous Metro projects (Figures E-1 through E-9, Appendix E). The 1.9-mile-long APE consists of 213 Los Angeles County Office of the Assessor parcels, some of which are subdivided into multi-property entities.

The proposed project APE was determined by consensus between the undertaking's lead federal agency, FTA, and consulting parties, led by the SHPO. The California OHP defines the boundaries within which properties are identified and evaluated for their historic significance, and effects of the proposed project are analyzed. The project APE was approved on September 9, 2009. Correspondence between FTA and SHPO for this project is included in Appendix D.

For archaeological and paleontological resources, the proposed direct APE includes the proposed at-grade and underground right-of-way and/or areas of direct ground disturbance. The direct APE also includes areas with permanent site improvements and areas for staging and temporary construction activities. For much of the project alignment, the direct APE includes the full width of the street along which the alignment runs, as well as the adjacent sidewalks. The direct APE includes additional street segments and portions of adjacent city blocks in areas of proposed stations, connections with existing rail lines, alignments that deviate from existing streets, and staging areas.

To anticipate effects that may result by implementing both above-ground and subterranean construction and implementation, the proposed vertical APE extends from approximately the existing ground surface to 25 feet above the existing ground surface and approximately 100 feet below the existing ground surface.

3.3 Native American Coordination

SWCA contacted the California Native American Heritage Commission (NAHC) by letter dated February 10, 2009, requesting a review of the Sacred Lands File and a list of appropriate Native American contacts for the project. The NAHC search of the Sacred Lands File

indicated the presence of Native American cultural resources in the project area. The NAHC also provided a list of five Native American contacts.

SWCA sent letters via U.S. mail to the five Native American contacts on April 16, 2009, requesting information regarding potential cultural resources that may be located within the project APE. These letters included location maps and a description of the proposed project and its related APE (Appendix B). A follow-up contact with each group was made via telephone on May 11, 2009, and subsequent follow-ups via telephone and/or email were made as necessary. Not all of the contacts responded.

One of the groups, the Gabrieleno/Tongva San Gabriel Band of Mission Indians, expressed dismay with Metro because the Band had never been contacted by anyone about the Metro Gold Line to East Los Angeles project, which was completed in November 2009. Tribal Chairperson Anthony Morales stated that he was concerned with the proposed project's proximity to the prehistoric village of Yangna and considers the project area highly sensitive for Native American resources and sacred places.

Mr. Morales further stated that he is aware that cultural resources, including human remains, have been uncovered during construction of various projects in the downtown area, and he wants Metro to know that his tribe has concerns.

A second tribe, the Tongva Ancestral Territorial Tribal Nation, responded via email that it objects to the proposed project and would like to prepare a detailed response, but has not received sufficient information to do so.

Metro is consulting with the Gabrieleno/Tongva San Gabriel Band of Mission Indians and Tongva Ancestral Territorial Tribal Nation should the project proceed. Details of SWCA's contacts with the Gabrieleno/Tongva San Gabriel Band of Mission Indians and Tongva Ancestral Territorial Tribal Nation are provided in Table 3-1.

Table 3-1. Contacts with Native Americans

Native American Contact	Letter Sent	Reply Date	Follow Ups	Results
Cindi Alvitre Ti'At Society 6515 E. Seaside Walk, #C Long Beach, CA 90803	4/16/09, via U.S. Priority Mail		5/11/09, message and email by Kip Harper (KH)	Left message. No further action necessary.
Robert Dorame Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707	4/16/09, via U.S. Priority Mail	5/11/09, telephone call from Mr. Dorame	5/11/09, telephone and email by KH	Mr. Dorame suggested that we look at historic maps/roadways. He said that he received the letter and would review the information and would respond via letter/email. He said that if we did not hear from him, then he had no response. SWCA re-sent the letter via email to facilitate his response. No response received. No further action necessary.
Sam Dunlap Gabrielino Tongva Nation P.O. Box 86908 Los Angeles, CA 90086	4/16/09, via U.S. Priority Mail		5/11/09, telephone and email by KH	Left message. No further action necessary.
Anthony Morales Gabrieleno/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778	4/16/09, via U.S. Priority Mail	4/17/09, telephone call from Mr. Morales	4/17/09, telephone by KH	On 4/17/09, Mr. Morales left a message stating that he wanted to talk about the project. On 4/17/09, K. Harper spoke to Mr. Morales about the proposed project. Mr. Morales expressed dismay that Metro had never contacted him about the Gold Line Extension project. Mr. Morales stated that he is concerned with the Regional

Table 3-1. Contacts with Native Americans

Native American Contact	Letter Sent	Reply Date	Follow Ups	Results
				<p>Connector’s proximity to the village of Yangna. In addition, he stated that he considers the project area to be highly sensitive for Native American resources and sacred places considering that the project is located in the heart of the city. Mr. Morales said that he is aware that cultural resources have been uncovered during construction of pipelines in the downtown area, and that human remains were uncovered during construction of the Metropolitan Water District building.</p> <p>Mr. Morales wants Metro to know that a local tribe—the Gabrielino—has concerns.</p> <p>SWCA recommends that Metro consult with the Gabrielino/Tongva San Gabriel Band of Mission Indians.</p>
John Tommy Rosas Tongva Ancestral Territorial Tribal Nation (TATTN)	4/16/09, via email (Samantha Murray)	4/16/09, via email; 4/17/09 via email; 5/11/09 via email	4/17/09, email by KH 5/11/09, email by KH	<p>On 4/17/09, K. Harper responded to Mr. Rosas’ email stating that his comments were received.</p> <p>Mr. Rosas responded via email on 4/17/09. In his email, Mr. Rosas stated that he objects to the proposed project “on the grounds that it[']s a growth inducing negative impact under CEQA, on violations to our indigenous rights, and that the TATTN lands are ours and so the claimed land titles by project [owners] is defective and illegal.”</p>

Table 3-1. Contacts with Native Americans

Native American Contact	Letter Sent	Reply Date	Follow Ups	Results
				<p>On 4/17/09, Mr. Rosas also responded stating that he would send a more detailed response. No response was received.</p> <p>On 5/11/09, K. Harper emailed Mr. Rosas to follow up on his 4/17/09 response to facilitate his response. Mr. Rosas responded stating “Your information attachment-does not contain any environmental construction reports or details so we can continue our detailed response.” Mr. Rosas did not provide any consequential information regarding cultural resource in the project area.</p> <p>SWCA recommends that Metro consult with the TATTN.</p>

4.0 AFFECTED ENVIRONMENT

The project is located within the City of Los Angeles in Los Angeles County, California. Specifically, the direct APE extends in a northeasterly direction from the intersection of Flower and 7th Streets to the Gold Line at Alameda Street between 2nd and Temple Streets within downtown Los Angeles. The project crosses several communities of downtown Los Angeles, including the Bunker Hill, Historic Core, Civic Center, and Little Tokyo communities.

This area is highly urbanized, with development ranging from commercial to public and institutional uses. Most of the native vegetation has been removed and replaced by non-native trees and grasses. Elevations range from 250 to 270 feet (76 to 82 meters) above mean sea level. The nearest natural water source includes the now channelized course of the Los Angeles River, located approximately 0.72 miles (1.1 km) east of the project area.

The climate within the project area is typified by hot, dry summers with moderate winter precipitation. Summers are influenced by a high-pressure zone associated with descending dry air from the upper atmosphere. This persistent high pressure generally prevents rain-bearing storms from entering the area, keeping summers dry.

Summer temperatures can be hot, commonly reaching 80 or 90 degrees Fahrenheit (°F) and sometimes exceeding 100°F. Autumn brings the Santa Ana winds, which blow from the Mojave Desert westward toward the Pacific Ocean. Winter is generally characterized by alternating sporadic rainstorms with predominantly clear, sunny days (Schoenherr 1992).

4.1 Cultural Setting

4.1.1 Prehistoric Overview

Numerous chronological sequences have been devised to help understand cultural changes within southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four periods are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's (1955) synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984), this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last three decades (Byrd and Raab 2007).

Several revisions have been made to Wallace's (1955) synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Mason and Peterson 1994; Koerper et al. 2002). The summary of prehistoric chronological sequences for southern California coastal and near-coastal areas presented in this memorandum is a composite of

information in Wallace (1955) and Warren (1968) as well as more recent studies, including Koerper and Drover (1983).

4.1.1.1 Horizon I – Early Man (ca. 10,000–6,000 B.C.)

When Wallace defined the Horizon I (Early Man) period in the mid-1950s, there was little evidence of human presence on the southern California coast prior to 6000 B.C.

Archaeological work in the intervening years has identified numerous pre-8000 B.C. sites, both on the mainland coast and the Channel Islands (e.g., Erlandson 1991; Johnson et al. 2002; Moratto 1984; Rick et al. 2001).

The earliest accepted dates for occupation are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area about 10,000 years ago (Erlandson 1991). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego Counties contain several sites dating to 9,000 to 10,000 years ago (Byrd and Raab 2007; Macko, 1998a; Mason and Peterson 1994; Sawyer and Koerper 2006).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones, et al. 2002) and on Pleistocene lake shores in eastern San Diego County (Moratto 1984). Although few Clovis-like or Folsom-like fluted points have been found in southern California (e.g., Dillon 2002; Erlandson, et al. 1987), it is generally thought that the emphasis on hunting may have been greater during Horizon I than in later periods. Common elements in many sites from this period include, for example, leaf-shaped bifacial projectile points and knives, stemmed or shouldered projectile points, scrapers, engraving tools, and crescents (Wallace 1978).

Subsistence patterns shifted around 6000 B.C. coincident with the gradual desiccation associated with the onset of the Altithermal climatic regime, a warm and dry period that lasted for about 3,000 years. After 6000 B.C., a greater emphasis was placed on plant foods and small animals.

4.1.1.2 Horizon II – Milling Stone (6000–3000 B.C.)

The Milling Stone Horizon of Wallace (1955, 1978) and Encinitas Tradition of Warren (1968) (6000 to 3000 B.C.) are characterized by subsistence strategies centered on collecting plant foods and small animals. Food procurement activities included hunting small and large terrestrial mammals, sea mammals, and birds; collecting shellfish and other shore species; near-shore fishing with barbs or gorges; processing yucca and agave; and extensively using seed and plant products (Kowta 1969; Reinman 1964).

The importance of seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages; namely, milling stones (metates and slabs) and handstones (manos and mullers). Milling stones occur in large numbers for the first time during this period, and are even more numerous near the end of this period. Recent research indicates that Milling Stone Horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007).

Milling Stone Horizon sites are common in the southern California coastal region between Santa Barbara and San Diego, and at many inland locations, including the Prado Basin in western Riverside County and the Pauma Valley in northeastern San Diego County (e.g., Herring 1968; Langenwalter and Brock 1985; Sawyer and Brock 1999; Sutton 1993; True 1958). Wallace (1955, 1978) and Warren (1968) relied on several key coastal sites to characterize the Milling Stone period and Encinitas Tradition, respectively. These include the Oak Grove Complex in the Santa Barbara region, Little Sycamore in southwestern Ventura County, Topanga Canyon in the Santa Monica Mountains, and La Jolla in San Diego County. The well-known Irvine site (CA-ORA-64) has occupation levels dating between ca. 6000 and 4000 B.C. (Drover, et al. 1983; Macko 1998b).

Stone chopping, scraping, and cutting tools made from locally available raw material are abundant in Milling Stone/Encinitas deposits. Less common are projectile points, which are typically large and leaf-shaped, and bone tools such as awls. Items made from shell, including beads, pendants, and abalone dishes, are generally rare. Evidence of weaving or basketry is present at a few sites.

Kowta (1969) attributes the presence of numerous scraper-planes in Milling Stone sites to preparation of agave or yucca for food or fiber. The mortar and pestle, associated with pounding foods such as acorns, were first used during the Milling Stone Horizon (Wallace 1955, 1978; Warren 1968).

Cogged stones and discoidals are diagnostic Milling Stone period artifacts, and most specimens have been found within sites dating between 4000 and 1000 B.C. (Moratto 1984). The cogged stone is a ground stone object with gear-like teeth on its perimeter. Discoidals are similar to cogged stones, differing primarily in their lack of edge modification. Discoidals are found in the archaeological record subsequent to the introduction of the cogged stone.

Cogged stones and discoidals are often purposefully buried, and are found mainly in sites along the coastal drainages from southern Ventura County southward, with a few specimens inland at Cajon Pass, and heavily in Orange County (Dixon 1968; Moratto 1984). These artifacts are often interpreted as ritual objects (Eberhart 1961; Dixon 1968), although alternative interpretations (such as gaming stones) have also been suggested (e.g., Moriarty and Broms 1971).

Characteristic mortuary practices of the Milling Stone period or Encinitas Tradition include extended and loosely flexed burials, some with red ochre, and few grave goods such as shell beads and milling stones interred beneath cobble or milling stone cairns. “Killed” milling stones, exhibiting holes, may occur in the cairns. Reburials are common in the Los Angeles County area, with north-oriented flexed burials common in Orange and San Diego Counties (Wallace 1955, 1978; Warren 1968).

Koerper and Drover (1983) suggest that Milling Stone period sites represent evidence of migratory hunters and gatherers who used marine resources in the winter and inland resources for the remainder of the year. Subsequent research indicates greater sedentism than previously recognized.

Evidence of wattle-and-daub structures and walls has been identified at several sites in the San Joaquin Hills and Newport Coast area (Koerper 1995; Strudwick 2005), while numerous early house pits have been discovered on San Clemente Island (Byrd and Raab 2007). This architectural evidence and seasonality studies suggest semi-permanent residential base camps that were relocated seasonally (de Barros 1996; Koerper, et al. 2002; Mason, et al. 1997) or permanent villages from which a part of the population left at certain times of the year to exploit available resources (Cottrell and Del Chario 1981).

4.1.1.3 Horizon III – Intermediate (3000 B.C.–A.D. 500)

Following the Milling Stone Horizon, Wallace’s Intermediate Horizon and Warren’s Campbell Tradition in Santa Barbara, Ventura, and parts of Los Angeles Counties, date from approximately 3000 B.C. to 500 A.D. and are characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. The Campbell Tradition (Warren 1968) incorporates David B. Rogers’ (1929) Hunting Culture and related expressions along the Santa Barbara coast. In the San Diego region, the Encinitas Tradition (Warren 1968) and the La Jolla Culture (Moriarty 1966; Rogers 1939, 1945) persist with little change during this time.

During the Intermediate Horizon and Campbell Tradition, there was a pronounced trend toward greater adaptation to regional or local resources. For example, an increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites along the California coast during this period. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks become part of the toolkit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period.

Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms. Koerper and Drover (1983) consider Gypsum Cave and Elko series points, which have a wide distribution in the Great Basin and Mojave deserts between ca. 2000 B.C. and A.D. 500, to be

diagnostic of this period. Bone tools, including awls, were more numerous than in the preceding period, and the use of asphaltum adhesive was common.

Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment. Hopper mortars and stone bowls, including steatite vessels, appeared in the toolkit at this time as well. This shift appears to correlate with the diversification in subsistence resources.

Many archaeologists believe this change in milling stones signals a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn (e.g., Glassow, et al. 1988; True 1993). It has been argued that mortars and pestles may have been used initially to process roots (e.g., tubers, bulbs, and corms associated with marshland plants), with acorn processing beginning at a later point in prehistory (Glassow 1997) and continuing to European contact.

Characteristic mortuary practices during the Intermediate Horizon and Campbell Tradition included fully flexed burials, placed face down or face up, and oriented toward the north or west (Warren 1968). Red ochre was common, and abalone shell dishes infrequent. Interments sometimes occurred beneath cairns or broken artifacts. Shell, bone, and stone ornaments, including charmstones, were more common than in the preceding Encinitas Tradition.

Some later sites include *Olivella* shell and steatite beads, mortars with flat bases and flaring sides, and a few small points. The broad distribution of steatite from the Channel Islands and obsidian from distant inland regions, among other items, attest to the growth of trade, particularly during the later part of this period. Howard and Raab (1993) have argued that the distribution of *Olivella* grooved rectangle beads marks “a discrete sphere of trade and interaction between the Mojave Desert and the southern Channel Islands” (Byrd and Raab 2007).

4.1.1.4 Horizon IV – Late Prehistoric (A.D. 500–Historic Contact)

In the Late Prehistoric Horizon (Wallace 1955, 1978), which lasted from the end of the Intermediate Horizon (ca. A.D. 500) until European contact, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts.

The recovery of a greater number of small, finely chipped, projectile points, usually stemless with convex or concave bases, suggests an increased utilization of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Other items include steatite cooking vessels and containers, the increased presence of smaller bone and shell circular fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and

personal ornaments made from shell, bone, and stone. There is also an increased use of asphalt for waterproofing and as an adhesive.

Many Late Prehistoric sites contain beautiful and complex objects of utility, art, and decoration. Ornaments include drilled whole venus clam (*Chione* spp.) and drilled abalone (*Haliotis* spp.). Steatite effigies become more common, with scallop (*Pecten* spp. and *Argopecten* spp.) shell rattles common in middens.

Mortuary customs are elaborate and include cremation and interment with abundant grave goods. By A.D. 1000, fired clay smoking pipes and ceramic vessels began to appear at some sites (Drover 1971, 1975; Meighan 1954; Warren and True 1961).

The scarcity of pottery in coastal and near-coastal sites implies ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

There was an increase in population size during this period, accompanied by the advent of larger, more permanent villages (Wallace 1955). Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between A.D. 500 and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura Counties; the Takic or Numic Tradition is present in the Los Angeles, Orange, and western Riverside Counties region; and the Yuman Tradition is present in the San Diego region.

The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric period are thought to be the result of a migration of people to the coast from inland desert regions to the east. In addition to the small triangular and side-notched points similar to those found in the desert regions in the Great Basin and Lower Colorado River, Colorado River pottery and introduction of cremation in the archaeological record are diagnostic of the Yuman Tradition in the San Diego region. This combination suggests a strong influence from the Colorado Desert region.

In Los Angeles, Orange, and western Riverside Counties, similar changes (introduction of cremation, pottery, and small triangular arrow points) are thought to be the result of a Takic migration to the coast from inland desert regions. This Takic, or Numic, Tradition was

formerly referred to as the “Shoshonean wedge” or “Shoshonean intrusion” (Warren 1968). This terminology, used originally to describe a Uto-Aztecan language group, is generally no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups who spoke Numic languages (Heizer 1978; Shipley 1978). Modern Gabrielino/Tongva, Juaneño, and Luiseño in this region are considered the descendents of the prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during this period or perhaps somewhat earlier.

4.1.2 Ethnographic Overview

The project area is located in the heart of Gabrielino/Tongva territory (Bean and Smith 1978; Kroeber 1925). Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south. There is documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

4.1.2.1 Gabrielino/Tongva

The name Gabrielino denotes those people who were administered by the Spanish from Mission San Gabriel, including people from the Gabrielino area proper as well as other social groups (Bean and Smith 1978; Kroeber 1925). Therefore, in the post-Contact period, the name does not necessarily identify a specific ethnic or tribal group.

The names by which Native Americans in southern California identified themselves have, for the most part, been lost. Many contemporary Gabrielino identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin and refer to themselves as the Tongva (King 1994). This term is used in the remainder of this section to refer to the pre-Contact inhabitants of the Los Angeles Basin and their descendants.

Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands, San Clemente, San Nicolas, and Santa Catalina. Their mainland territory was bounded on the north by the Chumash at Topanga Creek, the Serrano at the San Gabriel Mountains in the east, and the Juaneño on the south at Aliso Creek (Bean and Smith 1978; Kroeber 1925).

The Tongva language, as well as that of the neighboring Juaneño/Luiseño, Tatataviam/Alliklik, and Serrano, belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin area (Mithun 2004). This language family’s origin differs substantially from that of the Chumash to the north and the Ipai, Tipai, and Kumeyaay farther south. The language of the Ipai, Tipai, and Kumeyaay is derived from the California-Delta branch of the Yuman-Cochimi language family, which originated in the American Southwest (Mithun 2004).

The Chumash language is unlike both the Yuman-Cochimi and Uto-Aztecan families, and may represent a separate lineage (Mithun 2004). Linguistic analysis suggests that Takic-speaking immigrants from the Great Basin area began moving into southern California around 500 B.C. (Kroeber 1925). This migration may have displaced both Chumashan- and Yuman-speaking peoples, but the timing and extent of the migrations and their impact on indigenous peoples is not well understood.

The Tongva language consisted of two main dialects, Eastern and Western; the Western group included much of the coast and the Channel Island population (King 2004). Lands of the Western group encompassed much of the western Los Angeles Basin and San Fernando Valley, northward along the coast to the Palos Verdes Peninsula (McCawley 1996).

Tongva society was organized along patrilineal non-localized clans, a characteristic Takic pattern. Clans consisted of several lineages, each with their own ceremonial leader. The chief, or *tómyaar*, always came from the primary lineage of the clan/village. One or two clans generally made up the population of a village.

Even though the Tongva did not have a distinctly stratified society, there were two general classes of individuals: elites and commoners. The elites consisted of primary lineage members, other lineage leaders (who maintained a separate ceremonial language), the wealthy, and the elite families of the various villages who commonly married among themselves. The commoner class contained those from “fairly well-to-do and long-established lineages” (Bean and Smith 1978). A third, lower class consisted of slaves taken in war and individuals, unrelated to the inhabitants, who drifted into the village.

The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000 (Bean and Smith 1978), but recent ethnohistoric work suggests a number more likely approaching 10,000 (O’Neil 2002).

Several Tongva villages appear to have served as trade centers, largely due to their centralized geographic position in relation to the Southern Channel Islands and other tribes. These villages maintained particularly large populations and hosted annual trade fairs that would bring their population to 1,000 or more for the duration of the event (McCawley 1996).

Houses constructed by the Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Fields for races and games, such as lacrosse and pole throwing, were cleared adjacent to Tongva villages (McCawley 1996).

The Tongva subsistence economy was based on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, and deserts as well as riparian, estuarine, and open and rocky coastal ecological niches. As with most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh- and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978; Kroeber 1925; McCawley 1996).

A wide variety of tools and implements were employed by the Tongva to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Many plant foods were collected with woven seed beaters, several forms of burden baskets, carrying nets, and sharpened digging sticks, sometimes with stone weights fitted onto them.

Groups residing near the ocean used ocean-going plank canoes (known as a *ti'at*) and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands. The ocean-going canoes were capable of holding six to 14 people and were used for travel and trade between the mainland and the Channel Islands. The tule balsa canoes were used for near-shore fishing (Blackburn 1963; McCawley 1996).

Tongva people processed food with a variety of tools, including portable and bedrock mortars, pestles, basket hopper mortars, manos and metates, hammerstones and anvils, woven strainers and winnowers, leaching baskets and bowls, woven parching trays, knives, bone saws, and wooden drying racks. Food was consumed from a number of woven and carved wood vessels.

The ground meal and unprocessed hard seeds were stored in large, finely woven baskets, and the unprocessed acorns were stored in large granaries woven of willow branches raised off the ground on platforms. Santa Catalina Island steatite was used to make comals, ollas, and cooking vessels that would not crack after repeated firings. In addition to cooking vessels, steatite was used to make effigies, ornaments, and arrow straighteners (Blackburn 1963; Kroeber 1925; McCawley 1996).

The Tongva participated in an extensive exchange network, trading coastal goods for inland resources. They exported Santa Catalina Island steatite products, roots, seal and otter skins, fish and shellfish, red ochre, and lead ore to neighboring tribes, as well as people as far away as the Colorado River. In exchange they received ceramic goods, deer skin shirts, obsidian, acorns, and other items. This burgeoning trade was facilitated by the use of craft specialists, a standard medium of exchange (*Olivella* bead currency), and the regular destruction of valuables in ceremonies, which maintained a high demand for these goods (McCawley 1996).

At the time of Spanish contact, the basis of Tongva religious life was the *Chinigchinich* cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925). The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the Southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices (McCawley 1996).

Deceased Tongva were either buried or cremated, with inhumation being more common on the Channel Islands and the neighboring mainland coast and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966), as well as scattered among broken ground stone implements (Cleland, et al. 2007). Archaeological data such as this correspond with ethnographic descriptions of an elaborate mourning ceremony that included a wide variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased (Dakin 1978; Johnston 1962; McCawley 1996). At the behest of the Spanish missionaries, cremation essentially ceased during the post-Contact period (McCawley 1996).

4.1.2.2 Native American Communities in Los Angeles

Ethnohistoric data indicate that the Gabrielino ethnographic village of *Yaanga* (*Yang-na*, *Yabit*, or other spellings) was located in or near the original Pueblo of Los Angeles. In 1852, Hugo Reid indicated that *Yang-na* and Los Angeles were one and the same (Dakin 1978). Gabrielino informant José Zalvidea told ethnographer J. P. Harrington that *Yaanga* “is the old name of the site of the Los Angeles plaza” and the name means “it is alkali, like the earth is salty” (McCawley 1996).

Alternative names associated with the community include *Iyakha* (meaning “poison oak” in Luiseño) and *Wenot* (meaning “river” in Gabrielino). *Yaanga* was abandoned prior to 1836, but was succeeded by a series of Native American settlements in the same area. The community of *Geveronga*, which contributed 31 neophytes to the San Gabriel Mission between 1788 and 1809, may have been located nearby (McCawley 1996).

The precise location of Contact-era (late seventeenth century) Native American communities within downtown Los Angeles, including *Yaanga*, *Geveronga*, and related settlements, is unclear. Historical records place *Yaanga* in the vicinity of the pueblo plaza, which was located less than 0.25 mile north northwest of the project area, although historians and archaeologists have presented multiple possible village locations within this general area (Applied Earthworks 1999).

The archaeological evidence for these settlements is not clear-cut. Early Spanish period Native American deposits have been identified in several locations, the most significant being the cemetery next to Union Station. It is unclear whether this cemetery was adjacent to, affiliated with, or precisely contemporary with *Yaanga* (Applied Earthworks 1999).

The preponderance of available evidence indicates that early historic Native American communities in the area were situated near the Los Angeles River, which is currently located approximately 0.5 mile east of the project. Consequently, the project has the potential to encounter archaeological deposits associated with these communities.

4.1.3 Historic Overview

The post-Contact history of California is divided into three periods: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is briefly described below.

4.1.3.1 Spanish Period (1769–1822)

The first Europeans to observe what became southern California were members of the 1542–1543 expedition of Juan Rodriguez Cabrillo. Cabrillo noted the numerous campfires of the Gabrielino and thus named the area the Bay of Smokes. Cabrillo and other early explorers sailed along the coast and made limited expeditions into Alta (upper) California between 1529 and 1769. Although Spanish, Russian, and British explorers briefly visited Alta California during this nearly 250-year span, they did not establish permanent settlements (Starr 2007).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at San Diego in 1769. Mission San Diego de Alcalá was the first of 21 missions built by the Spanish between 1769 and 1823. Portolá continued north, passing through the project area and reaching San Francisco Bay on October 31, 1769.

On September 4, 1781, 12 years after the Portolá's initial visit, a dozen families from Sonora, Mexico founded *El Pueblo de la Reina de los Angeles* under the specific directions of Governor Felipe de Neve (Robinson 1979:238). The site chosen for the new pueblo was elevated on a broad terrace one-half mile west of the river (Gumprecht 1999). As a planned pueblo (one of only three in California), four square leagues (about 28 square miles) of land were set aside for the settlement (Robinson 1979).

The area's rich, well-watered soils created an ideal locale for a town meant to supply livestock and feed to the presidios of San Diego and Santa Barbara, and to serve as a home for retired Spanish soldiers. The soldiers were given vast tracts of land to start farms and ranches.

To expand their herds of cattle, colonists enlisted the labor of the surrounding Indian population (Engelhardt 1927b). By 1786, the flourishing pueblo attained self-sufficiency, and funding by the Spanish government ceased. Fed by a steady supply of water and an

expanding irrigation system, agriculture and ranching grew, and by the early 1800s the pueblo produced 47 different agricultural products (Gumprecht 1999).

The process of converting the local Native American population to Christianity through baptism and relocation to mission grounds began in this region by the Franciscan padres at the San Gabriel Mission, which was established in 1771 (Engelhardt 1927a). The San Fernando Mission was founded 26 years later, its location chosen as a stopping point between the San Gabriel and San Buenaventura missions (Engelhardt 1927b).

The majority of the Native Americans from the Los Angeles Basin were persuaded to settle in the vicinity of the two missions. These included the Eastern Gabrielino of the plains as far south as the Santa Ana River and west to the Los Angeles River. The padres also proselytized the Serrano of the San Gabriel and San Bernardino Mountains, the Vanyume Serrano of the Mojave Desert, many of the western Cahuilla in the Coachella and San Jacinto Valley, some Luiseño of the San Jacinto Valley, and Western Gabrielino of the plains west of the Los Angeles River, San Fernando Valley, and the southern Channel Islands.

The missions were charged with administering to the Indians within their areas. Although mission life gave the Indians skills needed to survive in their rapidly changing world, the close quarters and regular contact with Europeans transmitted diseases for which they had no immunity, decimating their populations (McCawley 1996).

4.1.3.2 Mexican Period (1822–1848)

After the end of the Mexican Revolution against the Spanish crown (1810–1821), all Spanish holdings in North America (including both Alta and Baja California) became part of the new Mexican republic. Alta California became a state in 1821, and Los Angeles selected its first city council the following year.

Independence and removal of economic restrictions attracted settlers to Los Angeles, and the town slowly grew in size, expanding to the south and west. The population nearly doubled during this period, rising from 650 to 1,250 between 1822 and 1845 (Weber 1992). Until 1832, Los Angeles was essentially a military post, with all able-bodied males listed on the muster rolls and required to perform guard duty and field duty whenever circumstances required (Los Angeles County 1963). The Mexican Congress elevated Los Angeles from pueblo to city status in 1835, declaring it the new state capital (Robinson 1979).

Under Mexican rule, the authority of the California missions gradually declined, culminating with their secularization in 1834. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its neophytes, the majority of these holdings quickly fell into non-Indian hands. Mission buildings were abandoned and quickly fell into decay.

If mission life was difficult for Native Americans, secularization was worse. After two generations of dependence upon the missions, they were suddenly disenfranchised. After secularization, “nearly all of the Gabrielinos went north while those of San Diego, San Luis and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required” (Dakin 1978).

Former mission lands were quickly divided and granted to private citizens for use as agricultural and pastoral land. Most of the land grants to Mexican citizens in California (Californios) were located inland, a policy intended to increase the population away from the coastal areas where the Spanish settlements were concentrated (Dakin 1978).

After years of surreptitious commerce, the first party of American immigrants arrived in Los Angeles in 1841, including William Workman and John Rowland, who soon became influential landowners. As the possibility of a takeover of California by the United States loomed large in the 1840s, the Mexican government increased the number of land grants in an effort to keep the land in Mexican hands (Wilkman and Wilkman 2006). Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state’s lands into private ownership for the first time (Gumprecht 1999).

4.1.3.3 American Period (1848–Present)

The United States took control of California in 1846, seizing Monterey, San Francisco, San Diego, and Los Angeles with little resistance. Los Angeles soon slipped from American control, however, and needed to be retaken in 1847.

Approximately 600 U.S. sailors, marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of 1847 to challenge the California resistance, which was led by General Jose Maria Flores. The American party scored a decisive victory over the Californios in the Battle of the Rio San Gabriel and at the Battle of La Mesa the following day, effectively ending the war and opening the door for increased American immigration (Harlow 1992).

Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the conquered territory, including California, Nevada, Utah, Arizona, New Mexico, Wyoming, and parts of Colorado. This represented nearly half of Mexico’s pre-1846 holdings. California joined the Union in 1850 as the 31st state (Wilkman and Wilkman 2006).

Although the discovery of gold in northern California in 1848 gave rise to the California gold rush, Los Angeles was where the first California gold was found. Francisco López had found several gold nuggets clinging to wild onion roots near the San Fernando Mission in 1842 (Guinn 1977; Workman 1935). The big strike at Sutter’s Creek seven years later led to an

enormous influx of American citizens in the 1850s and 1860s, and these “forty-niners” rapidly displaced the old rancho families.

One year after discovering gold, nearly 90,000 people journeyed to the California gold fields. With most miners drawn to central California by its well-known strikes, Los Angeles attracted people who were largely peripheral to the gold rush, including a healthy contingent of gamblers (Robinson 1979).

Surrounded by miles of ranchos, Los Angeles was the center of a vibrant cattle industry throughout the nineteenth century. The city served as a trading hub for southern California’s “cow counties,” and at mid-century the plaza was lined with the shops and town homes of ranch owners (Robinson 1979). In 1835, Los Angeles County had approximately 75,000 to 100,000 cattle, 1,700 horses, and 13,000 sheep, and produced about 4,000 bushels of cereal and legumes each year (Los Angeles County 1963).

Agricultural interests were gradually supplanted by more urban industries, with about a third of Los Angeles residents supporting themselves with non-agricultural pursuits by 1836 (Weber 1992). By 1853, the population of the state exceeded 300,000. Thousands of settlers and immigrants continued to pour into the state, particularly after completion of the transcontinental railroad in 1869.

When the Southern Pacific Railroad extended its line from San Francisco to Los Angeles in 1876, it signaled the beginning of Los Angeles’ first major growth spurt. Newcomers poured into the city, nearly doubling the population between 1870 and 1880.

Completion of the second transcontinental line, the Santa Fe, took place in 1886, causing a price war that drove fares to an unprecedented low, including a promotional one-way ticket from Kansas City that sold for one dollar. More settlers continued to head west and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities.

The large ranchos that surrounded the City were each annexed, subdivided, and developed in turn. Los Angeles’ population more than quadrupled in a decade, from 11,183 in 1880 to 50,395 by 1890 (Meyer 1981; Robinson 1979; Wilkman and Wilkman 2006). During the first three decades of the twentieth century, more than 2 million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area (Gumprecht 1999).

4.1.3.4 City of Los Angeles

The Spanish Governor of California, Felipe de Neve, recognized the need to establish a pueblo north of the Mission San Gabriel to help supply Spain’s military Presidios in California as well as maintain Spain’s control over the region. On September 4, 1781, 22 settlers from Mexico

accompanied by the governor, soldiers, mission priests, and several Native Americans arrived at the site alongside the Los Angeles River, which was officially declared *El Pueblo de la Reina de los Angeles*, or the Town of the Queen of the Angels (Ríos-Bustamante 1992).

Less than one month after the pueblo's founding, Los Angeles residents began constructing an extensive water management system. They diverted water from the river (near the present N. Broadway bridge) into a ditch named the *Zanja Madre* (mother ditch), which in turn fed numerous smaller *zanjas*. The city's residents used this water for ranching and agriculture, as well as domestic purposes such as drinking, bathing, and clothes washing (Newmark 1977). The Los Angeles *zanja* system was expanded and improved in subsequent decades and remained in use until the early 1900s.

Many *zanja* segments were converted into masonry-lined canals, iron or cement pipes, or brick-lined, subsurface conduits (Costello and Wilcoxon 1978; Gumprecht 1999; Slawson 2006). The early construction, extensive footprint, and longevity of this water system are evidence of its great importance to the city.

The Pueblo of Los Angeles grew in population during the Mexican period, but retained an emphasis on ranching as the primary economic activity. Mexican governors granted numerous *ranchos* during this period, and the few granted during the Spanish period continued to operate or were broken up into smaller *ranchos*.

On May 23, 1835, Los Angeles was officially declared a city by Mexican national decree (Bancroft 1886). During the Mexican period, Anglo-Americans such as Hugo Reid and Don Juan Forster were assimilated into Los Angeles's citizenry and culture (Dakin 1978).

On April 4, 1850, only two years after the Mexican American War and five months prior to California receiving statehood, the City of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period; the transition of many former *ranchos* lands to agriculture and development of citriculture in the late 1800s further strengthened this status (Caughey and Caughey 1977).

These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the real estate boom of the 1880s in Los Angeles (Caughey and Caughey 1977; Dumke 1944). The boom's fiscal impact can be observed through the city's tax assessments: in 1886, Los Angeles was assessed \$18 million; in 1889, the total was \$46 million (Dumke 1944). Since the real estate boom largely occurred in surrounding areas, Los Angeles, as the commercial center, reaped substantial benefits from the explosive growth.

The City of Los Angeles recognized the need for water to sustain the growing population in the late 1800s, and Irish immigrant William Mulholland personified the city's efforts to establish a plentiful and stable water supply (Dumke 1944; Nadeau 1997). The city purchased

large tracts of land in the Owens Valley, and Mulholland planned and directed the construction of the 240-mile aqueduct that brought the valley's water to the city by 1913 (Nadeau 1997).

Los Angeles continued to grow in the twentieth century in part due to the discovery of oil in the area and its strategic location as a wartime port. The military presence led to the aviation and eventually aerospace industries having a large presence in the city and region.

Mines Field, which would become Los Angeles International Airport (LAX), was established in 1928. The complexion of this multicultural city continued to change; however, the process was frequently painful for new and often unwelcome ethnic groups (Garcia et al. 2004).

Hollywood became the entertainment capital of the world through the presence of film and television industries and continues to tenuously maintain that position. With nearly four million residents, Los Angeles is the second largest city in the U.S. (by population) and remains a city with worldwide influence, while continuing to struggle with its population's growth and needs.

4.2 CHRIS Literature Search

A cultural resources records search for the Regional Connector Transit Corridor project was performed by SWCA at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) on February 10, 2009 (Appendix A). Subsequent requests for information were made in March, April, and May 2009. The records search included a review of the available documents and site records within a 0.25-mile radius of the project area. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places – Listed Properties (2006, updated to present)
- California Register of Historical Resources (2006, and review of minutes from State Historic Resources Commission meetings thereafter)
- California Inventory of Historical Resources (1976)
- California State Historical Landmarks (1996 and updates)
- California Points of Historical Interest (1992 and updates)
- Office of Historic Preservation Historic Property Directory and Determinations of Eligibility (2008)

- Survey of Surveys: A Summary of California’s Historical and Architectural Resource Surveys (1986)
- Five Views: An Ethnic Sites Survey for California (1988)

The records search focused on obtaining information about private and public lands located within a 0.25-mile search radius of the project alignment.

4.2.1 Previous Studies in 0.25-mile Radius of APE

Downtown Los Angeles has been the subject of a large number of cultural resources studies in the last three decades. The SCCIC records search identified 143 prior cultural resources studies within a 0.25-mile radius of the direct APE. Of these, 23 studies were located within the direct APE and 12 were adjacent to the direct APE (Table 4-1).

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA447	Preliminary Evaluation of Cultural Resources Located Along a Series of Proposed Urban Mass Transit System Alignment Alternatives in the City of Los Angeles, California	Singer, C.	unknown	within
LA483	Archaeological Resources Survey for the Proposed Downtown People Mover Project	Greenwood, R.	1978	within
LA982	Archaeological Resource Survey and Impact Assessment of a Proposed Parking Lot, Los Angeles, California	Bove, F.	1977	within
LA1578	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	Westec Services, Inc.	1983	within
LA1770	Report of Archaeological Reconnaissance Survey of: ESA Project 7217B, City of Los Angeles, Los Angeles County, CA	Salls, R.	1989	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA3103	Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1	Greenwood, R.	1993	within
LA3668	St. Vibiana's Cathedral Los Angeles, California	Dillon, B.	1997	within
LA3813	An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California	Peak & Associates	1992	within
LA4215	Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, Near West Third Street and South Grand Avenue, City and County of Los Angeles	Conkling, S.	1998	adjacent
LA4263	General Services Administration Federal Center: Archaeological Assessment Report Phase	Padon, B.	1986	within
LA4448	Section 106 Documentation for the Metro Rail Red Line East Extension in the City and County of Los Angeles, California	Anonymous	1994	within
LA4742	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-01, County of Los Angeles, California	Lapin, P.	1999	within
LA4836	Phase I Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project	Science Applications International Corporation	2000	adjacent
LA5093	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 679-11, County of Los Angeles, CA	Duke, C.	1999	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA5098	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA-226-01, County of Los Angeles, CA	Duke, C.	1999	adjacent
LA5200	Assessment of Archaeological and Paleontological Sensitivity on the Proposed California Department of Transportation District 7 Headquarters Replacement Project	Warren, K. <i>et al.</i>	2001	within
LA5447	Archaeological Monitoring Report: 911 Dispatch Center First and Los Angeles Streets	Schmidt, J.	1999	within
LA5448	Cultural Resource Assessment for AT&T Wireless Services Facility Number R299.1, County of Los Angeles	Duke, C.	2000	within
LA5451	The VA Outpatient Clinic Project	Padon, B.	unknown	within
LA6351	Nextel Communications CA-7837 A/Onizuka 332 2 nd Street, Los Angeles, California	Earthtouch, LLC	2001	within
LA6375	Highway Project to Close Vignes Street On-Ramp and the Hewitt Street on/off ramps to US 101 and to construct new on/off ramps to the south at Garey Street in the City of Los Angeles	Slyvia, B.	2002	adjacent
LA6396	An Archaeological Assessment of the Proposed Verizon Wireless Grand Avenue, East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5 th Street, Los Angeles County, California 90071	Tetra Tech, Inc.	2001	adjacent

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA6424	Cultural Resource Assessment Cingular Wireless Facility No. SM 140-01, Los Angeles County, California	Duke, C.	2002	adjacent
LA6435	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA679-11, County of Los Angeles, California	Duke, C.	1999	adjacent
LA6463	A Section 106 Historic Preservation Review of the Proposed Verizon Wireless Grand Avenue East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5 th Street, Los Angeles, CA 90071	Tetra Tech, Inc.	2002	adjacent
LA7178	Report on Cultural Resources Mitigation and Monitoring Activities Fluor/Level (3) Los Angeles Local Loops	Unknown	2001	within
LA7527	Caltrans Statewide Historic Bridge Inventory Update Tunnels	Feldman, J. <i>et al.</i>	2006	within
LA7533	Archaeological/Paleontological Monitoring at 3 rd Street and San Pedro	McKenna, J.	2004	adjacent
LA7547	Phase I Archaeological Survey/Class III Inventory for the Hall of Justice Study Area, Los Angeles, Los Angeles County, California	Whitely, D.	2003	adjacent
LA 7558	Archaeological Monitoring Report Alameda Street Improvements	Hale, A. and Scott, S.	2004	within
LA7733	Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate LSA0739 (811 Wilshire), 811 Wilshire Boulevard, Los Angeles, Los Angeles County, California	Bonner, W.	2006	within

Table 4-1. Prior Cultural Resources Studies Within or Adjacent to the Direct APE

SCCIC Report No.	Study	Author	Year	Proximity to Direct APE
LA8515	Historical Evaluation Report for the Downtown Bus Maintenance and Inspection Facility, Los Angeles, California	Wuellner, M.	2005	adjacent
LA8516	3 rd and San Pedro Archaeological Monitoring (Addendum)	McKenna, J.	2004	adjacent
LA8541	Cultural Resource Records Search Results and Site Visit for Cingular Telecommunications Facility Candidate LA-057-01, (EL-005-01), DWP Equipment Yard, 433 East Temple Avenue, Los Angeles, Los Angeles County, California	Bonner, W.	2005	within
LA8910	Archaeological Monitoring Report Mangrove Parking Lot Project, Los Angeles	Messick, P. and Hale, A.	2007	within

4.2.2 Previously Recorded Archaeological Resources within 0.25-mile Radius of Project APE

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

Section 4.2.2, Table 4.2, and Table 4-3 removed to protect confidential locations of archeological resources.

4.2.3 Historic Maps

A review of historic maps, including Sanborn Fire Insurance Maps, indicate a long and varied occupation history within the project Direct APE. Generally speaking, Los Angeles expanded from the original plaza (near today's N. Los Angeles and W. Arcadia Streets) to the west and south, and subsequently to the north and east. In terms of the current project, the city's development proceeded from the northeast to the southwest ends of the direct APE.

Sanborn maps from 1888 show nearly every parcel in the direct APE developed with commercial or residential buildings. The heaviest development is shown in the part of the direct APE between Alameda Street and Hill Street. Numerous commercial buildings such as hotels, banks, restaurants, and government buildings were located within this part of the direct APE. The western and southern parts of the direct APE, primarily along 2nd Street between Hill and Flower Streets and on Flower Street between 2nd and 7th Streets, were less heavily developed. Parcels within this part of the direct APE contained one or two buildings, primarily private residences, on large lots or were not developed at all. Street alignments for Flower and Temple Streets differ from their current alignments. The 1888 Sanborn shows Flower Street extending further north to Temple Street and Temple Street ending at Main Street.

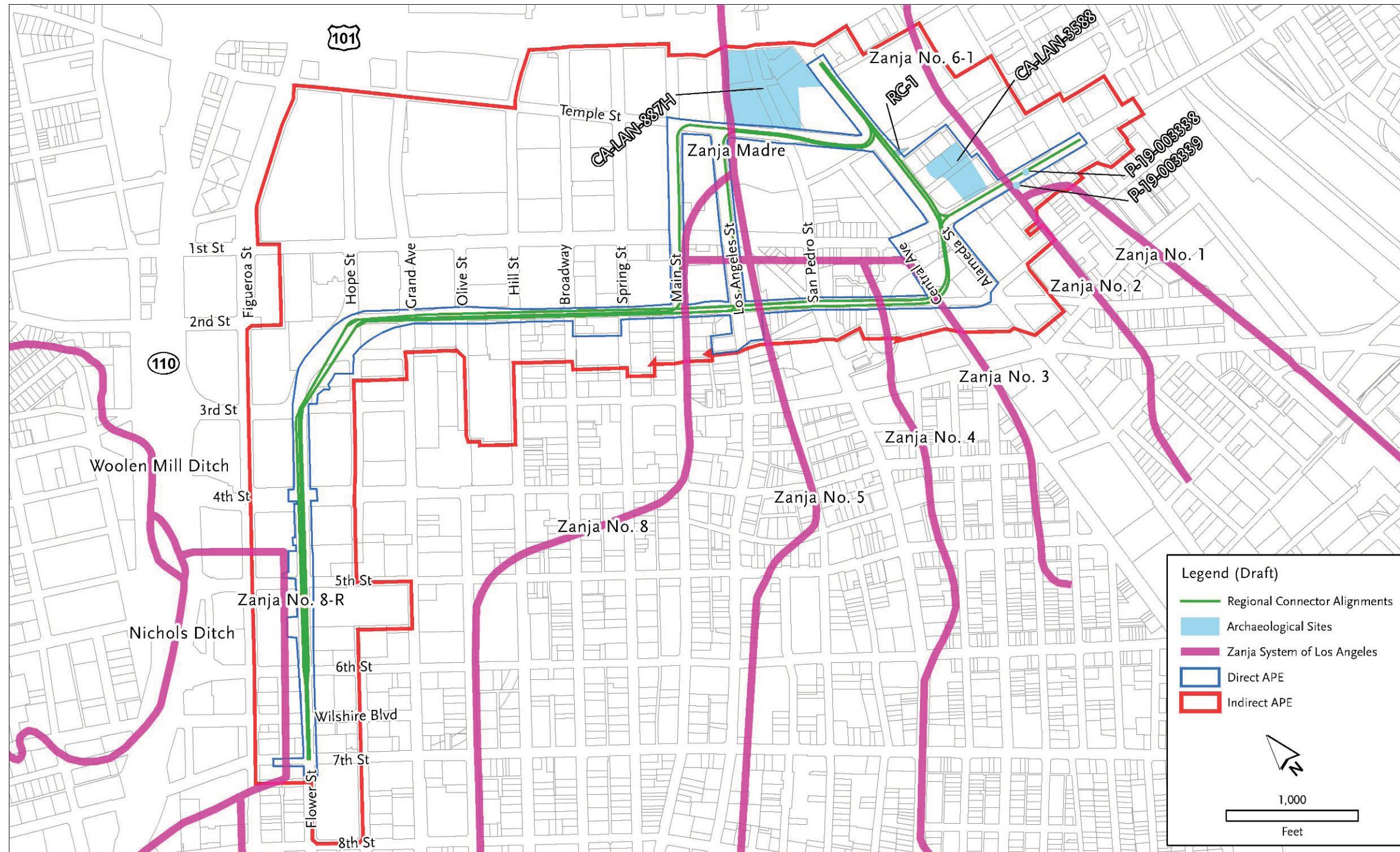
Sanborn Maps from 1951 show the direct APE between Alameda and Hill Streets continuing as an area dense with commercial and government buildings. The parts of the direct APE along 2nd Street between Hill and Flower Streets and on Flower Street between 2nd and 7th Streets are shown as more developed but continue to be primarily a residential area containing numerous apartment buildings and private residences.

A review of historic maps indicates that the route of the zanjas, Los Angeles' original domestic and irrigation water system, cross the direct APE in numerous locations. The original water system consisted of the main ditch, the Zanja Madre, and several branch ditches that flowed south and southwest into the city and beyond. A ca. 1880 map of the zanja system (reproduced in Gumprecht 1999) indicates that the route of the Zanja Madre and Zanjas 3, 4, 5, and 8 cross the project area in the northeastern part of the project direct APE. In addition, route of the West Branch Zanja 8R crosses the southwestern part of the direct APE.

Figure 4-1 depicts the approximate layout of the Los Angeles zanja system in 1880 in relation to the direct APE. This overlay is a digitization of Gumprecht's (1999:72) map of the system, which is based on a tracing of H.J. Stevenson's 1876 map of Los Angeles. The digitization uses the latest georeferencing tools (ArcGIS 9.3) to overlay Gumprecht's map on current (2009) County of Los Angeles parcel data. However, street alignments have changed, often dramatically, and the zanjas have been altered (moved, changed, or destroyed) to an unknown extent over the last 130 years. The margin of error inherent to Gumprecht's and Stevenson's maps is also unknown. Finally, these data have not been verified archaeologically within the direct APE. Consequently, Figure 4-1 should be thought of as an informed approximation of the location of the zanjas, but not as an "as built" plan of their current alignments.

4.3 Sacred Lands Files Search

SWCA initiated a Sacred Lands File Search for the project on February 3, 2009. SWCA contacted the California Native American Heritage Commission (NAHC) by letter to request a review of the Sacred Lands File. The NAHC responded on February 9, 2009, and stated that there are Native American cultural resources present in the project area and provided a list of Native American groups and individual contacts for Los Angeles County.



Source: Gumprecht 1999

Figure 4-1. Archaeological Resources within Direct APE including the Los Angeles Zanja System (Approximate Alignment)

4.4 Archaeological Survey

4.4.1 Survey Methods

SWCA Archaeologists John Dietler and Gini Austerman conducted an intensive-level archaeological survey of the original 1.8-mile-long direct APE on March 16, 2009. SWCA Archaeologist Robert Ramirez conducted an additional survey on April 7, 2009, to account for revisions in the project direct APE. Dr. Dietler conducted another survey of the additional 0.1 mile length of alignment where the Fully Underground LRT Alternatives differ from the previously analyzed Underground Emphasis LRT Alternative on January 7, 2010 of the portions of the direct APE associated with the Fully Underground alternatives. The archaeologists conducted pedestrian surveys using parallel transects spaced no more than 10 m (32.8 feet) apart. For most of the direct APE, this amounted to walking along paved sidewalks, either singly or in pairs. The archaeologists paid special attention to areas with exposed soil, which consisted primarily of planters and other landscaped areas.

SWCA archaeologists inspected the direct APE for the presence of archaeological deposits where ground visibility and access was possible. They took digital photographs of each street within the direct APE. All field notes, digital photographs, and records related to the current study are on file at SWCA's South Pasadena office. At the conclusion of the project, these materials will be transitioned to Metro for archiving.

4.4.2 Survey Results

Ground visibility was extremely poor (less than 5 percent) throughout most of the direct APE due to the presence of buildings, pavement, and/or landscaping.

Three areas of the direct APE were inaccessible due to the presence of construction site fences. These included sidewalks in the following locations:

- Northeast corner of parcel at 2nd Street and Spring Street (Assessor's Parcel Number [APN] 5149008032; see Figure E-5 in Appendix E)
- Parcel at 2nd Street and Main Street (APN 5149001902; see Figure E-5 in Appendix E)
- Parcel at Alameda Street between Temple Street and Ducommun Street (APN 5173006900; see Figure E-7 in Appendix E)

Numerous planters and unpaved areas that afforded fair to good (20–70 percent) visibility are present within the APE. These areas contained modern trash and the occasional un-diagnostic brick fragment. Planters and unpaved areas are present at the following locations:

- Parcels at Flower Street between 4th Street and 3rd Street (APN 5149001902; see Figure E-3 in Appendix E)

- Parcels and medians along W. General Thad Kosciuszko Way and Flower Street between 3rd Street and S. Grand Street (APNs 5151014033, 5151004911, 5151004912, 5151004913; see Figures E-3 through E-5 in Appendix E)
- Parcel at Los Angeles Street south of 2nd Street (APN 5161026035; see Figure E-6 in Appendix E)
- Parcels on 2nd Street between Central Avenue and Alameda Street (APNs 5161018007, 5161018011; see Figure E-6 in Appendix E)
- Parcels on Alameda Street between 2nd Street and 1st Street (APNs 5161018011, 5161018020, 5163001088; see Figure E-6 in Appendix E)
- Parcels at Los Angeles Street and Temple Street (APNs 5161013904, 5161014901; see Figure E-7 in Appendix E)
- Parcels on 1st Street between Alameda Street and Garey Street (APNs 5173011901, 5173011901; see Figure E-8 in Appendix E)

SWCA archaeologists encountered a single archaeological site within the direct APE, RC-1. This resource is described below. The five previously recorded archaeological sites (CA-LAN-887H, CA-LAN-3588, P-19-003338, P-19-003339, and P-19-003097) within the direct APE were encountered during ground-disturbing construction activities associated with earlier projects. They were not visible during this pedestrian survey.

Portions of Section 4.4.2 removed to protect confidential locations of archeological resources.

Portions of Section 4.4.2 removed to protect confidential locations of archeological resources.

Section 4.4.3 removed to protect confidential locations of archeological resources.

Section 4.4.3 removed to protect confidential locations of archeological resources.

Section 4.4.3 removed to protect confidential locations of archeological resources.

5.0 IMPACTS

The majority of the direct APE (see Figures E-1 through E-9, Appendix E) should be considered highly sensitive for the presence of historical resources, including both prehistoric and historic archaeological sites. Five previously recorded archaeological sites, all of historic age, are located within the Direct APE.

Sanborn maps indicate that most parcels within the direct APE were occupied by commercial or residential buildings by 1888. Additional historic maps indicate that the routes of seven zanjas (Zanja Madre and Zanjas 8-R, 8, 5, 4, 3, and 6-1) cross parts of the direct APE. Archaeological studies that have been undertaken in the project vicinity support the map data: subsurface archaeological deposits, including zanja segments, are commonly encountered during construction projects in downtown Los Angeles.

For the proposed project's cumulative impact analysis, the potentially affected cultural resources under consideration include those located within the indirect APE, which is generally bounded by US 101 to the north, Center Street to the east, 3rd Street to the south, and Figueroa Street to the west. The indirect APE, as well as adjacent areas in and around downtown Los Angeles, includes some of the oldest sections of the City of Los Angeles. In these areas there are numerous examples of historic properties and historical resources (including archaeological resources) that are significant on local, state, and/or national levels.

In support of this analysis, lists have been compiled of major projects that are anticipated to be completed within the general project area prior to the start of construction (2009 to 2014) and during the projected construction period (2014 to 2018). These include 20 major renovation projects, 66 new construction projects, and 14 large transportation projects. No major utility projects were identified.

Direct cumulative impacts to archaeological resources generally occur when the destruction or substantial modification of resources or their contexts result in the degradation of resource significance. Indirect cumulative impacts generally occur when the context of a resource is destroyed or modified. Projects that do not include substantial ground disturbance are unlikely to cause direct cumulative effects to archaeological resources. The primary cumulative impact concern in this evaluation is the systematic demolition or alteration of archaeological resources.

5.1 No Build Alternative

5.1.1 Construction Impacts

The No Build Alternative, in which the project site would remain in its existing condition, would not result in construction impacts to archaeological resources because no ground disturbance would occur.

5.1.2 Operational Impacts

The No Build Alternative would not result in operational impacts to archaeological resources.

5.1.3 Cumulative and Indirect Impacts

The No Build Alternative would not result in impacts to archaeological resources. Therefore, the No Build Alternative would not contribute to a cumulative impact on these resources.

5.2 Transportation System Management (TSM) Alternative

5.2.1 Construction Impacts

The TSM Alternative has the potential to alter, remove, or destroy archaeological resources within the APE during ground disturbance related to construction of bus stops and shelters. These facilities will be constructed every two to three blocks, but their precise locations have not yet been established.

The TSM Alternative crosses the Los Angeles zanja system, including the Zanja Madre (CA-LAN-887H) and the approximate alignments of Zanjas 3, 4, 5, 8, and 8-R. These alignments have not been confirmed archaeologically within the direct APE, but zanja segments have been observed in the project vicinity as shallow as 0.45 m (1.5 feet) below current grade (Zanja 6-1; P-19-003352). The potential to affect previously unrecorded archaeological resources elsewhere in the direct APE is high. Such damage to archaeological resources would represent a significant effect that could be mitigated. Implementation of Mitigation Measures (MM) A-1 and MM-A-2 would reduce this potential effect to less-than-significant level.

5.2.2 Operational Impacts

The TSM Alternative would not result in operational impacts to archaeological resources.

5.2.3 Cumulative and Indirect Impacts

Construction of the TSM Alternative, as stated above, has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources and the Los Angeles zanja system. Implementation of MM-A-1 (see Section 6.1) would reduce direct impacts to previously unidentified archaeological resources to less-than-significant level. Therefore, the TSM Alternative would not contribute to a cumulative impact on these resources.

The zanja system is a large, linear resource that winds throughout downtown Los Angeles and may be found immediately below current street grade. It has been affected by at least five previous construction projects and is likely to be affected by numerous future projects.

The system as a whole has not been documented by historians, archaeologists, or architectural historians in the modern era because it has been obscured by pavement and buildings for more than a century. Consequently, the zanja system is particularly vulnerable to cumulative impacts that would not be adequately addressed with standard archaeological mitigation measures. By providing documentation and interpretation of the zanja system on a system-wide scale, implementing MM-A-2 (see Section 6.1) would reduce both direct and cumulative impacts to this resource to less-than-significant level.

5.3 At-grade Emphasis Light Rail Transit (LRT) Alternative

5.3.1 Construction Impacts

The At-Grade Emphasis LRT Alternative has the potential to alter, remove, or destroy archaeological resources within the APE. Site RC-1, a historic brick alignment (see Section 4.4.2), may be affected during ground disturbance from construction of a proposed pedestrian bridge at the intersection of Temple and Alameda Streets.

Site RC-1 appears to be not eligible for National Register or California Register listing. However, previously unrecorded parts of the site that retain substantial integrity may be present. This alternative also has the potential to affect previously unrecorded archaeological resources during ground disturbance from constructing new underground tunnel segments on Flower Street between 7th Street and Hope Street; new stations proposed at Main/1st Streets, Los Angeles/1st Streets, 2nd/Hope Streets, and Flower/6th/5th Streets; and an automobile underpass and pedestrian overpass on Alameda Street at Temple Street. Such damage to archaeological resources would represent a significant effect that could be mitigated. Implementing MM-A-1 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.3.2 Operational Impacts

The At-Grade Emphasis LRT Alternative would not result in operational impacts to archaeological resources.

5.3.3 Cumulative and Indirect Impacts

Construction of the At-Grade Emphasis LRT Alternative has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources and previously undiscovered portions of site RC-1. However, implementing MM-A-1 would reduce this effect/impact to a less-than-significant level. Therefore, this alternative would not contribute to a cumulative impact on these resources.

5.4 Underground Emphasis LRT Alternative

5.4.1 Construction Impacts

The Underground Emphasis LRT Alternative involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations on 2nd Street (either at Broadway or at Los Angeles Street), 2nd/Hope Street, and Flower/5th/4th Streets; an automobile underpass on Alameda Street between 2nd and Temple Streets; and a potential pedestrian bridge at the intersection of Alameda and 1st Streets.

Potentially affected resources include site CA-LAN-3588 and the Los Angeles zanja system (specifically Zanjas 3, 4, 5, and 8; see Figure 4-1). Although the precise location and local integrity of the zanjas have not been established, the project's 2nd Street alignment likely crosses the system multiple times.

Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated. Construction of new stations would almost certainly affect any extant archaeological resources within their footprints. Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects to shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.4.2 Operational Impacts

The Underground Emphasis LRT Alternative would not result in operational impacts to archaeological resources.

5.4.3 Cumulative and Indirect Impacts

Construction of the Underground Emphasis LRT Alternative has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and site CA-LAN-3588. Implementing MM-A-1 would reduce potential direct impacts to previously unidentified archaeological resources to a less-than-significant level. Therefore, the Underground Emphasis LRT Alternative would not contribute to a cumulative impact on unidentified archaeological resources. Implementing MM-A-2 would reduce both direct and cumulative potential impacts to the Los Angeles zanja system to a less-than-significant level.

5.5 Fully Underground LRT Alternative- Little Tokyo Variation 1

5.5.1 Construction Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 1 involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations at 2nd Street/Broadway, 2nd/Hope Street, Flower/5th/4th Streets, and 2nd/Central Avenue; and portals at 1st /Hewitt Streets and Alameda/Temple Streets.

Potentially affected resources include sites CA-LAN-3588, P-19-003338, and P-19-003339 and the Los Angeles zanja system (specifically Zanjias 3, 4, 5, and 8; see Figure 4-1). Although the precise location and local integrity of the zanjias have also not been established, the project's 2nd Street alignment likely crosses the system multiple times. Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated.

Construction of new stations would almost certainly affect any extant archaeological resources within their footprints. Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects on shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.5.2 Operational Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 1 would not result in operational impacts to archaeological resources.

5.5.3 Cumulative and Indirect Impacts

Construction of the Fully Underground LRT Alternative-Little Tokyo Variation 1 has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and sites CA-LAN-3588, P-19-003338, and P-19-003339. Implementing MM-A-1 would reduce potential direct impacts to previously unidentified archaeological resources to a less-than-significant level. Therefore, the Fully Underground LRT Alternative-Little Tokyo Variation 1 would not contribute to a cumulative impact on unidentified archaeological resources. Implementing MM-A-2 would reduce both direct and cumulative potential impacts to the Los Angeles zanja system to a less-than-significant level.

5.6 Fully Underground LRT Alternative- Little Tokyo Variation 2

5.6.1 Construction Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 2 involves substantial ground disturbance, and therefore has the potential to alter, remove, or destroy archaeological resources within the APE. It has the potential to affect archaeological resources during ground disturbance from constructing a new underground tunnel along its entire route; underground stations at 2nd Street/Broadway, 2nd/Hope Street, Flower/5th/4th Streets, and 2nd/Central Avenue; and portals at 1st /Hewitt Streets, 1st/Garey Streets, and Alameda/Temple Streets.

Potentially affected resources include sites CA-LAN-3588, P-19-003338, and P-19-003339 and the Los Angeles zanja system (specifically Zanjias 3, 4, 5, 8, and 6-1; see Figure 4-1). Although the precise location and local integrity of the zanjias have not been established, the project's 2nd Street alignment likely crosses the system multiple times.

Archaeological remains associated with these sites may extend into the project area and be subject to direct alteration. This would result in a significant effect that could be mitigated. Construction of new stations would almost certainly affect any extant archaeological resources within their footprints.

Construction of new tunnel segments through deep tunneling, as opposed to cut-and-cover techniques, could avoid effects on shallow archaeological resources, although the maximum depth of these resources and minimum depth of construction would both need to be established prior to reaching this conclusion. Implementing MM-A-1 and MM-A-2 (see Section 6.1) would reduce this effect to a less-than-significant level.

5.6.2 Operational Impacts

The Fully Underground LRT Alternative-Little Tokyo Variation 2 would not result in operational impacts to archaeological resources.

5.6.3 Cumulative and Indirect Impacts

Construction of the Fully Underground LRT Alternative-Little Tokyo Variation 2 has the potential to directly affect archaeological resources within the APE, including previously unidentified archaeological resources, the Los Angeles zanja system, and sites CA-LAN-3588, P-19-003338, and P-19-003339. Implementing MM-A-1 would reduce potential direct impacts to previously unidentified archaeological resources to a less-than-significant level. Therefore, the Fully Underground LRT Alternative-Little Tokyo Variation 2 would not contribute to a cumulative impact on unidentified archaeological resources. Implementing MM-A-2 would reduce both direct and cumulative potential impacts to the Los Angeles zanja system to a less-than-significant level.

6.0 POTENTIAL MITIGATION MEASURES

Direct impacts to archaeological resources are typically mitigated on a project-specific basis by construction monitoring, testing, and data recovery. This approach to mitigation is adequate for small archaeological sites, including many prehistoric sites and the historic sites that are commonly encountered within urban settings, such as building foundations, privies, and artifact deposits. However, it may not be adequate for large, linear resources such as water conveyance systems because most projects in established urban areas encounter and mitigate impacts only on small segments of these resources.

Even the most comprehensive investigation of a small segment of a large, linear resource may fail to provide adequate documentation and contextual information for the system as a whole. These linear resources are repeatedly affected by construction projects because of their large spatial extent, resulting in the loss of contributing segments and, ultimately, system integrity.

The successive destruction of multiple linear resource segments without adequate documentation of the broader system constitutes a significant and adverse impact to the system that could be cumulatively considerable. The Los Angeles zanja system is a large, linear resource that is vulnerable to such cumulative impacts because it is almost entirely buried beneath the City's streets. These potential impacts and corresponding mitigation measures are discussed below.

6.1 Construction Impact Mitigation Measures

Portions of Section 6.1 removed to protect confidential locations of archeological resources.

Mitigation Measure 1 (MM-A-1): Treatment of Undiscovered Archaeological Resources

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementing this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementing a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected.

If cultural resources are discovered or if previously identified resources are affected in an unexpected manner, the CRMMP would ensure that such resources receive mitigation to reduce the impact to a less-than-significant level. This plan would include, but not be limited to, the following elements:

- Worker training;
- Archaeological monitoring;
- The scientific evaluation and mitigation of archaeological discoveries;
- Native American participation, as needed;
- Appropriate treatment of human remains, if applicable; or
- Reporting of monitoring and mitigation results.

Worker Training

Prior to initiating ground-disturbing activities, a qualified archaeologist would conduct a short awareness training session for all construction workers and supervisory personnel. The session would explain the importance of and legal basis for protecting significant archaeological resources.

Each worker would also learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and the immediate contact of their supervisor and the archaeological monitor.

This worker education session could include visual representations of artifacts (prehistoric and historic) that might be found in the project vicinity, and it could take place on-site immediately prior to the start of ground disturbance. Supervisory personnel may benefit from longer training sessions, while a brief training would suffice for non-supervisory workers. The

brief (approximate 30- to 45-minute) training session may be conducted on-site by video, PowerPoint presentation, or similar media.

Archaeological Monitoring, Evaluation, and Mitigation

Due to poor surface visibility and high archaeological sensitivity of the direct APE an archaeological monitor would be present during ground-disturbing activities in archaeologically sensitive areas. This would reduce the potential level of impact to buried archaeological resources to a less-than-significant level. This work would be completed under the direction of an archaeologist (Principal Investigator) who meets the Secretary of the Interior's Standards for archaeologists. An adequate number of monitors would be present to ensure that all earth-moving activities are observed and would be on-site during all grading activities for areas to be monitored.

During the original excavation of previously undisturbed soils, the archaeological monitor(s) would be on-site at a frequency determined by the Principal Investigator. Inspection frequency may vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. Full-time monitoring is warranted within one-half block of potentially significant archaeological resources that are known or suspected to be present within the direct APE.

If potentially significant archaeological resources are exposed during ground-disturbing activities, the project manager would be notified immediately. Archaeological monitor(s) would have the authority to divert or temporarily halt ground-disturbing operations in the area of discovery to allow the resources to be evaluated. Construction activities may continue in other areas.

Evaluation of such resources is typically accomplished by a test-level excavation designed to determine the horizontal and vertical extent of the resource, and to characterize its contents. If the discovery proves to be potentially eligible for listing on the National Register or California Register, and project plans cannot be altered to avoid affecting the site, then an adverse effect would result. This adverse effect may be resolved by implementing a Memorandum of Agreement (MOA) between Metro and the State Historic Preservation Officer.

Before construction activities are allowed to resume in an affected area, artifacts would be recovered and features recorded using professional archaeological methods. The Principal Investigator operating under the direction of the MOA would determine the amount of material to be recovered for an adequate artifact sample for analysis.

All cultural material collected during the construction monitoring program would be processed using professional archaeological methods. An appropriate sample of recovered materials, selected by the Principal Investigator, would be curated at a curation facility that

meets federal standards per 36 Code of Federal Regulations [CFR] Part 79 and made available to other archaeologists and researchers for further study.

Native American Participation

If Native American cultural resources (i.e., prehistoric or ethnohistoric-period artifacts, food remains, or features associated with Native Americans) are exposed during project-related ground disturbance, Metro would contact the Gabrielino/Tongva San Gabriel Band of Mission Indians and the Tongva Ancestral Territorial Tribal Nation. Both groups have expressed interest in the project. One or both of these groups would be asked to provide the services of a trained Native American consultant to monitor ground-disturbing work in the area containing the Native American cultural resources. This monitoring would occur on an as-needed basis, and would be intended to ensure that Native American concerns are taken into account during the construction process.

Human Remains

The discovery of human remains is always a possibility during ground disturbance. An unmarked early Spanish period Native American cemetery was recently discovered less than 0.15 mile from the direct APE (Applied Earthworks 1999). Other historic period remains are known less than 0.3 mile from the direct APE as well.

The State of California Health and Safety Code Section 7050.5 addresses these findings. This code section states that when human remains are encountered, no further disturbance would occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner would be notified of the find immediately.

If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a Most Likely Descendant (MLD). The MLD shall complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts to human remains may remain significant even after mitigation.

Reporting

If no cultural resources are discovered in the course of construction monitoring, a brief letter to that effect would be prepared by the consulting archaeologist, indicating that the monitoring activities have been satisfied. If previously unidentified cultural resources are discovered in the course of construction monitoring, a report would be prepared following Archaeological Resource Management Report (OHP 1990) guidelines that documents field and analysis results and interprets the data within an appropriate research context.

Mitigation Measure 2 (MM-A-2): Treatment of Known Archaeological Resources

Destruction of a resource that is eligible for listing in the National Register or California Register would be a significant adverse effect. This effect may be resolved through by implementing an MOA between FTA, Metro, and the SHPO, as well as other interested parties.

Four archaeological sites that are either within or immediately adjacent to the direct APE are presumed eligible for listing on both the National Register and the California Register. These include the Los Angeles zanja system (the Zanja Madre, CA-LAN-887H, and numerous unrecorded numbered zanjás) and sites CA-LAN-3588, P-19-003338, and P-19-003339.

Effects to the data potential of archaeological sites can be mitigated to a less than significant level by preparing and implementing a data recovery plan under Section 106 and CEQA. The actual measures agreed upon in the MOA may vary in substance and degree, but the MOA would include a process to resolve any adverse effects upon archaeological resources within the direct APE that are eligible for listing in the National Register or California Register. The treatment of sites CA-LAN-3588, P-19-003338, and P-19-003339 may include systematic and scientific exposure, evaluation, and if necessary, archaeological data recovery.

Los Angeles Zanja System

The Los Angeles zanja system was an extensive and integrated water conveyance network that served large areas of the City for multiple generations. Generally speaking, previous construction projects in downtown Los Angeles have unexpectedly encountered and documented limited exposures of a single zanja segment, often after the segment has been damaged by construction equipment. This incomplete approach does not permit the overall zanja system to be evaluated, given the requirements that the OHP clarified in its recent letter (Toffelmier 2009).

It is likely that other projects (such as emergency utility repair) have damaged segments of the zanja system without documentation. This repeated damage (both monitored and unmonitored construction impacts) constitutes a cumulative effect that should be mitigated. Construction monitoring alone is insufficient mitigation to address this effect, particularly given the likelihood of damaging the zanjás prior to discovery during project construction process.

Inadvertent project-related damage to the zanjás may constitute an adverse effect under the Criteria of Adverse Effect, “physical destruction or damage” (36 CFR Part 800.5(a) (2) and material impairment as defined in CEQA. This action would contribute to, rather than mitigate, these cumulative effects.

Both Section 106 of the National Historic Preservation Act (as amended) and the California Environmental Quality Act require identification, documentation, and evaluation of historic

properties/historic resources in a project area (or direct APE). For a poorly mapped and buried linear resource like the zanja system, identification alone is challenging.

Rather than a costly archaeological excavation program or a remote sensing (ground-penetrating radar, etc.) survey that is unlikely to produce clear-cut results, SWCA recommends a proactive identification and documentation program that would facilitate preservation or mitigation in a cost-effective manner. This would include using additional documentary research to identify, as accurately as possible, the precise alignments of the zanjias within the APE. Where these alignments are expected to be affected by the proposed project, particularly where cut-and-cover or other near-surface construction techniques (as opposed to tunneling 20 or more feet below the ground surface) are planned in the vicinity of mapped zanja segments, full-time archaeological monitoring would be instituted to ensure documentation. The archaeological monitors would work closely with equipment operators to ensure that every effort is made to avoid damaging zanja segments prior to their adequate documentation.

Documenting and evaluating the Los Angeles zanja system would be best accomplished with a system-wide approach that incorporates historical, archaeological, and engineering research and documentation. This systemic approach to documentation and evaluation is a particularly appropriate mitigation measure for the Regional Connector Transit Corridor project, which has the potential to impact multiple zanja segments. Documentation of the zanja segments' alignments and slopes would have the added benefit of enabling future projects to more accurately predict the location of zanja segments outside of the project area.

To mitigate potential impacts to the Los Angeles zanja system, the project MOA would provide that the system be adequately documented under the direction of an experienced archaeologist and an experienced historical architect, architectural historian, or historian, both meeting the Secretary of the Interior's qualification standards. This documentation would include a combination of historical research, archaeological testing, and architectural documentation, and would be followed by a formal evaluation of National Register and California Register eligibility.

It should be noted that substantial documentation already exists for the zanja system in the form of maps and engineering records, published books and articles, unpublished technical reports, and site records. The collation of available data for the system as a whole would accomplish much of the documentation effort that is proposed here, while intensive, original research would be restricted to the zanja segments that cross the direct APE.

Such research and documentation may include such specific measures as:

- Historical research using historical maps, photographs, and other written sources to document creation, maintenance, modification, and abandonment of the system.

- Archaeological research to establish the physical condition, presence of associated features and artifacts, and precise location of each zanja segment within the project's direct APE by using physical exposure through controlled excavation following its discovery during construction monitoring. Resources would be documented using DPR series 523 primary and detail forms, maps, and photographs. The results would be presented in a detailed technical report following Archaeological Resource Management Report (OHP 1990) guidelines. The report would address research questions and assess the National Register and California Register eligibility of the system.
- Architectural documentation of exposed zanja segments by producing narrative records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity.
- Preserving the results of the historical, archaeological, and historic architectural studies in repositories such as the local main library branch, the lead agency headquarters library, and with identified non-profit historic groups interested in the subject matter.
- Interpretation of the Los Angeles zanja system for the public through signage along the project alignment, visual representations of zanja alignments using colored pavement, or other appropriate means such as a dedicated internet website.

6.2 Operational Impacts Mitigation Measures

Because operational impacts to archaeological resources, including both previously recorded and as-yet-undiscovered resources, are not expected for any of the project alternatives, no mitigation is required.

7.0 CONCLUSIONS

This evaluation included a review of relevant historic maps and archaeological records, a Native American coordination program, and an intensive archaeological survey of the project direct APE. The background study indicates that subsurface archaeological deposits are commonly encountered during construction projects in downtown Los Angeles.

The direct APE was found to contain five previously recorded (CA-LAN-887H, CA-LAN-3588, P-19-003097, P-19-003338, and P-19-003339) and one newly recorded (site RC-1) archaeological resources. Of these, P-19-003097 has been destroyed, RC-1 is recommended not eligible for listing in the National Register and California Register, and CA-LAN-887H, CA-LAN-3588, P-19-003338, and P-19-003339 are presumed eligible for listing in the National Register and California Register.

None of the alternatives will have operational impacts to archaeological resources, and the No Build Alternative will have no construction or cumulative impacts on archaeological resources. Construction of each of the other alternatives has the potential to alter, remove, or destroy archaeological resources within the APE, including both known and previously undiscovered archaeological resources.

Physical destruction of an archaeological resource eligible for listing in the National Register and California Register would result in an adverse effect under Section 106 regulations and a significant impact under CEQA. Potential destruction of portions of the Los Angeles zanja system could also contribute to a cumulative impact to this resource.

To address potential impacts to previously undiscovered archaeological resources, the project would include producing and implementing a detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) (MM-A-1). To address potential impacts to known archaeological resources that are eligible for listing in the National Register and California Register, the project would be implemented by treating these known resources under an MOA (MM-A-2). After mitigation, potential construction and cumulative impacts would not be significant under NEPA or CEQA.

8.0 REFERENCES CITED

- Applied Earthworks, Inc. 1999. The Metropolitan Water District of Southern California Headquarters Facility Project. *The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H*. Report on file, South Central Coastal Information Center, California State University, Fullerton.
- Ashby, G. E., and J. W. Winterbourne. 1966. A Study of Primitive Man in Orange County and Some of Its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):5–52.
- Bancroft, Hubert Howe. 1886. *The Works of Hubert Howe Bancroft Vol. XVIII: History of California, Vol. I, 1542–1800* (1963 edition). The History Company, San Francisco.
- Bean, Lowell J., and Charles R. Smith. 1978. Gabrielino. In *California*, edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Blackburn, Thomas. 1963. *Ethnohistoric Descriptions of Gabrielino Material Culture*. Annual Report, Archaeological Survey. University of California, Los Angeles.
- Byrd, Brian F., and L. Mark Raab. 2007. Prehistory of the Southern Bight: Models for a New Millennium. In *California Prehistory*, edited by Terry L. Jones and Kathryn A. Klar, pp. 215-228. Altimira Press, New York.
- CERES. 2009. Title 14, Article 9. Contents of Environmental Impact Reports: Sections 15120 to 15132. <http://ceres.ca.gov/ceqa/guidelines/art9.html>. Accessed on May 22, 2009.
- Caughey, John and LaRee Caughey. 1977. *Los Angeles Biography of a City*. University of California Press, Berkeley and Los Angeles.
- Cleland, James H., Andrew L. York, and Lorraine M. Willey. 2007. *Piecing Together the Prehistory of Landing Hill: A Place Remembered*. EDAW Cultural Publications No. 3. EDAW, Inc., San Diego.
- Costello, Julia G., and Larry Wilcoxon. 1978. *An Archaeological Assessment of Cultural Resources in Urban Los Angeles*. Prepared for the city of Los Angeles in connection with construction project “La Placita de Dolores”, LAN-887. On file at the South Central Coastal Information Center, California State University at Fullerton.
- Cottrell, Marie, and Kathleen Del Chario. 1981. *Archaeological Investigations of the Tomato Springs Sites*. Report on file, South Central Coastal Information Center, California State University, Fullerton.

- Dakin, Susanna Bryant. 1978. *A Scotch Paisano in Old Los Angeles. Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London.
- de Barros, Philip. 1996. *San Joaquin Hills Transportation Corridor: Results of testing and data recovery at CA-ORA-1357*. Report on file, South Central Coastal Information Center, California State University, Fullerton.
- Dillon, Brian D. 2002. California Paleo-Indians: Lack of Evidence, or Evidence of a Lack? In *Essays in California Archaeology: A Memorial to Franklin Fenenga*, edited by William J. Wallace and Francis A. Riddell, pp. 110–128. Contributions of the University of California Archaeological Research Facility, No. 60, Berkeley.
- Dixon, E. J. 1968. Cogged Stones and Other Ceremonial Cache Artifacts in Stratigraphic Context at ORA-58, a Site in the Lower Santa Ana River Drainage, Orange County. *Pacific Coast Archaeological Society Quarterly* 4(3):57–68.
- Drover, Christopher E. 1971. Three Fired-Clay Figurines from 4-Ora-64, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 7(4):73–86.
- Drover, Christopher E. 1975. Early Ceramics from Southern California. *The Journal of California Anthropology* 2(1):101–107.
- Drover, Christopher E., Henry C. Koerper, and Paul E. Langenwalter II. 1983. Early Holocene Adaptation on the Southern California Coast: A Summary Report of Investigations at the Irvine Site (CA-ORA-64), Newport Bay, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 19(2 & 3):1–84.
- Dumke, Glenn S. 1944. *The Boom of the Eighties in Southern California*. Huntington Library Publications, San Marino, California.
- Eberhart, Hal. 1961. The Cogged Stones of Southern California. *American Antiquity* 26:361–370.
- Engelhardt, Zephyrin. O.F.M. 1927a. *San Gabriel Mission and the Beginning of Los Angeles*. Mission San Gabriel, San Gabriel, California.
- Engelhardt, Zephyrin. O.F.M. 1927b. *San Fernando Rey, the Mission of the Valley*. Franciscan Herald Press, Chicago.
- Erlandson, Jon M. 1991. Early Maritime Adaptations on the Northern Channel Islands. In *Hunter-Gatherers of Early Holocene Coastal California* edited by J. M. Erlandson and R.

Colten. *Perspectives in California Archaeology*, Vol. 1. Institute of Archaeology, University of California, Los Angeles.

Erlandson, Jon M., Theodore Cooley, and Richard Carrico 1987. A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBA-1951. *Journal of California and Great Basin Anthropology* 9:120–128.

Federal Highway Administration (FHWA). 2009. Section 4f Overview. <http://www.environment.fhwa.dot.gov/4f/index.asp>. Accessed on May 22, 2009

Garcia, Robert, Erica S. Flores, and Julie Ehrlich. 2004. *The Cornfield and the Flow of History: People, Place, and Culture*. Center for Law in the Public Interest. <http://www.clipi.org/publications/index.html>. Accessed on April 29, 2006

Glassow, Michael A. 1997. Middle Holocene Cultural Development in the Central Santa Barbara Channel Region. In *Archaeology of the California Coast during the Middle Holocene*, edited by J. M. Erlandson and M. A. Glassow, pp.73–90. *Perspectives in California Archaeology*, Vol. 4. Institute of Archaeology, University of California, Los Angeles.

Glassow, M. A, L. Wilcoxon, and J. M. Erlandson 1988. Cultural and Environmental Change During the early Period of Santa Barbara Channel Prehistory. In *The Archaeology of Prehistoric Coastlines*, edited by G. Bailey and J. Parkington, pp. 64–77. Cambridge University Press, Cambridge.

Glenn, Brian K. and Sherri Gust. 2004. Cultural Resource Monitoring and Mitigation Plan for the Los Angeles County Metropolitan Transportation Authority Eastside Gold Line Transit Corridor, Los Angeles, Los Angeles County, California. Report prepared by Cogstone Resource Management Inc. for UltraSystems Environmental, Inc. and Metropolitan Transportation Authority. On file at SWCA Environmental Consultants, South Pasadena.

Guinn, J.M. 1977. Gold! Gold! Gold! from San Francisquito! In *Los Angeles Biography of a City*, edited by John Caughey and LaRee Caughey. University of California Press, Berkeley.

Gumprecht, Blake. 1999. *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore.

Gust, Sherri. 2007. *The Archaeology and History of the Zanja Madre below Broadway, City of Los Angeles, California*. Report prepared by Cogstone Resource Management Inc. for Metropolitan Transportation Authority. On file at SWCA Environmental Consultants, South Pasadena.

Harlow, Neal. 1992. *California Conquered: The Annexation of a Mexican Province 1846-1850*. University of California Press, Berkeley.

Harrington, John P. 1942. Culture Element Distributions: XIX, Central California Coast. *Anthropological Records* 7:1. University of California Press, Berkeley.

Heizer, Robert F. 1978. Introduction. In *California*, edited by Robert F. Heizer, pp. 1–6. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Herring, Alika, 1968. Surface Collections from ORA-83, a Cogged Stone Site at Bolsa Chica, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 4(3):3–37.

Howard, William J. and L. Mark Raab. 1993. *Olivella* Grooved Rectangle Beads as Evidence of an Early-Period Southern Channel Islands Interaction Sphere. *Pacific Coast Archaeological Society Quarterly* 29(3):1-11.

Johnson, J. R., T. W. Stafford, Jr., H. O. Ajie, and D. P. Morris. 2002. Arlington Springs Revisited. In: *Proceedings of the Fifth California Islands Symposium*, edited by D. R. Brown, K. C. Mitchell, and H. W. Chaney, pp. 541–545. Santa Barbara Museum of Natural History.

Johnston, Bernice E. 1962. *California's Gabrielino Indians*. Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles.

Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson. 2002. The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.

King, Chester D. 1994. Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills. Topanga Anthropological Consultants, California.

King, Chester D. 2004. *Japchibit Ethnohistory*. Angeles National Forest, Topanga Anthropological Consultants, California.

Koerper, Henry C. 1995. *The Christ College Project: Archaeological Investigations at CA-ORA-378, Turtle Rock, Irvine, California*, Volume II. Report on file, South Central Coastal Information Center, California State University, Fullerton.

Koerper, H. C., and C. E. Drover 1983. Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A. *Pacific Coast Archaeological Society Quarterly* 19(2):1–34.

Koerper, Henry C., Roger D. Mason, and Mark L. Peterson 2002. Complexity, Demography, and Change in Late Holocene Orange County. In *Catalysts to Complexity, Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63-81. Perspectives in California Archaeology Vol. 6. Costen Institute of Archaeology, University of California, Los Angeles.

Kowta, Makoto. 1969. The Sayles Complex, A Late Milling Stone Assemblage from the Cajon Pass and the Ecological Implications of its Scraper Planes. *University of California Publications in Anthropology* 6:35–69. Berkeley, California.

Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, D.C. Reprinted 1976 by Dover Publications, Inc., New York.

Langenwalter, Paul E., II, and James Brock. 1985. *Phase II Archaeological Studies of the Prado Basin and the Lower Santa Ana River*. Report on file, U.S. Army Corps of Engineers, Los Angeles District.

Langum, David J. 1987. *Law and Community on the Mexican California Frontier: Anglo-American Expatriates and the Clash of Legal Traditions, 1821–1846*. University of Oklahoma Press, Norman.

Los Angeles City Preservation. 2009. Cultural Heritage Ordinance, Chapter 9 Department of City Planning, Article 1, Section 22.171.

Los Angeles County. 1963. The First Los Angeles City and County Directory 1872. Facsimile reprint. Ward Richie Press, Los Angeles.

McCawley, William 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning California and Ballena Press, Novato, California.

Macko, Michael E. 1998a. *The Muddy Canyon Archaeological Project: Results of Phase II Test Excavations and Phase III Data Recovery Excavations at Archaeological Sites within the Crystal Cove Planned Community, Phase IV, Tentative Tract 15447, San Joaquin Hills, Orange County, California*. Report on file, South Central Coastal Information Center, California State University, Fullerton.

Macko, Michael E. 1998b. Neolithic Newport. In *Executive Summary: Results of Implementing Mitigation Measures Specified in the Operation Plan and Research Design for the Proposed Newporter North Residential Development at ORA-64*. Report on file, South Central Coastal Information Center, California State University, Fullerton.

Mason, Roger D., Henry C. Koerper, and Paul E. Lagenwalter II. 1997. Middle Holocene adaptations on the Newport Coast of Orange County. In *Archaeology of the California Coast during the Middle Holocene*, edited by Jon M. Erlandson and Michael A. Glassow, pp. 35–60. UCLA Institute of Archaeology, Los Angeles.

Mason, Roger D., and Mark L. Peterson. 1994. *Newport Coast Archaeological Project: Newport Coast Settlement Systems—Analysis and Discussion*, Volume 1, part 1 of 2. Prepared

by The Keith Companies. Copies on file at the South Central Coastal Information Center, California State University, Fullerton.

Meighan, Clement W. 1954. A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215–227.

Messick, Peter, and Alice E. Hale. 2007. *Archaeological Monitoring Report Mangrove Parking Lot Project, Los Angeles, California*. Report prepared by Greenwood and Associates for Commercial Paving and Coating. On file at South Central Coastal Information Center, California State University, Fullerton.

Meyer, L. 1981. *Los Angeles, 1781-1981*. A special bicentennial issue of California history, Spring 1981. California Historical Society. Los Angeles.

Mithun, Marianne. 2004. *Languages of Native North America*. Reprinted. Cambridge University Press, New York. Originally published 1999.

Moratto, Michael J. 1984. *California Archaeology*. Academic Press, San Diego.

Moriarty, James R., III. 1966. Cultural phase divisions suggested by typological change coordinated with stratigraphically controlled radiocarbon dating in San Diego. *The Anthropological Journal of Canada* 4(4):20–30.

Moriarty, James R., III, and Robert S.D. Broms. 1971. The Antiquity and Inferred Use of Stone Discoidals in the Southwest. *The Anthropological Journal of Canada* 9(1):16–36.

Nadeau, Remi. 1997. *The Water Seekers*. Revised 4th ed. Crest Publishers, Santa Barbara, California.

Newmark, Harris. 1977. Reminiscences of the Fifties. In *Los Angeles: Biography of a City*, edited by John Caughey and LaRee Caughey, pp. 132-140. University of California Press, Berkeley.

O’Neil, Stephen. 2002. *The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change*. Unpublished master’s thesis, Department of Anthropology, California State University, Fullerton.

Office of Historic Preservation (OHP). 1990. *Archaeological Resource Management Report (ARMR)*. California Office of Historic Preservation. Department of Parks and Recreation, Sacramento, California.

Office of Historic Preservation (OHP), 2009e. *California Points of Historical Interest*. http://ohp.parks.ca.gov/?page_id=21750. Accessed May 22, 2009.

Reinman, Fred M. 1964. Maritime Adaptations on San Nicolas Island, California. *University of California Archaeological Survey Annual Report 1963–1964*:47–80.

Rick, Torben C., Jon M. Erlandson, and René Vellanoweth. 2001. Paleocoastal Marine Fishing on the Pacific Coast of the Americas: Perspectives from Daisy Cave, California. *American Antiquity* 66:595–613.

Ríos-Bustamante, Antonio. 1992. *Mexican Los Angeles: A Narrative and Pictorial History*. Floricanto Press, Mountain View, California.

Robinson, W.W. 1979. Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads. University of California Press, Berkeley.

Rogers, David B. 1929. *Prehistoric Man of the Santa Barbara Coast*. Santa Barbara Museum of Natural History, Santa Barbara, California. Edited by Richard F. Pourade. Union Tribune Publishing Company, San Diego.

Rogers, Malcom J. 1939. Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. *San Diego Museum of Man Papers* 3.

Rogers, Malcom J. 1945. An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167–198.

Sawyer, William A., and Henry C. Koerper. 2006. The San Joaquin Hills Venus: A Ceramic Figurine from CA-ORA-1405-B. In *Contributions from Orange County Presented in Remembrance of John Peabody Harrington*, edited by Henry C. Koerper, pp. 13–34. Coyote Press Archives of California Prehistory, Number 53. Coyote Press, Salinas, California.

Schoenherr, Allan A. 1992. *A Natural History of California*. University of California Press, Berkeley.

ShIPLEY, William F. 1978. Native Languages of California. In *California*, edited by Robert F. Heizer, pp. 80–90. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Slawson, Dana N. 2006. *Mitigation of Impacts on the Zanja Madre Archaeological Feature, La Placita*. Report prepared by Greenwood and Associates for the Los Angeles Bureau of Engineering. On file at the South Central Coastal Information Center, California State University, Fullerton.

Starr, Kevin. 2007. *California: A History*. Modern Library, New York.

Strudwick, Ivan H. 2005. The Use of Fired Clay Daub from CA-ORA-269 in the Identification of Prehistoric Dwelling Construction Methods, San Joaquin Hills, Orange County, California. *Proceedings of the Society for California Archaeology* 18:219-237.

Sutton, Mark Q. 1993. On the Subsistence Ecology of the “Late Inland Millingstone Horizon” in Southern California. *Journal of California and Great Basin Anthropology* 15(1):134–140.

Taniguchi, Christeen. 2008. *National Register of Historic Places Registration Form for a segment of the Zanja Madre*. On file at SWCA Environmental Consultants, South Pasadena.

Toffelmier, Cynthia. 2009. Letter regarding Zanja Madre National Register of Historic Places Nomination to Christeen Taniguchi, dated June 4, 2009. On file at SWCA Environmental Consultants, South Pasadena.

True, Delbert L. 1958. An Early Complex in San Diego County, California. *American Antiquity* 23:255–263.

True, Delbert L. 1993. Bedrock Milling Elements as Indicators of Subsistence and Settlement Patterns in Northern San Diego County, California. *Pacific Coast Archaeological Society Quarterly* 29(2):1–26.

United States Geologic Survey (USGS). No Date. Topographic Survey Maps.

Wallace, William J. 1955. A Suggested Chronology for Southern California. *Southwestern Journal of Anthropology* 11(3):215–230.

Wallace, William J. 1978. Post-Pleistocene Archaeology, 9000 to 2000 B.C. In *California*, edited by Robert F. Heizer, pp. 25–36. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington D.C.

Warren, Claude N. 1968. Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams. *Eastern New Mexico University Contributions in Anthropology* 1(3):1–14, Portales.

Warren, Claude N., and D. L. True 1961. The San Dieguito Complex and its Place in California Prehistory. *Archaeological Survey Annual Report for 1960-1961*:246–337. University of California, Los Angeles.

Warren, Keith, Dina M. Coleman, and M. Colleen Hamilton. 2001. *Results of Phase II Testing, Analysis, and Evaluation, and Development of a Phase III Research Design*. California Department of Transportation District 7 Headquarters Replacement Project. Report prepared

by Applied EarthWorks for Myra L. Frank and Associates. On file at South Central Coastal Information Center, California State University, Fullerton.

Weber, David J. 1992. *The Spanish Frontier in North America*. Yale University Press, New Haven, Connecticut.

Wilkman, Jon and Nancy Wilkman. 2006. *Picturing Los Angeles*. Gibbs Smith, Salt Lake City.

Workman, Boyle. 1935. *The City that Grew*. Southland Publication Co., Los Angeles.

APPENDIX A

RECORDS SEARCH RESULTS

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA4742 **DATE:** 1999 **PAGES** 14

AUTHOR Lapin, Philippe

FIRM: LSA Associates

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-01,
County of Los Angeles, California

AREA: < 1 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA483 **DATE:** 1978 **PAGES** 175

AUTHOR Greenwood, Roberta

FIRM: Greenwood and Associates

TITLE: Archaeological Resources Survey the Proposed Downtown People Mover Project

AREA:

SITES: none

QUADNAME: Hollywood

Los Angeles

MEMO:

IC ID#: LA5200 **DATE:** 2001 **PAGES** 159

AUTHOR Warren, Keith M; Hamilton, Colleen; Robinson, Mark

FIRM: Applied earth Works, Inc.

TITLE: Assessment of Archaeological and Paleontological Sensitivity on the Proposed California
Department of Transportation District 7 Headquarters Replacement Project

AREA: <2.5 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA5203 **DATE:** 2001 **PAGES** 9

AUTHOR Foster, John M.

FIRM: Greenwood And Associates

TITLE: Archaeological Monitoring Report: Soil Test Pit Excavation for the Siqueiros Mural Project, El Pueblo de Los Angeles

AREA: <5 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA5282 **DATE:** 2001 **PAGES** 6

AUTHOR Schmidt, James J.

FIRM: Compass Rose Archaeological, Inc.

TITLE: Negative Archaeological Survey Report: 29660 Harvester Rd., Malibu, CA

AREA: <1 ac

SITES: 19-001121

QUADNAME: Point Dume

MEMO:

IC ID#: LA5410 **DATE:** 1978 **PAGES** 35

AUTHOR Reinoenl, Gary

FIRM: Department of Parks and Recreation

TITLE: El Pueblo de Los Angeles State Historic Park Resource Management Plan

AREA: 10 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA1770

DATE: 1989

PAGES 37

AUTHOR Salls, Roy A.

FIRM: Northridge Center for Public Archaeology

TITLE: Report of Archaeological Reconnaissance Survey of:ESA Project 7217B, City of Los Angeles, Los Angeles County, Ca

AREA: 8 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

IC ID#: LA2486

DATE: 1991

PAGES 17

AUTHOR Kaptain, Neal

FIRM: Greenwood and Associates

TITLE: Monitoring and Mapping: Union Station Utility Upgrade, CA-LAN-1575H

AREA:

SITES: 19-001575

QUADNAME: Los Angeles

MEMO:

IC ID#: LA292

DATE: 1978

PAGES 8

AUTHOR D'Altroy, Terence N.

FIRM: University of California Los Angeles Archaeological Surveyt

TITLE: Environmental Impact Statement: Assessment of the Impact on Archaeological Resources of Proposed Constructi of School Facilities and Parking Facilities at the Intersection of Sunset Boulevard and North Figueroa Street, Los Angeles, California

AREA:

SITES: None

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3377 **DATE:** 1996 **PAGES** 3
AUTHOR FOSTER, JOHN
FIRM: Greenwood and Associates
TITLE:
AREA: 1 ac
SITES: CA-LAN-1103

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3501 **DATE:** 1990 **PAGES** 67
AUTHOR Dillon, Brian D.
FIRM:
TITLE: Archaeological Record Search and Impact Evaluation for the Los Angeles Wastewater Program Management (NOS-NCOS) Project Los Angeles, California
AREA: 57,600 ac
SITES: 19-000053,19-000055,19-000056,19-000057,19-000068,19-000007,19-000097,19-000069,19-000070,19-000071,19-000072,19-000073,19-000074,19-000080,19-000171,19-000172,19-0001336,19-001399,19-000159,19-001261,19-000181,19-001112,19-001595,19-000887,19-000132,
19-000067

QUADNAME: Los Angeles,Pasadena,Venice,Beverly Hills,Burbank,Hollywood,Inglewood
MEMO:

IC ID#: LA3515 **DATE:** 1996 **PAGES** 8
AUTHOR Maki, Mary K.
FIRM: Fugro West, Inc.
TITLE: Negative Phase I Archaeological Survey of 0.84 Acre at 14751 and 14755 Garfield Ave and 7339 Petrol Street, City of Paramount, Los Angeles County, California
AREA: 0.84 ac
SITES: None

QUADNAME: South Gate
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3587

DATE: 1994

PAGES 415

AUTHOR King, Chester

FIRM: Topanga Anthropological Consultants

TITLE: Prehistoric Native American Cultural Sites in the Santa Monica Mountains

AREA: 13,337 ac

SITES: 19-000229,19-000267,19-000690,56-000003,19-000227,19-000776,56-000110,56-000010,56-000024,56-000089,56-000174,19-000052,19-000384,19-000114,19-000207,19-000264,56-000071,56-000865,56-000261,56-000737,56-000179,56-000095,56-000096,56-000341,56-000342,
19-000186,19-000242,19-000243,19-000413,19-000043,19-000059,19-000060,19-19-002200,56-000204,56-000538,56-001157,19-000002,19-000373,19-000324,56-000294,56-000606,19-000669,19-000466,56-000535,19-000807,56-000100,56-000070,56-000065,56-000001,56-000640,56-001154,56-000881,56-000880,56-000879,56-000878,56-000877,56-000876,
56-000875,56-000874,56-000873,56-000872,56-000871,56-000869,56-000145,56-000870,19-002154,19-002201,19-002202,56-000146,56-000145,19-001248,19-001341,56-000853,56-000536,56-000271,56-000045,56-000044,56-000124,56-000123,56-000221,56-000222,56-000705,
56-000706,56-000707,19-001352,19-000111,19-001326,19-001327,56-000884,56-000885,56-000883,56-000882,56-000886,19-002160,19-002153m19-002167,19-002168,19-001117,19-002165,19-002164,19-002162,19-002161,19-002159,19-002158,19-002157,19-002163,+more,see memo

QUADNAME: Point Dume, Triunfo Pass, Malibu Beach, Topanga, Beverly Hills, Hollywood, Burbank, Van

MEMO: Same as VN1462. Space did not permit the entry of all sites referenced within this

IC ID#: LA3645

DATE: 1995

PAGES 73

AUTHOR Whitley, David S.

FIRM: W & S Consultants

TITLE: Phase I Archaeological Survey and Cultural Resources Assessment of the Metropolitan Water District Headquarters Study Area, Los Angeles, California

AREA: 4 ac

SITES: 19-001575H

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3668 **DATE:** 1997 **PAGES** 182
AUTHOR Dillon, Brian D.
FIRM:
TITLE: St. Vibiana's Cathedral Los Angeles, California
AREA: 2.5 ac
SITES: 19-150330

QUADNAME: Los Angeles
MEMO: Missing Report Updated: 11/6/02

IC ID#: LA3783 **DATE:** 1993 **PAGES** 19
AUTHOR White, Robert S. and White, Laurie E.
FIRM: Archaeological Associates
TITLE: Archaeological Element of the Metropolitan Water District of Southern California
Headquarters Facility Site Study Analysis
AREA: 101 ac
SITES: None

QUADNAME: Los Angeles
San Dimas
MEMO: 92 ac. Area on the San Dimas Quad was surveyed. Areas on Los Angeles Quad were not

IC ID#: LA3786 **DATE:** 1997 **PAGES** 173
AUTHOR Dillon, Brian D.
FIRM:
TITLE: Cathedral of Our Lady of the Angles Los Angeles, California Cultural Resources Evaluation
AREA: Unknown
SITES: 19-000007,19-000887,19-00112,19-001575,19-120013

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3812

DATE: 1982

PAGES 20

AUTHOR Chace, Paul G.

FIRM: Paul G. Chace & Associates

TITLE: Archaeological Monitoring of the W-7 Ramp Project, Olvera St, El Pueblo de Los Angeles State Historic Park

AREA:

SITES: Palomares-Jones Property

QUADNAME: Los Angeles

MEMO:

IC ID#: LA3813

DATE: 1992

PAGES 47

AUTHOR Anonymous

FIRM: Peak & Associates, Inc.

TITLE: An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California

AREA: 6.5 li mi

SITES: None

QUADNAME: Los Angeles

MEMO:

IC ID#: LA3814

DATE: 1981

PAGES 45

AUTHOR Singer, Clay A.

FIRM: Northridge Archaeological Research Center, Ca. St. University

TITLE: Preliminary Historic Archaeological Investigations at the Los Angeles Plaza Church

AREA:

SITES: The Plaza Church

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3906 **DATE:** **PAGES** 239
AUTHOR Costello, Julia G., Wilcoxon, Larry R.
FIRM: Julia G. Costello, Larry R. Wilcoxon
TITLE: An Archaeological Assessment of Cultural Resources in Urban Los Angeles, California La
Placita de Dolores -- Lan-887
AREA: 8 ac
SITES: 19-000887H

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3910 **DATE:** 1983 **PAGES** 62
AUTHOR Frierman, Jay D.
FIRM: Jay D. Frierman, Consulting Archaeologist
TITLE: Monitoring the Restoration and Rehabilitation of the Sepulveda Block 622-624 North
Main Street El Pueblo de Los Angeles State Historic Park
AREA: 8 ac
SITES: 19-000887H

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3946 **DATE:** 1998 **PAGES** 26
AUTHOR McLean Deborah
FIRM: LSA Associates, Inc.
TITLE: Archaeological Assessment for Pacific Bell Mobile Services Telecommunications Facility
LA 057-03, 433 East Temple Street, City and County of Los Angeles, California
AREA: less than 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3986

DATE: 1981

PAGES 38

AUTHOR Chace, Paul G.

FIRM: Paul G. Chace & Associates

TITLE: A Cultural Resources Assessment of the Plaza El Pueblo de Los Angeles State Historic Park

AREA: None

SITES: 19-000007H

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4080

DATE: 1996

PAGES 110

AUTHOR Goldberg, Susan K.

FIRM: Applied Earth Works, Inc.

TITLE: Archaeological Research Design and Treatment Plan: the Metropolitan Water District of Southern California Headquarters Facility Project

AREA: 4.3 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4214

DATE: 1998

PAGES 3

AUTHOR Conkling, Steve

FIRM: LSA Associates, Inc.

TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R106, near West Fourth Street and South Hill Street, City and County of Los Angeles

AREA: 1 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA4215

DATE: 1998

PAGES 3

AUTHOR Conkling, Steve

FIRM: LSA Associates, Inc.

TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, near West Third Street and South Grand Avenue, City and County of Los Angeles

AREA: 1 ac

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

IC ID#: LA4237

DATE: 1998

PAGES 9

AUTHOR Conkling, Steve

FIRM: LSA Associates, Inc.

TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site r105, at the Intersection of West Third Street and South Spring Street, City and County of Los Angeles

AREA: <1ac

SITES: 19-002741

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4263

DATE: 1986

PAGES 203

AUTHOR Padon, Beth

FIRM: LSA Associates, Inc.

TITLE: General Services Administration Federal Center: Archaeological Assessment Report Phase

AREA: 4.8 ac

SITES: 19-000887

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA4448

DATE: 1994

PAGES 357

AUTHOR Anonymous

FIRM: Myra L. Frank & Associates

TITLE: Section 106 Documentation for the Metro Rail Red Line East Extension in the City and County of Los Angeles, California

AREA: 20 li mi

SITES: 19-174979,19-174978,19-174977,19-174976,19-174975,19-174974,19-167081,19-174973,19-174972,19-174971,19-174970,19-174968,19-172755,19-174964,19-176624,19-174941,19-174940,19-174235,19-174955,19-174954,19-174951,19-174957,19-174943,19-174958,19-174956

19-1748952,19-174953,19-174950,19-174949,19-174948,19-174947,19-174946,19-

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4452

DATE: 1982

PAGES 141

AUTHOR Hatheway, Roger G.

FIRM: Roger G. Hatheway & Associates

TITLE: Determination of Eligibility Report Chinatown

AREA: 200 ac

SITES: 19-173391,19-173392,19-170950,19-173393,19-170951,19-173394,19-170952,19-173395,19-170953,19-173396,19-170954,19-173397,19-170995,19-173398,19-170961,19-170962,19-170960,19-173399,19-170956,19-173400,19-170957,19-170958,19-170965,19-170963,19-173402

19-170959

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA5437 **DATE:** 1980 **PAGES** 20

AUTHOR Chace, Paul G.

FIRM: Paul G. Chace & Associates

TITLE: An Archaeological Review and tests for the Tree Planting Program, El Pueblo de Los Angeles State Historic Park

AREA: 10 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA5446 **DATE:** 2001 **PAGES** 3

AUTHOR Savastio, Scott

FIRM: Greenwood & Associates

TITLE: Report for Monitoring: Sewer pipe Repair at Alameda and Arcadia Streets, Los Angeles

AREA: 2 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA5447 **DATE:** 1999 **PAGES** 10

AUTHOR Schmidt, James J.

FIRM: Greenwood & Associates

TITLE: Archaeological monitoring Report: 911 Dispatch Center First and Los Angeles Streets
Los Angeles, California

AREA: 2 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA5448

DATE: 2000

PAGES 9

AUTHOR Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for AT&T Wireless Services Facility Number R299.1,
County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA5451

DATE: ?

PAGES 84

AUTHOR Padon, Beth

FIRM: LSA Associates, Inc.

TITLE: the VA Outpatient Clinic Project

AREA: 1.85 ac

SITES: 19-000007

QUADNAME: Los Angeles

MEMO:

IC ID#: LA850

DATE: 1978

PAGES 215

AUTHOR Costello, Julia G., and Larry R. Wilcoxon

FIRM:

TITLE: An ARHCAEOLOGICAL Assessment of Cultural Resources in Urban
LOS ANGELES, CALIforNIA -- LA PLACITA DE DOLORS -- LAN-887

AREA:

SITES: 19-000887

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA982 DATE: 1977 PAGES 5

AUTHOR Bove, Frederick J.

FIRM: UCLA Archaeological Survey

TITLE: Archaeological Resource Survey and Impact Assessment of A
PROPOSED PARKinG LOT, LOS ANGELES, CALIForNIA

AREA:

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA6359 DATE: 2001 PAGES 32

AUTHOR Hale, Alice

FIRM: Greenwood and Associates

TITLE: Archaeological Monitor Report The Los Angeles Gas Works 513 North Main Street

AREA: 1 ac

SITES: 19-002891

QUADNAME: Los Angeles

MEMO: NPS72000231

IC ID#: LA6085 DATE: 2003 PAGES 35

AUTHOR Wlodarski, Robert J.

FIRM: Historical Environmental Archaeological Research Team

TITLE: A Phase I Archaeological Study For The Proposed Eugene Obregon Congressional Medal
of Honor Memorial Within Father Serra Park and El Pueblo de Los Angeles State
Historic Park, City of Los Angeles, Los Angeles County, California

AREA: .25 ac

SITES: none

QUADNAME: Los Angeles

MEMO: 19-000007

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA6087

DATE: 1996

PAGES 49

AUTHOR Lisecki, Lee

FIRM: Myra L. Frank & Associates, Inc.

TITLE: The Metropolitan Water District Of Southern California Headquarters Facility Project
Archival Documentation For The Southern Ramp And Service Wing At Union Station,
Los Angeles

AREA: 4.3 ac

SITES: none

QUADNAME: Los Angeles

MEMO: Union Station/National Register Historic Places

IC ID#: LA6340

DATE: 2001

PAGES 19

AUTHOR Wlodarski, Robert J.

FIRM: Historical, Environmental, Archaeological, Research, Team (H.E.A.R.T)

TITLE: A Phase I Archaeological Study For 625 North Hill Street (Castellar Apartments) City of
Los Angeles, Los Angeles County, California

AREA: 1 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA6343

DATE: 2001

PAGES 10

AUTHOR Foster, John M.

FIRM: Greenwood and Associates

TITLE: Archaeological Monitor Report: Sewer Line Trenching for the Avila Adobe Interpretive
Center, El Pueblo de Los Angeles

AREA: 4 ac

SITES: 19-000887

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA6351 **DATE:** 2001 **PAGES** 4
AUTHOR Unknown
FIRM: Earthtouch, LLC
TITLE: Nextel Communications CA-7837A/Onizuka 332 2nd Street Los Angeles, California
AREA: 1 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6375 **DATE:** 2002 **PAGES** 4
AUTHOR Sylvia, Barbara
FIRM: Caltrans District 7
TITLE: Highway Project To close Vignes Street on-ramp and the Hewitt Street on-/off ramps to US-101 and to construct new on-/off ramps to the south at Garey Street in the City of
AREA: 1 limi
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA6382 **DATE:** 1999 **PAGES** 340
AUTHOR Goldberg, Susan K., Bradley J. Adams, Carole Denardo, Scott A. Williams, Marilyn J.
FIRM: Wyss, Mark C. Robinson, Jill A. Onken, Melinda, C. Horne Applied EarthWorks, Inc.
TITLE: The Metropolitan Water District of Southern California Headquarters Facility Project
The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H
AREA: 0 ac
SITES: 19-001575H

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA6841 **DATE:** 2003 **PAGES** 228
AUTHOR Unknown
FIRM: Sapphos Environmental, Inc.
TITLE: Plaze De Cltura Y Arte Invironmental Impact Report Volume I, Draft EIR SCH No.
2001 101 167
AREA: 4 ac
SITES: None

QUADNAME: Los Angeles
MEMO: Map location hand drawn, 19-000007H, 19-002741,19-100301,19-120028,19-

IC ID#: LA7178 **DATE:** 2001 **PAGES** 57
AUTHOR Unknown
FIRM: William Self Associates
TITLE: Report on Cultural Resources Mitigation and Monitoring Activities Fluor/Level (3) Los
Angeles Local Loops
AREA: 200 ac
SITES: 19-003356,19-003337,19-003338,19-003339,19-003340

QUADNAME: Beverly Hills,Los Angeles,Hollywood
MEMO:

IC ID#: LA7533 **DATE:** 2004 **PAGES** 57
AUTHOR McKenna, Jeanette A.
FIRM: McKenna et al.
TITLE: Archaeological/Paleontological Monitoring at 3rd Street and San Pedro
AREA: ~1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7547

DATE: 2003

PAGES 25

AUTHOR Whitley, David S.

FIRM: W & S Consultants

TITLE: Phase I Archaeological Survey/Class III Inventory for the Hall of Justice Study Area, Los Angeles, Los Angeles County, California

AREA: ~2 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

IC ID#: LA7551

DATE: 2006

PAGES 37

AUTHOR Foster, John M. and Kronzek, Lynn C.

FIRM: Greenwood and Associates

TITLE: Mitigation of Impacts on an Archaeological Feature in the Winery El Pueblo de Los Angeles Historical Monument

AREA: 1 ac

SITES: None

QUADNAME: Los Angeles

MEMO: Mentions Features 1 and 2 as being sites, but no primary number, or DPR forms

IC ID#: LA7546

DATE: 2006

PAGES 7

AUTHOR Foster, John

FIRM: Greenwood and Associates

TITLE: Archaeological Monitoring Program Final Report, La Placita Renovation and Winery Restroom Project, Los Angeles, California

AREA: <1 ac

SITES: 19-000882

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7545 **DATE:** 2006 **PAGES** 24

AUTHOR Slawson, Dana N.

FIRM: Greenwood and Associates

TITLE: Mitigation of Impacts on the Zanja Madre Archaeological Feature, La Placita

AREA: <1 ac

SITES: None

QUADNAME: Los Angeles

MEMO: Excavation of segment of Zanja Madre

IC ID#: LA7556 **DATE:** 2006 **PAGES** 17

AUTHOR Slawson, Dana N.

FIRM: Greenwood and Associates

TITLE: Archaeological Monitoring Report Earthquake Repair and Replacement Sewer Unit 338
(W.O. E2003260) El Pueblo de Los Angeles and Environs Los Angeles, California

AREA: ~309 li ft

SITES: 19-100515

QUADNAME: Los Angeles

MEMO:

IC ID#: LA7557 **DATE:** 2006 **PAGES** 14

AUTHOR Slawson, Dana N.

FIRM: Greenwood and Associates

TITLE: Archaeological Monitoring Report Sewer Line Repair Project El Pueblo de Los Angeles
and Environs Los Angeles, California

AREA: ~309 ft

SITES: 19-100515

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7558 **DATE:** 2004 **PAGES** 19
AUTHOR Hale, Alice and Savastio, Scott
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report Alameda Street Improvements
AREA: ~3000 ft
SITES: 19-000007x

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8026 **DATE:** 1985 **PAGES** 17
AUTHOR Carrico, Richard
FIRM: WESTEC Services, Inc.
TITLE: Treatment Plan for Potential Cultural Resources within Proposed Metro Rail Subway
Station Locations in Metropolitan Los Angeles, California
AREA: ~80 ac
SITES: None

QUADNAME: Los Angeles, Hollywood
MEMO:

IC ID#: LA8515 **DATE:** 2005 **PAGES** 40
AUTHOR Wuellner, Margarita J.
FIRM: EDAW, Inc.
TITLE: Historical Evaluation Report for the Downtown Bus Maintenance and Inspection
Facility, Los Angeles, California
AREA: 2.5 ac
SITES: 19-186945

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA8516 **DATE:** 2004 **PAGES** 12
AUTHOR McKenna, Jeanette A.
FIRM: McKenna et al.
TITLE: Re: 3rd and San Pedro Archaeological Monitoring (Addendum)
AREA: unknown
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8525 **DATE:** 2004 **PAGES** 9
AUTHOR Rehberger, Linda H. and Peter Messick
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Report, Veteran Memorial, El Pueblo de Los Angeles,
Los Angeles Street and Alameda Street, Los Angeles, California
AREA: < 1 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA8532 **DATE:** 2004 **PAGES** 6
AUTHOR Hale, Alice and Scott Savastio
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report: The Plaza House, 507-511 North Main Street, Los
Angeles, California
AREA: < 1 ac
SITES: 19-002891, El Pueblo NRH District (NPA 72000231), Plaza House Hotel, Brunswig Drug
Company, Brunswig Annex, Old Plaza Church, Antique Block, Uriquides Adobe, Pio Pico
Townhouse, Baric Adobe, Pio Pico Townhouse Refuse Deposit, Los Angeles Gas Works

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA8541

DATE: 2005

PAGES 13

AUTHOR Bonner, Wayne H.

FIRM: MBA

TITLE: Cultural Resource Records Search Results and Site Visit for Cingular Telecommunications Facility Candidate LA-057-01, (EL-005-01), DWP Equipment Yard, 433 East Temple Avenue, Los Angeles, Los Angeles County, California

AREA: < 1 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

IC ID#: LA8910

DATE: 2007

PAGES 52

AUTHOR Messick, Peter and Alice E. Hale

FIRM: Greenwood and Associates

TITLE: Archaeological Monitoring Report Mangrove Parking Lot Project, Los Angeles,

AREA: 1.75 ac

SITES: 19-003588

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA1071 **DATE:** 1981 **PAGES** 45
AUTHOR Singer, Clay A.
FIRM: Northridge Archaeological Research Center
TITLE: Preliminary Historic Archaeological Investigations at the Los Angeles Plaza Church
AREA: 1 ac
SITES: 19-001112

QUADNAME: Los Angeles
MEMO:

IC ID#: LA110 **DATE:** 1974 **PAGES** 4
AUTHOR Clewlow, C. William Jr.
FIRM: University of California Archaeological Survey
TITLE: Report on the Archaeological Resources of Job No. 4059 for Ultrasystems, Inc.
AREA:
SITES: None

QUADNAME: Hollywood
MEMO:

IC ID#: LA1424 **DATE:** 1984 **PAGES** 40
AUTHOR Padon, Beth, Rod Raschke and Roger Hatheway
FIRM:
TITLE: Cultural Resource Assessment of the Proposed Los Angeles Federal Center, Los Angeles, California
AREA: 29 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA1577 **DATE:** 1985 **PAGES** 40

AUTHOR Anonymous

FIRM: Westec Services, Inc.

TITLE: Identification Study for Cultural Resources Within Proposed Metro Rail Subway Station
Locations in Metropolitan Los Angeles, CA

AREA:

SITES: 19-000007

QUADNAME: Los Angeles
Hollywood

MEMO:

IC ID#: LA1578 **DATE:** 1983 **PAGES** 39

AUTHOR Anonymous

FIRM: Westec Services, Inc.

TITLE: Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft
Environmental Impact Statement and Environmental Impact Report

AREA: 18 ac

SITES: None

QUADNAME: 1103
Burbank

MEMO:

IC ID#: LA1609 **DATE:** 1986 **PAGES** 75

AUTHOR Padon, Beth

FIRM: LSA Associates, Inc.

TITLE: Los Angeles Outpatient Clinic Veterans Administration Archaeological Assessment
Report Phase II

AREA: 2 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA1642 **DATE:** 1980 **PAGES** 225

AUTHOR Costello, Julia G.

FIRM: Science Applications Inc.

TITLE: Los Angeles Downtown People Mover Program Archaeologica Resources Survey: Phast
II Evaluation of Significance and Recommendations for Future Actions

AREA:

SITES: Historic structures

QUADNAME: Los Angeles

MEMO:

IC ID#: LA1643 **DATE:** 1981 **PAGES** 150

AUTHOR Costello, Julia G.

FIRM:

TITLE: Los Angeles Downtown People Mover Program Archaeological Resources Survey Phase

AREA:

SITES: None

QUADNAME: Los Angeles

Hollywood

MEMO:

IC ID#: LA1997 **DATE:** 1990 **PAGES** 84

AUTHOR Anonymous

FIRM: Environmental Science Assoc.

TITLE: First Street North Draft Environmental Impact Report

AREA: 8 ac

SITES: None

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA2028

DATE: 1974

PAGES 40

AUTHOR Clewlow, Carl

FIRM: Ultrasystems, Inc.

TITLE: Draft Environmental Impact Report Bank of America Service Center Los Angeles,

AREA: 10 ac

SITES: None

QUADNAME: Hollywood
Los Angeles

MEMO:

IC ID#: LA2321

DATE: 1989

PAGES 66

AUTHOR Wheeler, T. L., P. L. Walker, E. Honeysett and, W. Wisura

FIRM: California Department of Parks and Recreation

TITLE: Report and Analysis of Cremated Human Remains from CA-LAN-840

AREA:

SITES: 19-000840

QUADNAME: Malibu Beach

MEMO:

Mistake?

IC ID#: LA2512

DATE: 1991

PAGES 34

AUTHOR Norwood, Richard H.

FIRM: RT Factfinders

TITLE: Phase II Cultural Resource Evaluation for Historic Site LAN-1990 H the Winchester-Graham Property Lancaster, California

AREA:

SITES: 19-001990H

QUADNAME: Lancaster

MEMO:

Mistake?

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA2519 **DATE:** 1960 **PAGES** 23
AUTHOR Owen, J. Thomas
FIRM: Historical Society of Southern California
TITLE: The Church by the Plaza: A History of the Pueblo Church of Los Angeles
AREA:
SITES: 19-001112

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2567 **DATE:** 1979 **PAGES** 18
AUTHOR CHACE, PAUL G.
FIRM: Paul G. Chace and Associates
TITLE: Assessment of AN Archaeological Feature Beneath the Merced Theatre Building, El Pueblo De Los Angeles State Historic Park
AREA:
SITES: El Pueblo State Historic Park, National Register

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2692 **DATE:** 1985 **PAGES** 45
AUTHOR PADON, BETH, ROD RASCHKE, AND ROGER HATHOWAY
FIRM:
TITLE: Final Environmental Impact Statement Los Angeles Federal Center Master Plan
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA2712 **DATE:** 1978 **PAGES** 90
AUTHOR Huey, Gene
FIRM: CALTRANS
TITLE: Archaeological Survey Report for the El Monte Busway Extension in the City of Los Angeles, Los Angeles County, California
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2713 **DATE:** 1980 **PAGES** 75
AUTHOR Weitze, Karen J.
FIRM: CALTRANS
TITLE: Aliso Street Historical Report El Monte Busway Extension in the City of Los Angeles 07-LA-101 P.M.O. to .5 07202-417801
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA2768 **DATE:** 1989 **PAGES** 72
AUTHOR DILLON, BRIAN, AND ROY SALLS
FIRM:
TITLE: Draft Environmental Impact Report Central City West Specific Plan
AREA: 465 ac
SITES: None

QUADNAME: Hollywood
Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA2892

DATE: 1993

PAGES 17

AUTHOR Stone, David and Robert Sheets

FIRM: Science International Corporation

TITLE: Phase I Archaeological Survey Report Pacific Pipeline Project Santa Barbara Coastal
Reroutes Ethnohistoric Village Placement Locations

AREA:

SITES:

QUADNAME: Long Beach
South Gate

MEMO:

Mistake?

IC ID#: LA2950

DATE: 1992

PAGES 356

AUTHOR Anonymous

FIRM: Peak and Associates

TITLE: Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project

AREA: 172 ac

SITES: See Report

QUADNAME: See Report

MEMO:

IC ID#: LA2966

DATE: 1993

PAGES 31

AUTHOR Anonymous

FIRM: Geotransit Consultants

TITLE: Draft Stage I Environmental Site Assessment Eastside Extension (from Whittier
Boulevard and Atlantic Boulevard Intersection to Union Station area) Metro Red Line

AREA: 7 li mi

SITES:

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3151 **DATE:** 1994 **PAGES** 224
AUTHOR Dillon, Brian D.
FIRM:
TITLE: Alameda District Plan, Los Angeles California: Prehistoric and Early Historic
Archaeological Research
AREA: 68 ac
SITES: 19-000007,19-000887,19-001112, 19-001575

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3197 **DATE:** 1976 **PAGES** 36
AUTHOR GIERKE, FREDRICK JAMES
FIRM: Archaeology Laboratory, Spring Quarter
TITLE: Avila Adobe 1971 Excavation Potsherds
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA3496 **DATE:** n.d. **PAGES** 65
AUTHOR Anonymous
FIRM: Unknown
TITLE: Draft Environmental Impact Report Transit Corridor Specific Plan Park Mile Specific
Plan Amendments
AREA: 18.6 li mi
SITES: 19-000159,19-001945

QUADNAME: Burbank, Beverly Hills, Los Angeles, Van Nuys, Hollywood
MEMO: Indexed. No specific location map provided. Site mapped.

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA3510

DATE: 1983

PAGES 20

AUTHOR Knight, Al

FIRM: Westec Services, Inc.

TITLE: Technical Report Archaeological Resources Los Angeles Rail Rapid Transit Project
"Metro Rail" Draft Environmental Statement and Environmental Impact Report

AREA: 20 ac

SITES: 19-000007,19-000887,19-000159, 19-001945

QUADNAME: Los Angeles, Beverly Hills, Hollywood
Burbank, Van Nuys

MEMO: Indexed. No specific location map provided. Sites mapped.

IC ID#: LA4238

DATE: 1998

PAGES 5

AUTHOR Conkling, Steve

FIRM: LSA Associates, Inc.

TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R107, at the Intersection
of West First Street and South Hill Street, City and County of Los Angeles

AREA: <1ac

SITES: 19-100301

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4262

DATE: 1987

PAGES 124

AUTHOR Berger, Louis

FIRM: The Cultural Resource Group

TITLE: Zanja No. 3: Brick Culvert Historic American Engineering Record Documentation at the
Proposed Federal Center Complex Los Angeles, California

AREA: 2 ac

SITES: 19-000887

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA4447 **DATE:** 1999 **PAGES** 63
AUTHOR Anonymous
FIRM: Myra L. Frank & Associates
TITLE: Los Angeles County Demolition of Buildings Between Spring Street and New High Street
AREA:
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4623 **DATE:** 1986 **PAGES** 89
AUTHOR Unknown
FIRM: General Services Administration
TITLE: Los Angeles Federal Center Project: Determination of Effect on National Register
AREA: 11.1 ac
SITES: 19-171159, 19-170973, 19-167020, 19-173080, 19-173174, 19-173225
19-173078, 19-167499, 19-166939, 19-167278, 19-166858, 19-167010, 19-166891

QUADNAME: Los Angeles
MEMO:

IC ID#: LA4836 **DATE:** 2000 **PAGES** 319
AUTHOR ?
FIRM: Science Applications International Corporation
TITLE: Phase I Archaeological Survey Along onshore Portions of the Global West Fiber Optic
Cable Project
AREA: 200 miles
SITES: none

QUADNAME: South Gate, Venice, Hollywood, Inglewood, Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA5129 **DATE:** 2000 **PAGES** 9
AUTHOR Greenwood, Roberta S.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring at La Golondrina Café, Olvera Street, Pueblo De Los Angeles
State Historic Park
AREA: 1 ac
SITES: 19-167020, 19-167820

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5131 **DATE:** 1999 **PAGES** 4
AUTHOR Iverson, Gary
FIRM: Caltrans District 7
TITLE: Negative Archaeological Survey Report: 119910
AREA: <.25 li mi
SITES: none

QUADNAME: Los Angeles
MEMO:

IC ID#: LA5203 **DATE:** 2001 **PAGES** 9
AUTHOR Foster, John M.
FIRM: Greenwood And Associates
TITLE: Archaeological Monitoring Report: Soil Test Pit Excavation for the Siqueiros Mural
Project, El Pueblo de Los Angeles
AREA: <5 ac
SITES: none

QUADNAME: Los Angeles
MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA5413 DATE: 2000 PAGES 9

AUTHOR Lapin, Philippe

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 263-02,
County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA5426 DATE: 2001 PAGES 14

AUTHOR Hale, Alice

FIRM: Caltrans District 7

TITLE: Negative HPSR form: Central Ave. Improvements

AREA: 2 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

IC ID#: LA5433 DATE: 2001 PAGES 7

AUTHOR Slawson, Dana N.

FIRM: Greenwood & Associates

TITLE: EXPOSURE OF BRICK REMAINS ALONG CENTRAL AVENUE LITTLE TOKYO,
CITY OF LOS ANGELES

AREA: <1 ac

SITES: none

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA6358

DATE: 2002

PAGES 42

AUTHOR Hale, Alice

FIRM: Greenwood and Associates

TITLE: Archaeological Monitor Report Chinatown Branch Library 639 North Hill Street Los Angeles, California

AREA: 1 ac

SITES: 19-002959

QUADNAME: Los Angeles

MEMO:

IC ID#: LA6362

DATE: 1994

PAGES 35

AUTHOR Borg, Roger

FIRM: Caltrans District 7

TITLE: Finding of Effect on Historic Properties Arroyo Seco Parkway and Four Level Interchange

AREA: 6 li mi

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

IC ID#: LA6381

DATE: 1993

PAGES 33

AUTHOR Byrens, Joan

FIRM: General Services Administration, Region 9

TITLE: General Services Administration Design and Installation of Security Measures for the United States Courthouse Located at 312 North Spring Street, Los Angeles, California

AREA: 1 ac

SITES: None

QUADNAME: Los Angeles

MEMO: No map provided, mapped by reference

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA6840 **DATE:** 2003 **PAGES** 68
AUTHOR Budinger, Fred E., Jr.
FIRM: Tetra, Tech, Inc.
TITLE: Phase I Archaeological Survey Former Aliso Street MGP Site Los Angeles, California
AREA: 52 ac
SITES: None

QUADNAME: Los Angeles
MEMO: 22 site within .5 miles are mentioned in report

IC ID#: LA7527 **DATE:** 2006 **PAGES** 50
AUTHOR Feldman, Jessica B., Lemon, David, and Hope, Andrew
FIRM: Myra L. Frank & Associates, Inc./California Department of Transp
TITLE: Caltrans Statewide Historic Bridge Inventory Update Tunnels
AREA: 0
SITES: 19-187739, 19-187740, 19-187741, 19-187742, 19-187743, 19-187744, 19-187745,

QUADNAME: Los Angeles, Malibu, Beach, Condor Peak, Agua Dulce, Mt. Baldy, Beverly Hills, Van
MEMO:

IC ID#: LA7552 **DATE:** 2000 **PAGES** 7
AUTHOR Hale, Alice
FIRM: Greenwood and Associates
TITLE: Archaeological Monitor Report: Waste Line Trenching for the Cielito Lindo Restaurant
Olvera Street, El Pueblo de Los Angeles
AREA: ~.25 ac
SITES: Nat. Reg. Hist. Dist.

QUADNAME: Los Angeles
MEMO: Nat. Reg. Hist. Dist.

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7550 **DATE:** 2004 **PAGES** 76
AUTHOR Mirro, Vanessa and Gust, Sherri
FIRM: Cogstone Resource Management Inc.
TITLE: Archaeological and Paleontological Monitoring Report for the Grand Avenue
Realignment Project, Los Angeles, California
AREA: ~.5 ac
SITES: 19-003129H

QUADNAME: Los Angeles, Hollywood
MEMO:

IC ID#: LA7555 **DATE:** 2004 **PAGES** 4
AUTHOR Hale, Alice
FIRM: Greenwood and Associates
TITLE: Inspection of Auger Bore Samples for the Coyote Pass Geotechnical Project
AREA: ~7.5 ac
SITES: None

QUADNAME: Los Angeles
MEMO:

IC ID#: LA7544 **DATE:** 2006 **PAGES** 15
AUTHOR Foster, John M.
FIRM: Greenwood and Associates
TITLE: Archaeological Monitoring Program, Alameda Street/North Spring Street Arterial
Redesign-Phase 1, California
AREA: <1600 ft
SITES: 19-100542, 19-000007, 19-000887

QUADNAME: Los Angeles
MEMO: 30 sites within 1/2 mile radius of project area

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA7888 **DATE:** 2004 **PAGES** 52

AUTHOR Strauss, Monica

FIRM: EDAW, Inc.

TITLE: Archaeological Resources Assessment for the Proposed Public Safety Facilities Master Plan Project, City of Los Angeles, California

AREA: 36 ac

SITES: 19-003347, 19-186944, 17 sites listed on pages 27 and 28

QUADNAME: Los Angeles

MEMO:

IC ID#: LA8519 **DATE:** 1997 **PAGES** 50

AUTHOR Various

FIRM: Micropaleo Consultants, Georesources Associates, Beta Analytic

TITLE: The Metropolitan Water District of Southern California Headquarters Facility Project; Union Station, Los Angeles, California

AREA: 1.5 ac

SITES: None

QUADNAME: Los Angeles

MEMO: Firms cont'd: Paleo Environmental Associates

IC ID#: LA8514 **DATE:** 2004 **PAGES** 81

AUTHOR Gregory, Carrie and Margarita Wuellner

FIRM: EDAW, Inc.

TITLE: Historical Assessment and Technical Report for the Proposed Public Safety Facilities Master Plan, Los Angeles, California

AREA: 36 ac

SITES: 19-186882, 19-186883, 19-186884, 19-186885, 19-186886, 19-186887, 19-186888

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector LA Quadrangle

IC ID#: LA8969

DATE: 2007

PAGES 34

AUTHOR Warren, Keith

FIRM: Applied Earthworks, Inc.

TITLE: Results of Archaeological Monitoring for the New Police Administration Building

AREA: < 1 ac

SITES: 19-003091

QUADNAME: Hollywood, Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA110 **DATE:** 1974 **PAGES:** 4

AUTHOR: Clewlow, C. William Jr.
FIRM: University of California Archaeological Survey
TITLE: Report on the Archaeological Resources of Job No. 4059 for Ultrasystems, Inc.
AREA:
SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA1578 **DATE:** 1983 **PAGES:** 39

AUTHOR: Anonymous
FIRM: Westec Services, Inc.
TITLE: Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft
Environmental Impact Statement and Environmental Impact Report
AREA: 18 ac
SITES: None

QUADNAME: 1103
Burbank

MEMO:

IC ID#: LA1642 **DATE:** 1980 **PAGES:** 225

AUTHOR: Costello, Julia G.
FIRM: Science Applications Inc.
TITLE: Los Angeles Downtown People Mover Program Archaeologica Resources Survey: Phast II
Evaluation of Significance and Recommendations for Future Actions
AREA:
SITES: Historic structures

QUADNAME: Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA1741

DATE: 1989

PAGES: 75

AUTHOR: Dillon, Brian D.

FIRM:

TITLE: Archaeological and Paleontological Reconnaissance and Impact Evaluation of the Central City West Study Area Los Angeles, California

AREA: 350 ac

SITES: None

QUADNAME: Hollywood
Los Angeles

MEMO:

IC ID#: LA2028

DATE: 1974

PAGES: 40

AUTHOR: Clewlow, Carl

FIRM: Ultrasystems, Inc.

TITLE: Draft Environmental Impact Report Bank of America Service Center Los Angeles, California

AREA: 10 ac

SITES: None

QUADNAME: Hollywood
Los Angeles

MEMO:

IC ID#: LA2768

DATE: 1989

PAGES: 72

AUTHOR: DILLON, BRIAN, AND ROY SALLS

FIRM:

TITLE: Draft Environmental Impact Report Central City West Specific Plan

AREA: 465 ac

SITES: None

QUADNAME: Hollywood
Los Angeles

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA3103

DATE: 1993

PAGES: 415

AUTHOR: Greenwood, Roberta S.

FIRM:

TITLE: Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1

AREA: 4 li mi

SITES: 19-000007,19-000887,19-001575

QUADNAME: Los Angeles

MEMO:

IC ID#: LA4215

DATE: 1998

PAGES: 3

AUTHOR: Conkling, Steve

FIRM: LSA Associates, Inc.

TITLE: Results of Cultural Resources Monitoring, L.A. Cellular Cell Site R104, near West Third Street and South Grand Avenue, City and County of Los Angeles

AREA: 1 ac

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

IC ID#: LA447

DATE:

PAGES: 18

AUTHOR: Singer, Clay A.

FIRM:

TITLE: Preliminary Evaluation of Cultural Resources Located Along a Series of Proposed Urban Mass Transit System Alignment Alternatives in the City of Los Angeles, California

AREA:

SITES: ?

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA483

DATE: 1978

PAGES: 175

AUTHOR: Greenwood, Roberta

FIRM: Greenwood and Associates

TITLE: Archaeological Resources Survey the Proposed Downtown People Mover Project Corridor Area

AREA:

SITES: none

QUADNAME: Hollywood

Los Angeles

MEMO:

IC ID#: LA4836

DATE: 2000

PAGES: 319

AUTHOR: ?

FIRM: Science Applications International Corporation

TITLE: Phase I Archaeological Survey Along onshore Portions of the Global West Fiber Optic Cable Project

AREA: 200 miles

SITES: none

QUADNAME: South Gate, Venice, Hollywood, Inglewood, Los Angeles

MEMO:

IC ID#: LA5081

DATE: 2000

PAGES: 11

AUTHOR: Lapin, Philippe

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Wireless Facility LA 650-02, County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA5093 **DATE:** 1999 **PAGES:** 14

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 679-11, County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Hollywood

MEMO:

IC ID#: LA5098 **DATE:** 1999 **PAGES:** 11

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 226-01, County of Los Angeles, CA

AREA: <1 ac

SITES: none

QUADNAME: Hollywood

MEMO:

IC ID#: LA6362 **DATE:** 1994 **PAGES:** 35

AUTHOR: Borg, Roger

FIRM: Caltrans District 7

TITLE: Finding of Effect on Historic Properties Arroyo Seco Parkway and Four Level Interchange

AREA: 6 li mi

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA6437 **DATE:** 2000 **PAGES:** 22

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for AT&T Wireless Services Facility 1998, County of Los Angeles, California

AREA: 0.25 ac

SITES: 19-166958

QUADNAME: Hollywood

MEMO:

IC ID#: LA6435 **DATE:** 1999 **PAGES:** 16

AUTHOR: Duke, Curt

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA679-11, County of Los Angeles, California

AREA: 0.25 ac

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA6446 **DATE:** 2000 **PAGES:** 12

AUTHOR: Mason, Roger

FIRM: Chambers Group, Inc.

TITLE: Proposed AT&T Wireless Services Facility: 7th Hill (R282) in the City of Los Angeles, Los Angeles County, California

AREA: 0.25 ac

SITES: None

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA6460 **DATE:** 2002 **PAGES:** 49

AUTHOR: Duke, Curt and Judith Marvin

FIRM: LSA Associates, Inc.

TITLE: Cultural Resource Assessment Cingular Wireless Facility No. SM204-02, Los Angeles County, California

AREA: 0.25

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA6396 **DATE:** 2001 **PAGES:** 56

AUTHOR: Anonymous

FIRM: Tetra Tech, Inc.

TITLE: An Archaeological Assessment of the Proposed Verizon Wireless Grand Avenue, East Los Angeles Unmanned Cellular Telecommunications Site to be Located at 601 West 5th Street, Los Angeles County, California 90071

AREA: 1 ac

SITES: None

QUADNAME: Hollywood

MEMO:

IC ID#: LA6463 **DATE:** 2002 **PAGES:** 95

AUTHOR: ANONYMOUS

FIRM: TETRA TECH, INC.

TITLE: A SECTION 106 HISTORIC PRESERVATION REVIEW OF THE PROPOSED VERIZON WIRELESS GRAND AVENUE EAST LOS ANGELES UNMANNED CELLULAR TELECOMMUNICATIONS SITE TO BE LOCATED AT 601 WEST 5TH STREET, LOS ANGELES, CA 90071

AREA: < 1AC

SITES:

QUADNAME: HOLLYWOOD

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA6424

DATE: 2002

PAGES: 8

AUTHOR: DUKE, CURT

FIRM: LSA Associates, Inc.

TITLE: CULTURAL RESOURCE ASSESSMENT CINGULAR WIRELESS FACILITY NO. SM 140-01 LOS ANGELES COUNTY, CALIFORNIA

AREA: < .25 AC

SITES:

QUADNAME: HOLLYWOOD

MEMO:

IC ID#: LA6449

DATE: 2002

PAGES: 30

AUTHOR: Bonner, Wayne H.

FIRM: Chamabers Group, Inc.

TITLE: Cultural Resources Survey Report for an AT&T Wireless Services Telecommunications Facility: Cell Site 7th Hill (R282) in the City of Los Angeles, Los Angeles County, California Section 106 Historic 701 S. Hill Street Los Angeles

AREA: .25 ac

SITES: 19-173189

QUADNAME: Hollywood

MEMO: 19-173189 is listed as 701 S. Hill in State Historic Resources Inventory but project address is lis

IC ID#: LA6440

DATE: 2001

PAGES: 7

AUTHOR: Mason, Roger D.

FIRM: Chambers Group, Inc.

TITLE: Proposed Verizon Wireless Facility: Pershing Square (99800089) in the City and County of Los Angeles, California

AREA: .25 ac

SITES: None

QUADNAME: Hollywood

MEMO: DOE:19-01-0810-0000

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA7527

DATE: 2006

PAGES: 50

AUTHOR: Feldman, Jessica B., Lemon, David, and Hope, Andrew

FIRM: Myra L. Frank & Associates, Inc./California Department of Transp

TITLE: Caltrans Statewide Historic Bridge Inventory Update Tunnels

AREA: 0

SITES: 19-187739, 19-187740, 19-187741, 19-187742, 19-187743, 19-187744, 19-187745, 19-187746

QUADNAME: Los Angeles, Malibu, Beach, Condor Peak, Agua Dulce, Mt. Baldy, Beverly Hills, Van Nuys

MEMO:

IC ID#: LA7733

DATE: 2006

PAGES: 12

AUTHOR: Bonner, Wayne H.

FIRM: Michael Brandman Associates

TITLE: Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate
LSANCA0739 (811 Wilshire), 811 Wilshire Boulevard, Los Angeles, Los Angeles County,
California

AREA: <1 ac

SITES: 617 S. Olive, 630 W. 5th, 354-704 S. Spring, 300-849 S. Broadway, 401-411 W. 5th, btw
Broadway and Hill and 6th and 7th, 830 Wilshire

QUADNAME: Hollywood

MEMO:

IC ID#: LA7774

DATE: 2005

PAGES: 11

AUTHOR: Bonner, Wayne H.

FIRM: Michael Brandman Associates

TITLE: Cultural Resources Records Search Results and Site Visit for Cingular Wireless EL-038-01
(SBC Switch-Downtown LA), 433 South Olive Street & 434 Grand Avenue (aka 420 South
Grand Avenue), Los Angeles, Los Angeles County, California

AREA: <1 ac

SITES: 533, 540 Grand Ave.; 449, 515 S. Olive St.; 423, 550 W. 4th St; 401, 415, 427, 501 W. 5th St.

QUADNAME: Hollywood

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA7980 **DATE:** 2006 **PAGES:** 15

AUTHOR: Bonner, Wayne H.

FIRM: Michael Brandman Associates

TITLE: Cultural Resources Records Search and Site Visit Results for Royal Street Communications, LLC Candidate LA0155A (433 S. Olive Street: AT&T Switch), 433 South Olive Street, Los Angeles, Los Angeles County, California

AREA: <1 ac

SITES: None

QUADNAME: Hollywood

MEMO: 14 NR properties located within one-half mile radius of the candidate

IC ID#: LA8026 **DATE:** 1985 **PAGES:** 17

AUTHOR: Carrico, Richard

FIRM: WESTEC Services, Inc.

TITLE: Treatment Plan for Potential Cultural Resources within Proposed Metro Rail Subway Station Locations in Metropolitan Los Angeles, California

AREA: ~80 ac

SITES: None

QUADNAME: Los Angeles, Hollywood

MEMO:

IC ID#: LA8252 **DATE:** 1986 **PAGES:** 113

AUTHOR: Snyder, John W.

FIRM: Caltrans

TITLE: Request for Determination of Eligibility for Inclusion in the National Register of Historic Places

AREA:

SITES: 19-173803, 19-173432, 19-174996, 19-175070, 19-171738

QUADNAME: Los Angeles, Hollywood, Pasadena

MEMO:

SCCIC Bibliography: Regional Connector Hollywood Quadrangle

IC ID#: LA8754

DATE: 2007

PAGES: 13

AUTHOR: Bonner, Wayne H. and Kathleen Crawford

FIRM: Michael Brandman Associates (MBA)

TITLE: Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate LA03104K
(California Jewelry), 607 South Hill Street, Los Angeles, Los Angeles County, California

AREA: < 1 ac

SITES: 19-166921

QUADNAME: Hollywood

MEMO:

APPENDIX B

SACRED LANDS FILE SEARCH AND NATIVE AMERICAN CONSULTATION

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net



February 9, 2009

Ms. Caprice "Kip" Harper, RPA
SWCA ENVIRONMENTAL CONSULTANTS
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

Sent by FAX to 626-240-0807
No. Pages: 2

Re: Request for a Sacred Lands File records search and Native American Contacts list for "Regional Connector Transit Corridor Project, City and County of Los Angeles." The project will extend the Blue Line from the 7th Street/Metro Center Terminus to the Union Station via the Little Tokyo/Arts District Station on the Metro Gold Line Extension. Los Angeles County, California

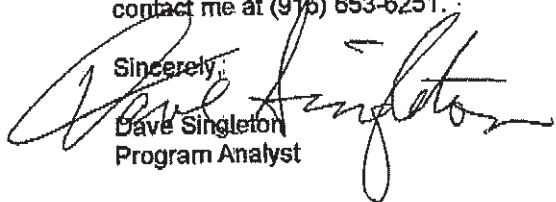
Dear Ms. Harper:

The Native American Heritage Commission was able to perform a record search of its Sacred Lands File (SLF) for the affected project area (APE). The SLF search did indicate the presence of Native American cultural resources in the project area (APE or 'area of potential effect).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of the nearest tribes that may have knowledge of cultural resources in the project area. We recommend that you contact persons on the attached list of Native American contacts. A Native American tribe or individual may be the only source of information about a cultural resource. They may have specific knowledge as to whether or not the known cultural resources identified may be at-risk by the proposed project

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contacts
Los Angeles County
February 11, 2009

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C
Long Beach, CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower, CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax

Gabrielino Tongva

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.

Gabrielino Tongva

tattnlaw@gmail.com
310-570-6567

Gabrielino/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel, CA 91778
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Gabrielino Tongva

Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
P.O. Box 86908
Los Angeles, CA 90086
samdunlap@earthlink.net

Gabrielino Tongva

(909) 262-9351 - cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Regional Connector Transit Corridor Project, City and County of Los Angeles, California; FOR the "extension from the Blue Line at the 7th Street/Metro Center terminus to Union Station via the Little Tokyo/Arts District Station on the Metro Gold Line; Los Angeles County, California for which a Sacred Lands File search and NAC list were requested.



ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Pasadena Office
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Tel 626.240.0587 Fax 626.240.0607
www.swca.com

April 16, 2009

Cindi Alvitre
Ti'At Society
6515 E. Seaside Walk, #C
Long Beach, CA 90803

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Ms. Alvitre:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

Ground disturbing construction activities associated with the at-grade portions of the At-Grade Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,



Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)



ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Pasadena Office
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Tel 626.240.0587 Fax 626.240.0607
www.swca.com

April 16, 2009

Robert Dorame
Gabrielino Tongva Indians of California Tribal Council
P.O. Box 490
Bellflower, CA 90707

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Dorame:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

Ground disturbing construction activities associated with the at-grade portions of the At-Grade Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,



Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)



ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Pasadena Office
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Tel 626.240.0587 Fax 626.240.0607
www.swca.com

April 16, 2009

Sam Dunlap
Gabrielino Tongva Nation
P.O. Box 86908
Los Angeles, CA 90086

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Dunlap:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

Ground disturbing construction activities associated with the at-grade portions of the At-Grade Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,



Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)

April 16, 2009

Anthony Morales
Gabrielino/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778

Sent Via U.S. Mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Morales:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

Ground disturbing construction activities associated with the at-grade portions of the At-Grade Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,



Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)



ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Pasadena Office
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Tel 626.240.0587 Fax 626.240.0607
www.swca.com

April 16, 2009

John Tommy Rosas
Tongva Ancestral Territorial Tribal Nation
tattnlaw@gmail.com

Sent Via E-mail

RE: Regional Connector Transit Corridor Project, City of Los Angeles, Los Angeles County, CA

Dear Mr. Rosas:

SWCA Environmental Consultants has been retained to conduct a cultural resources survey for the Regional Connector Transit Corridor Project in the City of Los Angeles, Los Angeles County, California. As part of the process of identifying cultural resources issues for this project, the Native American Heritage Commission (NAHC) was contacted by SWCA to conduct a Sacred Lands File search and to provide a list of Native American individuals and/or tribal organizations that may have knowledge of cultural resources in or near the project area. The NAHC search "did indicate the presence of Native American cultural resources in the project area," and recommended that we consult with you directly regarding your knowledge of the presence of cultural resources that may be impacted by this project.

The Regional Connector Transit Corridor Project is a proposed transit infrastructure improvement project that would construct 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th St./Metro Center Station (the Metro Blue Line and Metro Expo Line [2010] terminus) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st and Alameda Streets. The project would include the construction of several new Metro stations in Downtown Los Angeles and would create direct trains between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct trains into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- At-Grade Emphasis LRT Alternative
- Underground Emphasis LRT Alternative

Please refer to the enclosed project maps, Figure 2-2A (At-Grade Emphasis LRT Alternative Alignment and Configuration) and Figure 2-2B (Underground Emphasis LRT Alternative Alignment and Configuration) for an overview of the proposed alignments.

Ground disturbing construction activities associated with the at-grade portions of the At-Grade

Emphasis LRT Alternative are anticipated to a maximum depth of 20 feet below grade. Ground disturbing activities for the underground portions of the At-Grade Emphasis LRT Alternative and the Underground LRT Alternative are anticipated to an approximate maximum depth of 100 feet below grade.

Archaeological and Built-Environment Survey Reports are being prepared by our technical staff, however, we acknowledge that some areas may contain values not readily apparent and would appreciate any such information you can provide. Please notify us in writing, if you have information on potential or identified cultural resources in the project study area by no later than close of business, **Thursday, April 30, 2009**. If we do not receive a response, we will follow up to ensure receipt of the letter. Please contact me with any applicable comments:

SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, California 91030
Phone: (626) 240-0587
Fax: (626) 240-0607
E-mail: kharper@swca.com

This consultation is project-specific and Senate Bill 18 consultation is not expected.
Thank you for your assistance.

Sincerely,



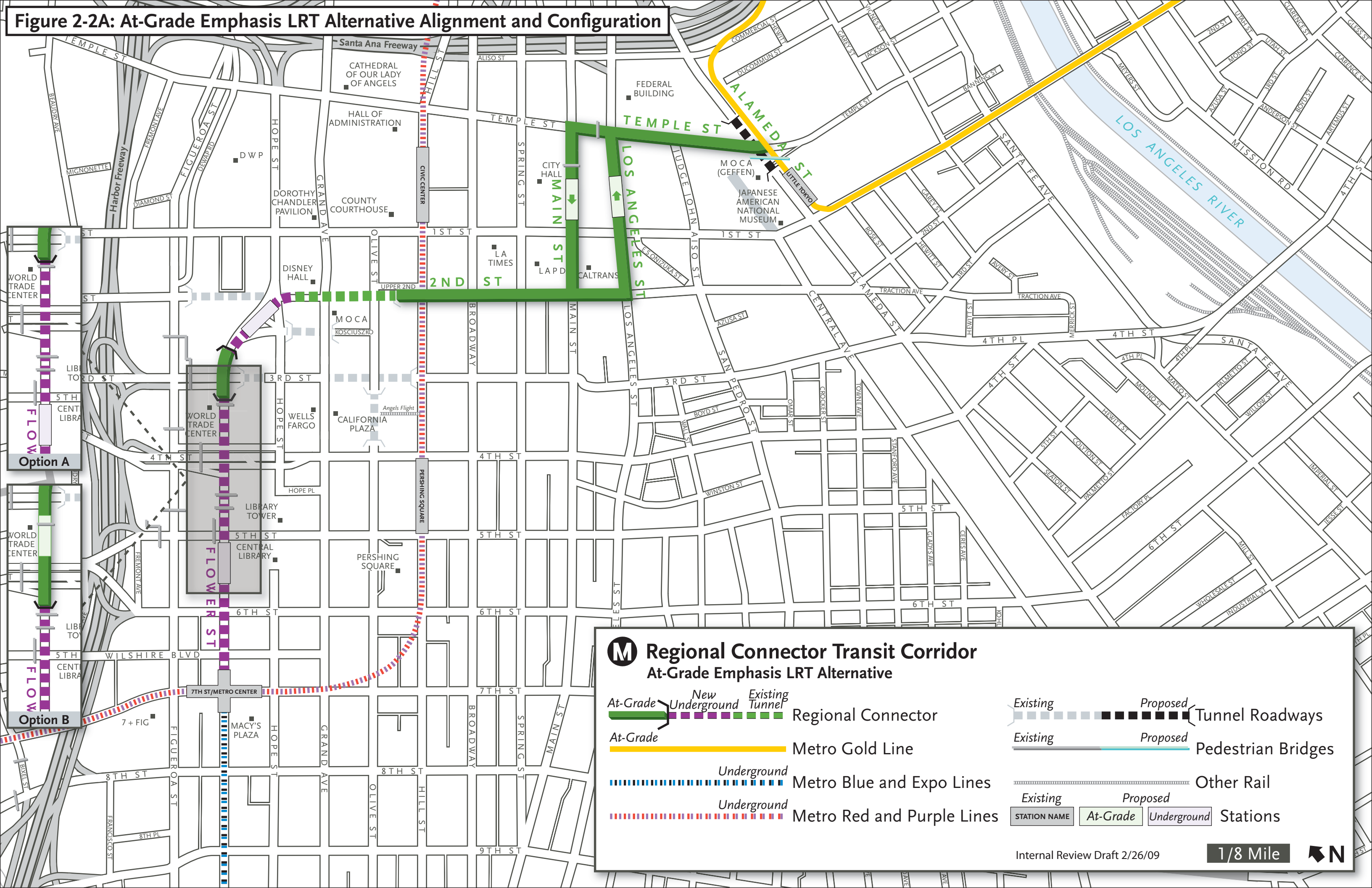
Caprice D. (Kip) Harper, M.A., RPA
Project Manager – Cultural Resources

Enclosures:

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration
Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration

cc: Dolores Roybal Saltarelli, Metro (via e-mail)
Helene Kornblatt, CDM (via e-mail)
Ray Sosa, CDM (via e-mail)
Monica Villalobos, CDM (via e-mail)

Figure 2-2A: At-Grade Emphasis LRT Alternative Alignment and Configuration

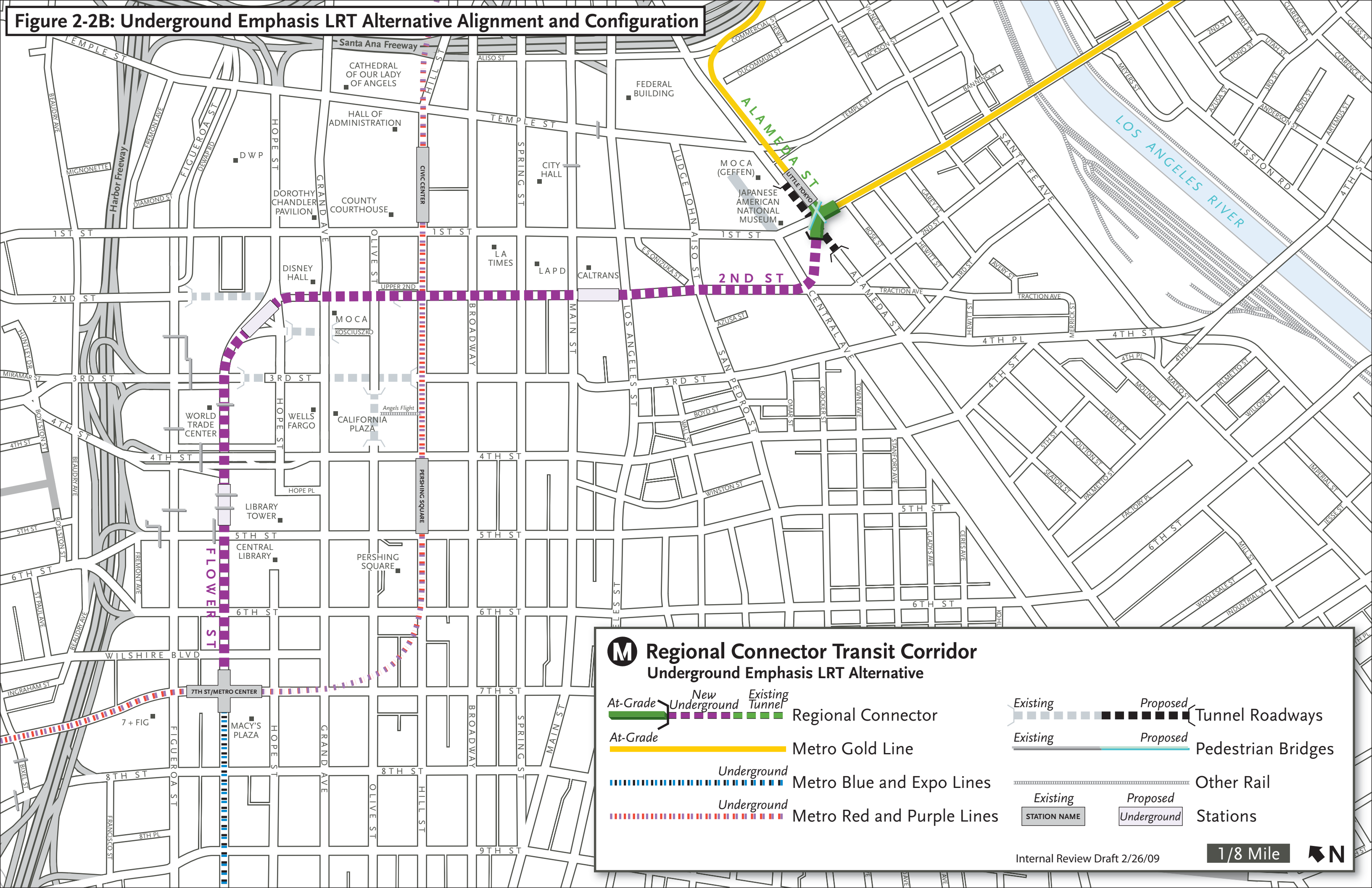


M Regional Connector Transit Corridor
At-Grade Emphasis LRT Alternative

<p>At-Grade </p> <p>Underground </p>	<p>New </p> <p>Existing </p>	<p>Regional Connector</p>	<p>Existing </p> <p>Proposed </p>	<p>Tunnel Roadways</p>
<p>At-Grade </p>		<p>Metro Gold Line</p>	<p>Existing </p> <p>Proposed </p>	<p>Pedestrian Bridges</p>
<p>Underground </p>		<p>Metro Blue and Expo Lines</p>		<p>Other Rail</p>
<p>Underground </p>		<p>Metro Red and Purple Lines</p>	<p>Existing </p> <p>Proposed </p>	<p>Stations</p>

Internal Review Draft 2/26/09 1/8 Mile

Figure 2-2B: Underground Emphasis LRT Alternative Alignment and Configuration



M Regional Connector Transit Corridor
Underground Emphasis LRT Alternative

<p>At-Grade </p> <p>New Underground </p> <p>Existing Tunnel </p>	<p> Regional Connector</p> <p> Metro Gold Line</p> <p> Metro Blue and Expo Lines</p> <p> Metro Red and Purple Lines</p>	<p>Existing </p> <p>Proposed </p> <p> Tunnel Roadways</p> <p>Existing </p> <p>Proposed </p> <p> Pedestrian Bridges</p> <p> Other Rail</p> <p>Existing </p> <p>Proposed </p> <p> Stations</p>
--	---	--

Internal Review Draft 2/26/09 1/8 Mile

CONVERSATION RECORD

DATE 4/17/09 **TIME** 3:55 A.M. P.M.

NAME OF CONTACT Anthony Morales

COMPANY/AGENCY Gabrielino/Tongva San Gabriel Band of Mission Indians

PHONE NUMBER _____

PROJECT NAME Regional Connector
Transit Corridor Project **PROJECT NO.** 14104

Notes:

On 4/17/09 Mr. Morales called to discuss the letter that he received regarding the proposed Regional Connector Transit Corridor Project (Regional Connector). At first he thought the letter was in regards to construction on Alameda Street related to the Gold Line Extension. Mr. Morales was concerned that so much construction is underway for that project, and he had not been contacted about it by an archaeologist (or anyone). He said that he was concerned about that project because of its proximity to the village of Yangna and the Metropolitan Water District (MWD) building. He expressed dismay that MTA had never contacted him about the project.

I explained that the project that we are working on is Regional Connector that would connect the Red Line station at 7th/Flower with the Gold Line Extension station at Alameda/Temple.

Mr. Morales said that he had similar concerns about Regional Connector's proximity to the village of Yangna. In addition, Mr. Morales said that he considers the project area to be highly sensitive for Native American resources and sacred places considering that this is in the heart of the city.

Mr. Morales said that he is aware of the fact that cultural resources have been uncovered during the construction of pipelines in the downtown area, and that human remains were uncovered during construction of the MWD [Metropolitan Water District] building.

Mr. Morales wants the MTA [Metro] to know that a local tribe—the Gabrielino--has concerns.

RECORDED BY: K. Harper

Kip Harper

From: Johntommy Rosas [tattnlaw@gmail.com]
Sent: Friday, April 17, 2009 4:00 PM
To: Kip Harper
Subject: Re: Regional Connector Transit Corridor Project

OK -I WILL BE SENDING MORE-

AND IN MORE DETAIL-

AND I TYPE IN CAPS MOST OF THE TIME SO DONT MAKE MISTAKE OF ASSUMING -I AM NOT YELLING-I DONT DO THAT-.
THANKS JOHNTOMMY

On Fri, Apr 17, 2009 at 3:52 PM, Kip Harper <KHarper@swca.com> wrote:

Dear Mr. Rosas,

Your comments have been received.

Kip

Caprice D. (Kip) Harper

Project Manager-Cultural Resources

SWCA Environmental Consultants

625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030
Phone: (626) 240-0587
Fax: (626) 240-0607

email: kharper@swca.com

Preliminary Draft - For Discussion Purposes Only: This email may contain material that is confidential and privileged for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Thursday, April 16, 2009 12:34 PM
To: Kip Harper

Subject: Re: Regional Connector Transit Corridor Project

HI I CONFIRM RECEIPT OF YOUR DOCUMENT,

WE OBJECT AND OPPOSE THIS PROPOSED PROJECT,

ON GROUNDS THAT ITS A GROWTH INDUCING NEGATIVE IMPACT UNDER CEQA,

ON VIOLATIONS TO OUR INDIGENOUS RIGHTS,

AND THAT THE TATTN LANDS ARE OURS

AND SO THE CLAIMED LAND TITLES BY PROJECT[OWNERS] IS DEFECTIVE AND ILLEGAL.

/S/ JOHNTOMMY ROSAS

On Thu, Apr 16, 2009 at 12:02 PM, Kip Harper <KHarper@swca.com> wrote:

Dear Mr. Rosas,

I have attached a letter regarding the Regional Connector Transit Corridor Project for your review.

Regards,

Kip

Caprice D. (Kip) Harper

4/17/2009

Project Manager-Cultural Resources

SWCA Environmental Consultants

625 Fair Oaks Avenue, Suite 190

South Pasadena, CA 91030

Phone: (626) 240-0587

Fax: (626) 240-0607

email: kharper@swca.com

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
OFFICIAL TATTN E-MAIL CONFIDENTIAL
ALL RIGHTS RESERVED
TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure, or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
OFFICIAL TATTN E-MAIL CONFIDENTIAL
ALL RIGHTS RESERVED
TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure, or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

Kip Harper

From: Johntommy Rosas [tattnlaw@gmail.com]
Sent: Monday, May 11, 2009 11:10 AM
To: Kip Harper
Subject: Re: Regional Connector Transit Corridor Project

HI - YOUR INFORMATION ATTCHMENT -DOES NOT CONTAIN ANY ENVIRONMENTAL, CONSTRUCTION REPORTS OR DETAILS SO WE CAN CONTINUE OUR DETAILED RESPONSE-

ALSO YOU CANT LEGALLY IMPOSE DEADLINES ON US - SO DONT TRY OR MAKE THOSE COMMENTS TO US.

WE WILL RESPOND DIRECTLY TO LEAD AGENCY[S] NOW-

On Mon, May 11, 2009 at 11:01 AM, Kip Harper <KHarper@swca.com> wrote:

Dear Mr. Rosas,

I am following up with you regarding your last email. We haven't received a response yet.

If you'd like to send a more detailed response, please do so by the end of the week.

Regards,

Kip

Caprice D. (Kip) Harper

Project Manager-Cultural Resources

SWCA Environmental Consultants

625 Fair Oaks Avenue, Suite 190

South Pasadena, CA 91030

Phone: (626) 240-0587

Fax: (626) 240-0607

email: kharper@swca.com

Preliminary Draft - For Discussion Purposes Only: This email may contain material that is confidential and privileged for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express

permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]

Sent: Friday, April 17, 2009 4:00 PM

To: Kip Harper

Subject: Re: Regional Connector Transit Corridor Project

OK -I WILL BE SENDING MORE-

AND IN MORE DETAIL-

AND I TYPE IN CAPS MOST OF THE TIME SO DONT MAKE MISTAKE OF ASSUMING -I AM NOT YELLING-I DONT DO THAT-.

THANKS JOHNTOMMY

On Fri, Apr 17, 2009 at 3:52 PM, Kip Harper <KHarper@swca.com> wrote:

Dear Mr. Rosas,

Your comments have been received.

Kip

Caprice D. (Kip) Harper

Project Manager-Cultural Resources

SWCA Environmental Consultants

625 Fair Oaks Avenue, Suite 190

South Pasadena, CA 91030

Phone: (626) 240-0587

5/11/2009

Fax: (626) 240-0607

email: kharper@swca.com

Preliminary Draft - For Discussion Purposes Only: This email may contain material that is confidential and privileged for the sole use of the intended recipient. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies.

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Thursday, April 16, 2009 12:34 PM
To: Kip Harper
Subject: Re: Regional Connector Transit Corridor Project

HI I CONFIRM RECEIPT OF YOUR DOCUMENT,

WE OBJECT AND OPPOSE THIS PROPOSED PROJECT,

ON GROUNDS THAT ITS A GROWTH INDUCING NEGATIVE IMPACT UNDER CEQA,

ON VIOLATIONS TO OUR INDIGENOUS RIGHTS,

AND THAT THE TATTN LANDS ARE OURS

AND SO THE CLAIMED LAND TITLES BY PROJECT[OWNERS] IS DEFECTIVE AND ILLEGAL.

/S/ JOHNTOMMY ROSAS

On Thu, Apr 16, 2009 at 12:02 PM, Kip Harper <KHarper@swca.com> wrote:

Dear Mr. Rosas,

I have attached a letter regarding the Regional Connector Transit Corridor Project for your review.

5/11/2009

Regards,

Kip

Caprice D. (Kip) Harper

Project Manager-Cultural Resources

SWCA Environmental Consultants

625 Fair Oaks Avenue, Suite 190

South Pasadena, CA 91030

Phone: (626) 240-0587

Fax: (626) 240-0607

email: kharper@swca.com

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
OFFICIAL TATTN E-MAIL CONFIDENTIAL
ALL RIGHTS RESERVED
TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure, or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR

5/11/2009

TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
OFFICIAL TATTN E-MAIL CONFIDENTIAL
ALL RIGHTS RESERVED
TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure, or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.
TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
OFFICIAL TATTN E-MAIL CONFIDENTIAL
ALL RIGHTS RESERVED
TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure, or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

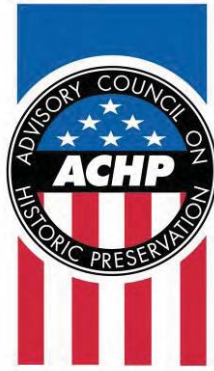
APPENDIX C

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION- SERIES 523 FORMS

**Appendix C removed to protect confidential
locations of archeological resources.**

APPENDIX D

PROJECT-RELATED FTA/SHPO CORRESPONDENCE



Preserving America's Heritage

March 31, 2009

Mr. Roger Snoble
Chief Executive Officer
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952

RE: *Regional Connector Transit Project*
Los Angeles County, California

Dear Mr. Snoble:

On March 17, 2009, the Advisory Council on Historic Preservation (ACHP) received your invitation to participate in the environmental review process for the referenced undertaking pursuant to Section 6002 of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). At this time, we do not expect to attend meetings or provide formal comments at environmental review milestones. However, we retain the right to become involved in the environmental review for this action in the future if, based on information provided by the Federal Transit Administration (FTA) or other consulting parties, we determine that our involvement is warranted.

In order to ensure compliance with Section 106 of the *National Historic Preservation Act*, the ACHP encourages FTA to initiate the Section 106 process by notifying, at its earliest convenience, the appropriate State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), Indian tribes, and other consulting parties pursuant to our regulations, "Protection of Historic Properties" (36 CFR Part 800). Through early consultation, FTA and your agency will be able to determine the appropriate strategy to ensure Section 106 compliance for this undertaking. Please note that FTA, as the federal agency, must be involved in the notification of consulting parties.

FTA and the Los Angeles County Metropolitan Transportation Authority should continue consultation with the appropriate SHPO/THPO, Indian tribes, and other consulting parties to identify and evaluate historic properties and to assess any potential adverse effects on those historic properties. If you determines through consultation with the consulting parties that the undertaking will adversely affect historic properties, or that the development of an agreement document is necessary, FTA must notify the ACHP and provide the documentation detailed at 36 CFR § 800.11(e). In the event that this undertaking is covered under the terms of an existing agreement document, you should follow the process it outlines.

Should you have any questions as to how your agency should comply with the requirements of Section 106, please contact Blythe Semmer by telephone at (202) 606-8552 or by e-mail at bsemmer@achp.gov.

Sincerely,

A handwritten signature in black ink that reads "LaShavio Johnson". The signature is written in a cursive, flowing style.

LaShavio Johnson
Historic Preservation Technician
Federal Permitting, Licensing, and Assistance Section
Office of Federal Agency Programs



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
Northern Mariana Islands

201 Mission Street
Suite 1650
San Francisco, CA 94105-1839
415-744-3133
415-744-2726 (fax)

Mr. Milford Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
California State Department of Parks and Recreation
Post Office Box 942896
Sacramento, CA 94296-0001

APR - 7 2009

Attention: Dr. Susan Stratton, Supervisor, Project Review Unit

Re: Regional Connector Transit Corridor Project

Dear Mr. Donaldson:

The Federal Transit Administration (FTA), in coordination with the Los Angeles County Metropolitan Transportation Authority (LACMTA), is pleased to initiate efforts in the identification of historic properties and the analysis of effects on those properties for various components of the proposed Regional Connector Transit Corridor Project in downtown Los Angeles, California. This letter is to request your review and concurrence with the Area of Potential Effects (APE) and to delegate the authority to consult directly with the LACMTA.

Cultural resources identification and analysis will be prepared in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, as required by the Advisory Council on Historic Preservation, with regulations contained in 36 Code of Federal Regulations (CFR), Part 800, and applicable sections of the California Environmental Quality Act (CEQA).

Project Description

The Regional Connector Transit Corridor Project is a proposed light rail transit infrastructure improvement project that would construct approximately 1.8 miles of a new set of dual tracks in order to connect four vital travel corridors that stretch across 50 miles of Los Angeles County. The proposed project would directly link the 7th Street/Metro Center Station (the terminus of the existing Metro Blue Line and Metro Expo Line under construction and opening in 2010) located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station (a new Metro Gold Line Station opening in 2009) located at 1st.and Alameda Streets. The project would include the construction of several new Metro stations in downtown Los Angeles and would create direct connections between Long Beach and Pasadena, as well as East Los Angeles and Culver City. It would also provide passengers with direct connections into the heart of the business and civic districts. These improvements would provide regional benefits to people throughout Los Angeles County.

Metro will evaluate the following four (4) alternatives in a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR):

- No Build (Baseline)
- Transportation System Management (TSM)
- Build Alternative 1: At-Grade Emphasis Light Rail Transit (LRT) Alternative (includes two options for station locations)
- Build Alternative 2: Underground Emphasis LRT Alternative

Stations

Proposed station locations would include the following (depending on the selected alternative):

- Build Alternative 1:
 - Underground station on Flower Street, just north of 5th (Option A only)
 - At-grade station on Flower Street, just south of 3rd Street (Option B only)
 - Underground station just south of the intersection of Hope and Flower Streets
 - At-grade northbound only station on Los Angeles Street, just north of 1st Street
 - At-grade southbound only station on Main Street, just north of 1st Street
- Build Alternative 2:
 - Underground station on Flower Street, just north of 5th Street
 - Underground station just south of the intersection of Hope and Flower Streets
 - Underground station on 2nd Street between Broadway and Los Angeles Streets.

Area of Potential Effects

A proposed project-specific APE was established in accordance with 36 CFR Part 800.16 (d), which defines an APE as:

the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

The proposed project APE (see enclosed map) was delineated to ensure identification of significant historic and architectural resources that may be directly or indirectly affected by the proposed project and are listed in or eligible for inclusion in the National Register of Historic Places (National Register) and/or California Register of Historical Resources (California Register). The APE was established using methodology consistent with those of previous LACMTA projects.

For historic and architectural resources, the proposed APE includes all parcels adjacent to both sides of the proposed project alignment, including stations, subway or open cut construction areas, and areas proposed for acquisition. In addition, the APE includes areas that may be subject to potential project-related effects, including visual or audible effects, and settlement effects that may

result from construction or implementation the proposed project. Additionally, the built environment APE includes the boundaries of two known identified historic districts that are listed in or eligible for the National Register.

For archaeological resources, the proposed APE includes the proposed at-grade and underground right-of-way and/or areas of direct ground disturbance. The APE also includes areas with permanent site improvements and areas for staging and temporary construction activities.

The proposed vertical APE extends from approximately 0 to 25 feet above the existing ground surface to approximately 100 feet below the existing ground surface.

Because the proposed project is expected to be constructed by 2018, identification efforts will be focused on parcels containing improvements constructed in or before 1968 (2018-50 years=1968). Those improvements will be evaluated for National and California register eligibility as part of the project identification phase, as well as noting all previously identified historic properties and historical resources.

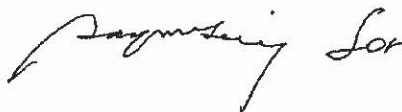
Consultation Coordination

To the extent that it facilitates the review and approval process, FTA has authorized certain experienced and knowledgeable agencies to consult directly with you in addressing Section 106 requirements. In permitting this arrangement, agencies have been instructed to keep FTA informed by forwarding copies of all transmittals to our attention, and immediately contacting FTA on matters deemed to be of significant importance. Until further notice, this authority is extended to the LACMTA for the Regional Connector Transit Corridor project.

Previous scoping efforts have taken place and are expected to continue over the next several months. On behalf of FTA, the LACMTA supported by its consultants Camp Dresser and McKee (CDM) and Steven W. Carothers & Associates (SWCA), is currently contacting local historic groups, Native American groups, and other stakeholders that may have an interest in the project. The LACMTA also expects to meet with the Los Angeles Conservancy and the City of Los Angeles, Office of Historic Resources, to address their concerns.

Please let us know if you have comments on the project description, APE definition, methodology, or map. If you or your staff is interested in a site visit of the corridor, we would be pleased to accommodate your request. The LACMTA appreciates your assistance in the preservation of cultural resources related to all aspects of their transit system. If you or any members of your staff have questions, please contact Mr. Ray Tellis of our Los Angeles Metropolitan Office at (213) 202-3956.

Sincerely,



Leslie T. Rogers
Regional Administrator

Enclosure: Draft Area of Potential Effects Map

cc: Dolores Roybal Saltarelli, Project Manager, LACMTA

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



September 9, 2009

Reply In Reference To: FTA090409B

Leslie T. Rodgers
Regional Administrator
U.S. Department of Transportation
Federal Transit Administration, Region IX
201 Mission Street, Suite 1650
San Francisco, CA 94105-1839

RE: Section 106 Consultation for Proposed Regional Connector Transit Corridor Project, Los Angeles, CA

Dear Mr. Rodgers:

Thank you for initiating consultation with me pursuant to 36 CFR Part 800, the implementing regulation of Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended. On behalf of the U.S. Department of Transportation, Federal Transit Administration (FTA), you are both initiating consultation with me and seeking my comments on your initial documentation of the undertaking's Area of Potential Effect (APE).

As I understand it, the Regional Connector Transit Corridor Project is a proposed light rail transit infrastructure improvement project that will necessitate the construction of approximately 1.8 miles of new dual tracks. The project will connect four travel corridors that stretch across 50 miles of Los Angeles County. The proposed project will directly link the 7th Street/Metro Center Station located at 7th and Figueroa Streets to the Little Tokyo/Arts District Station located at 1st and Alameda Streets. The project will include the construction of several new Metro stations in downtown Los Angeles and would create direct connections between Long Beach and Pasadena, as well as East Los Angeles and Culver City. In addition to your project description, you have submitted descriptions of route and design alternatives, detailed aerial maps of the project area, and a summary of initial consultation efforts pertaining to potentially interested Native American groups, local government entities, and local historic preservation organizations.

Having reviewed this documentation, I have the following comments:

- 1) The initial APE for this undertaking has been adequately determined and documented pursuant to 36 CFR Part 800.4 (a) (1);
- 2) As outlined in conversations between State Historian Tristan Tozer, State Associate Archaeologist William Soule and Francesca Smith of SWCA Environmental Consultants, I will be sent draft cultural resource/built environment surveys and archaeology technical reports encompassing the project area. Once I have received this information, I will provide further comment;

3) Please submit proof of public notification and consultation, including copies of notification letters and any responses you may receive.

Thank you for considering historic resources during project planning. I look forward to continuing this consultation. If you have any questions or comments, please contact staff historian Tristan Tozer at (916) 651-0304 or email at ttozer@parks.ca.gov.

Sincerely,

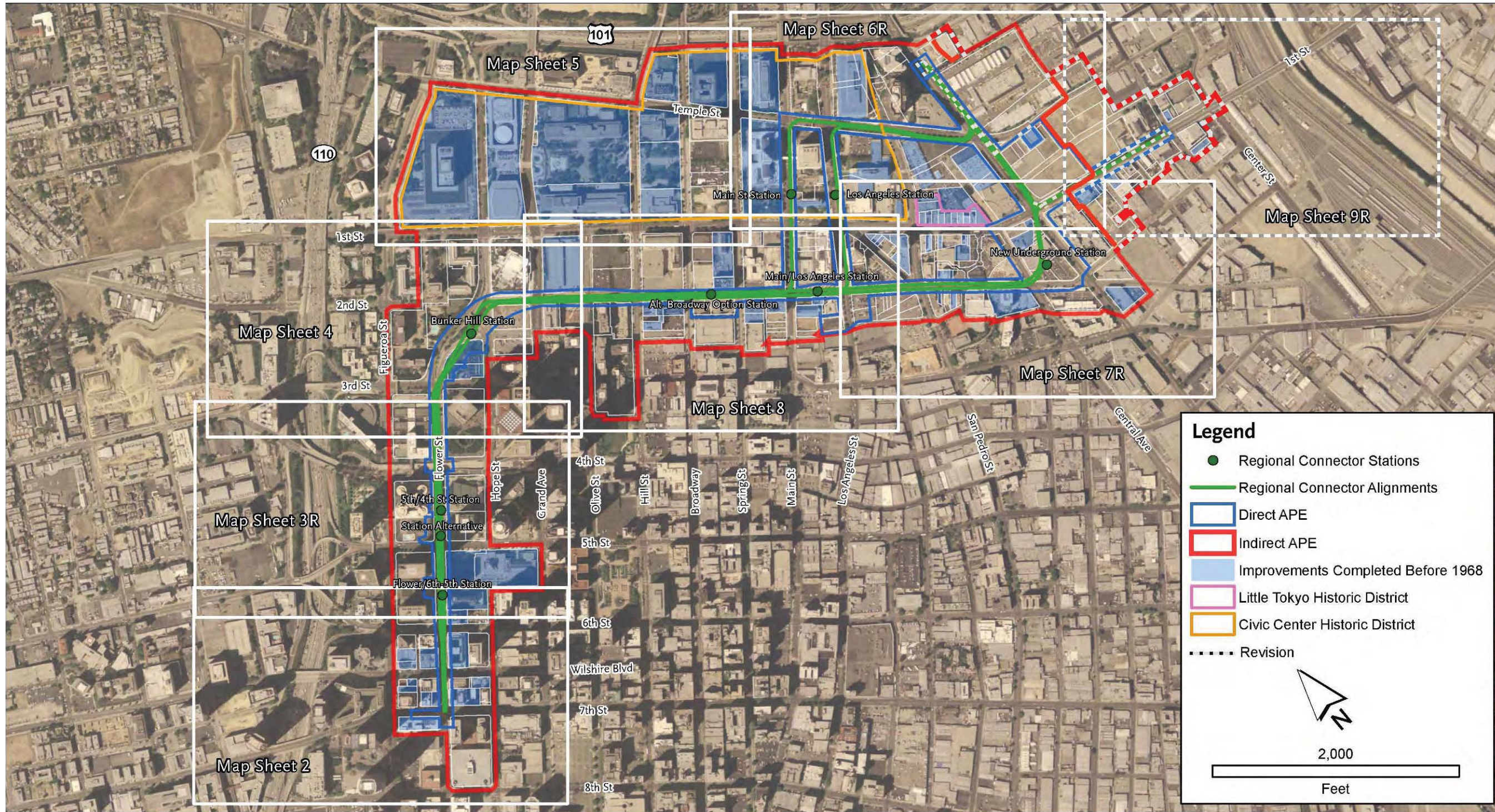


Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

APPENDIX E

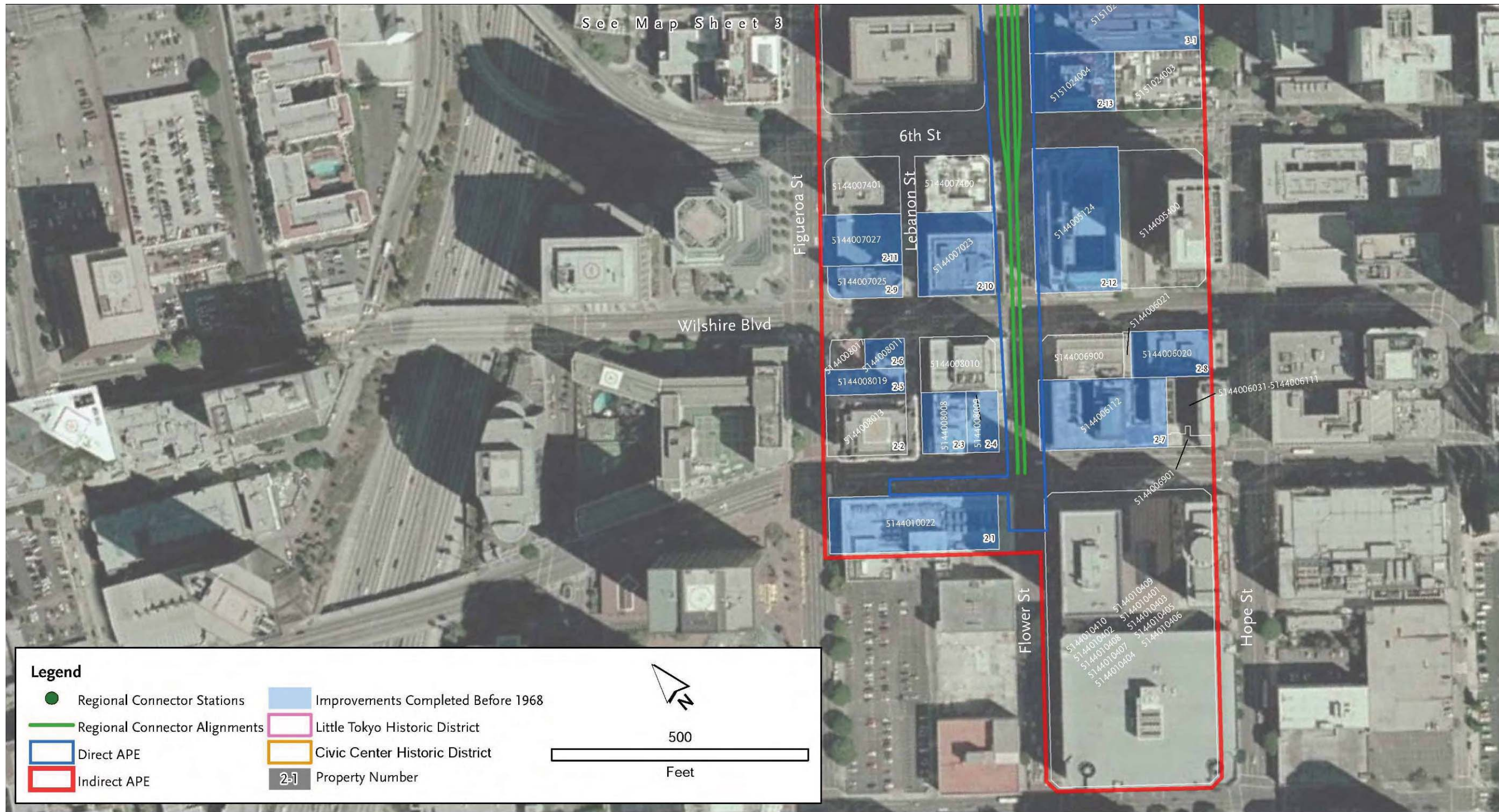
PROJECT AREA OF POTENTIAL EFFECTS MAP

The following maps depict the project Area of Potential Effects. This series of maps were prepared for the Built Environment Technical Memorandum and show the locations of historic built environment features. They are included in this appendix because they also include the tax assessor's parcel numbers referred to in the archaeology survey methodology section, Section 4.4.2.



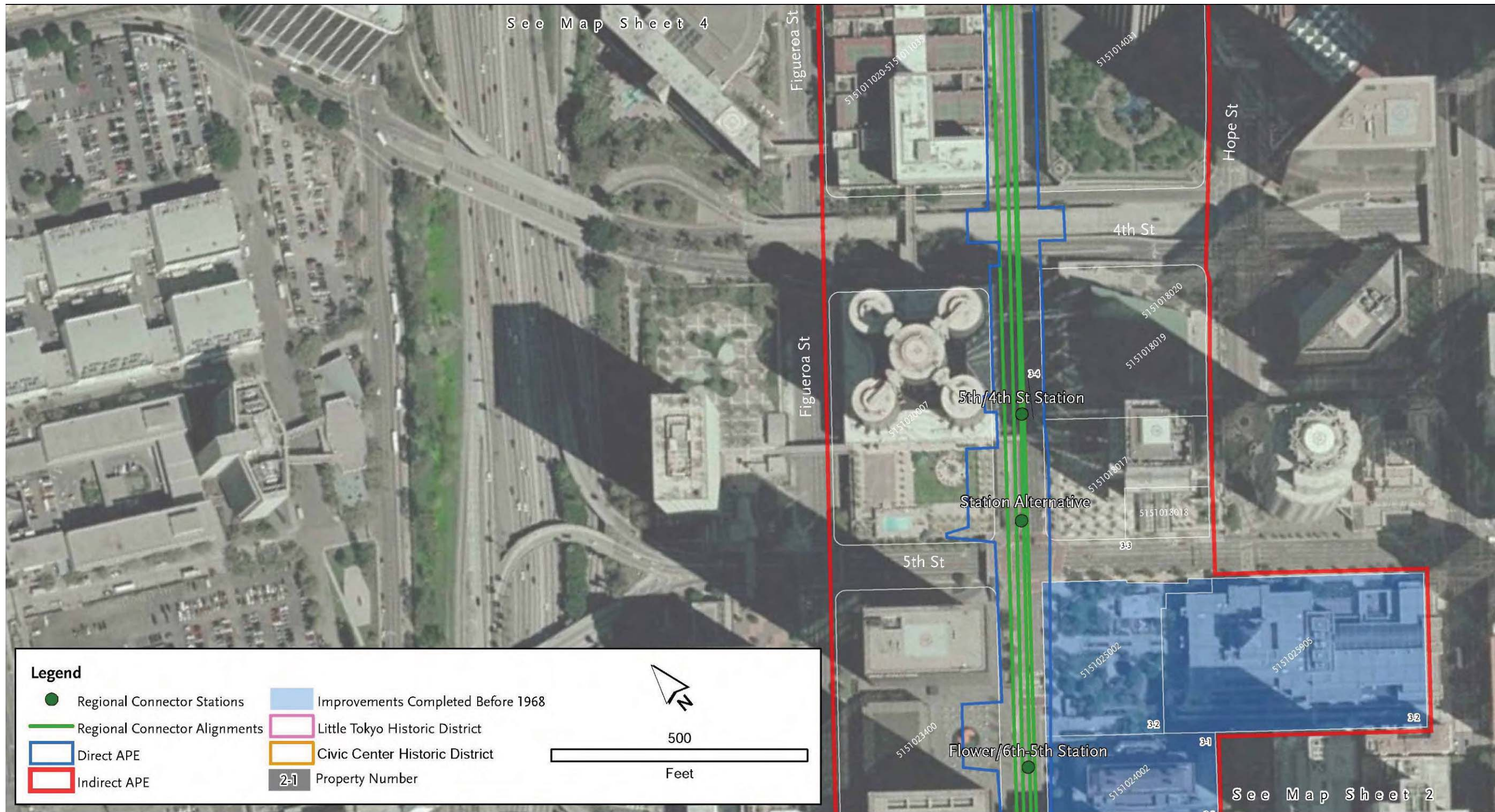
Sheet 1 of 9 Revised December 23, 2009

Figure E-1. Area of Potential Effects Map, Sheet 1



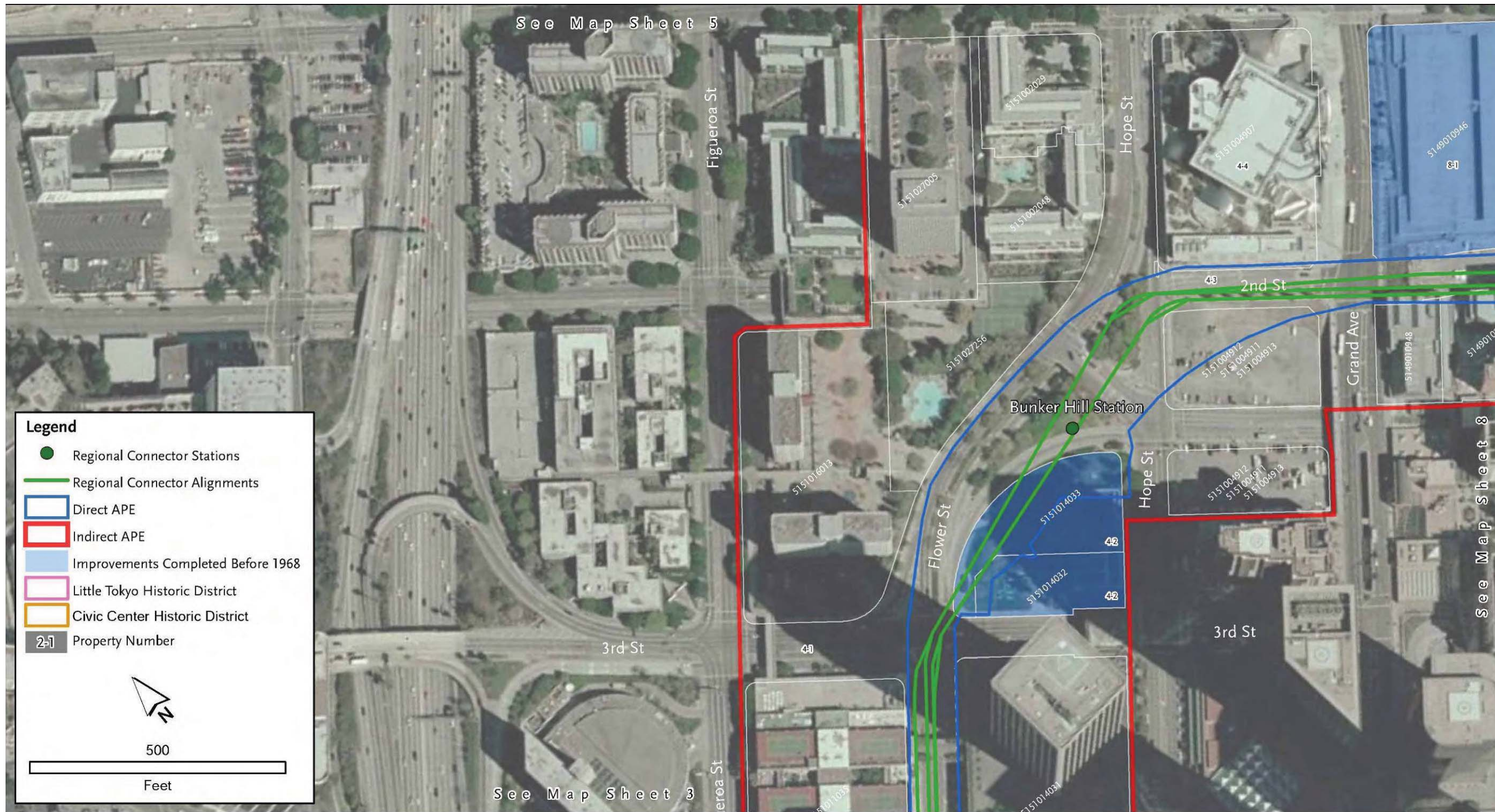
Sheet 2 of 9

Figure E-2. Area of Potential Effects Map, Sheet 2



Sheet 3R of 9 Revised December 23, 2009

Figure E-3. Area of Potential Effects Map, Sheet 3



Sheet 4 of 9

Figure E-4. Area of Potential Effects Map, Sheet 4

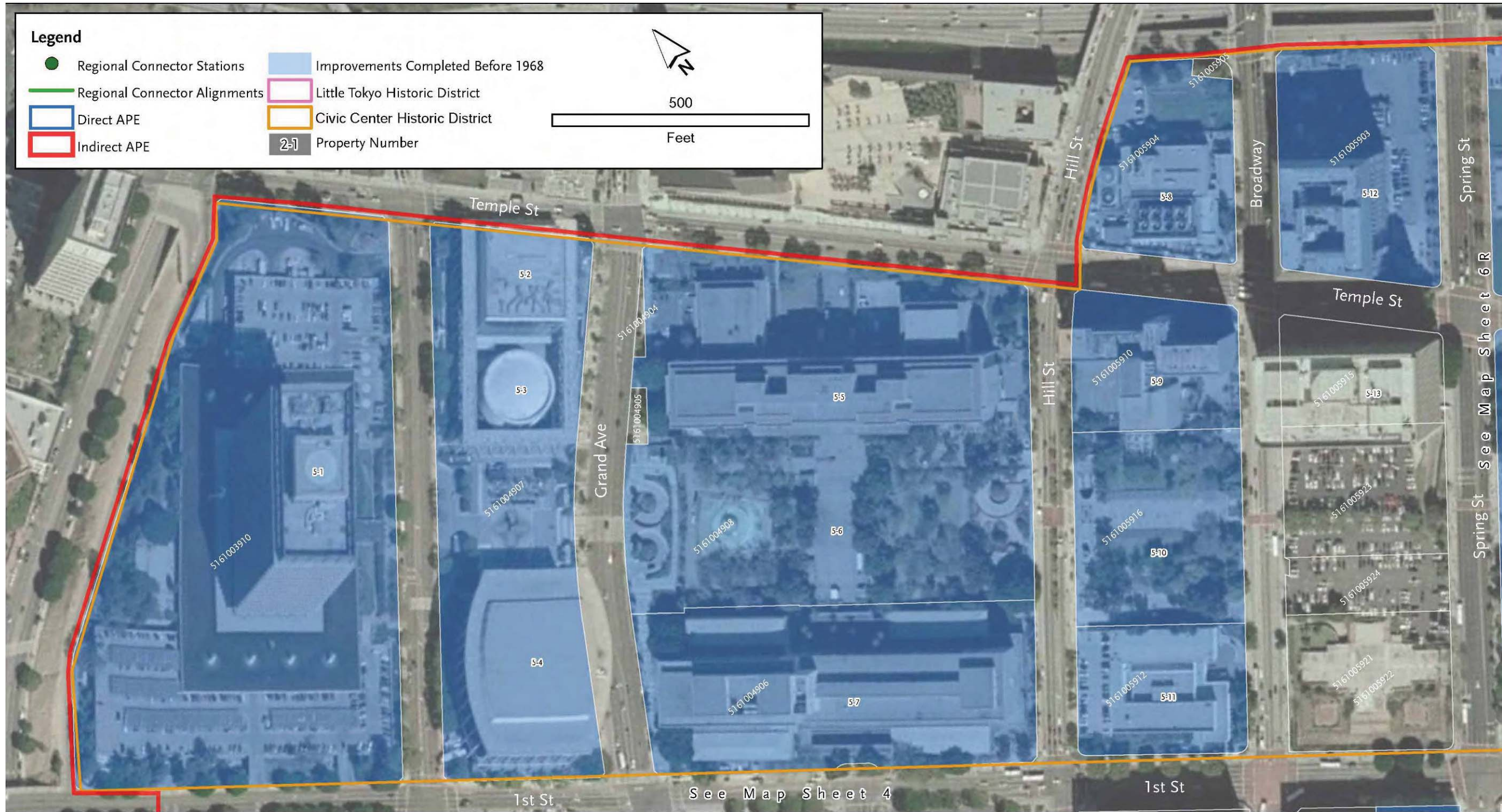


Figure E-5. Area of Potential Effects Map, Sheet 5

Sheet 5 of 9

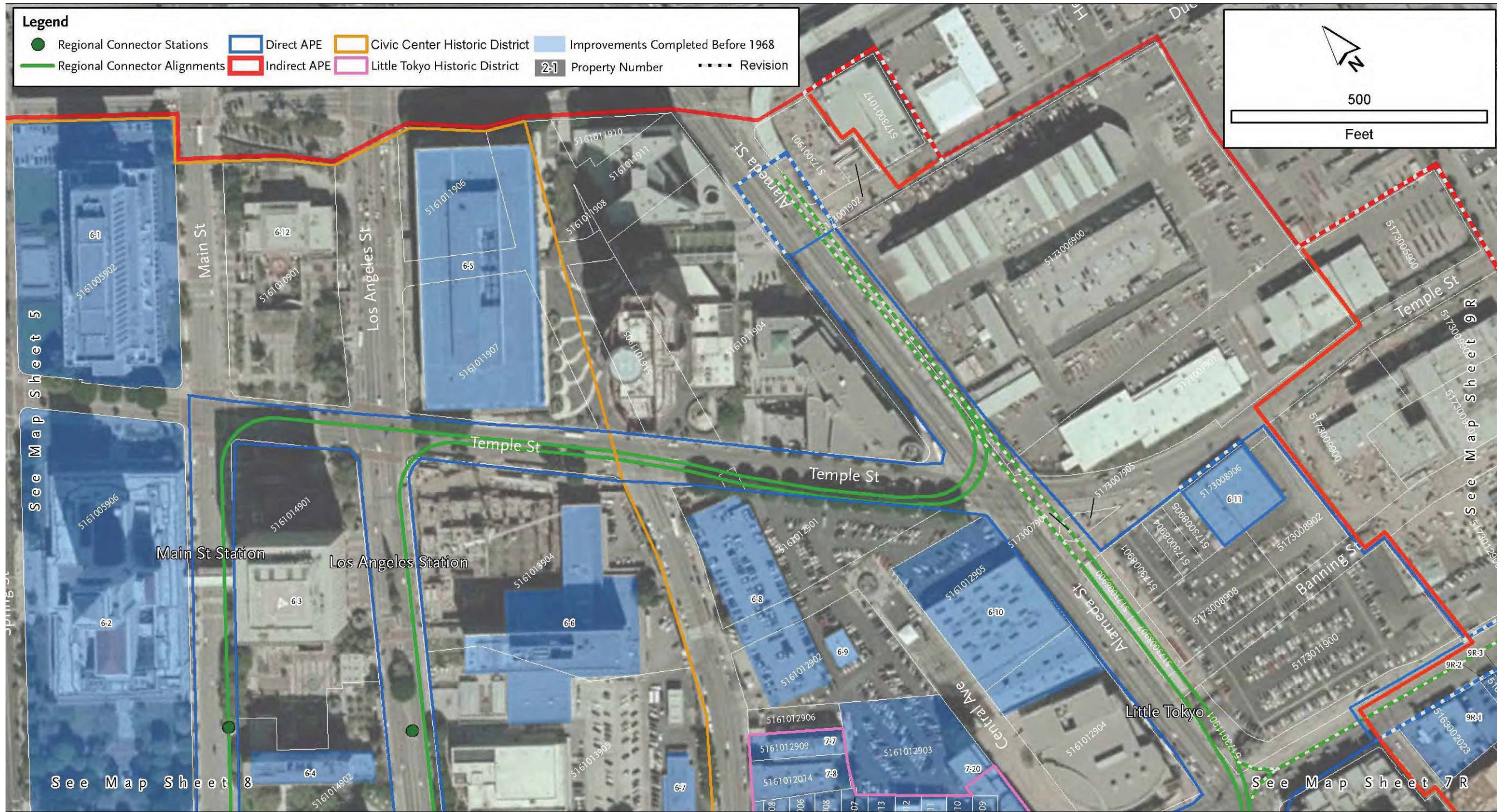
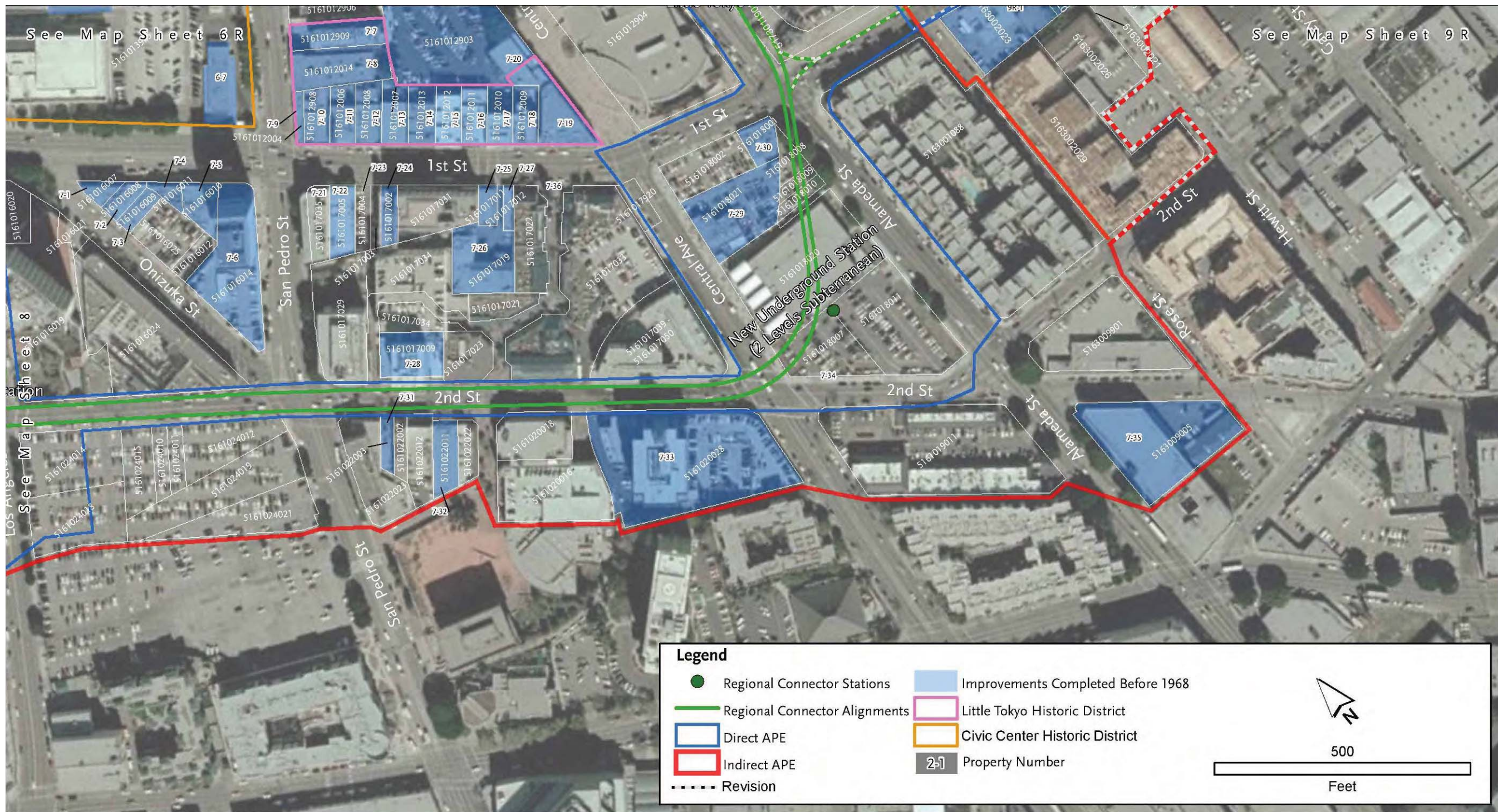


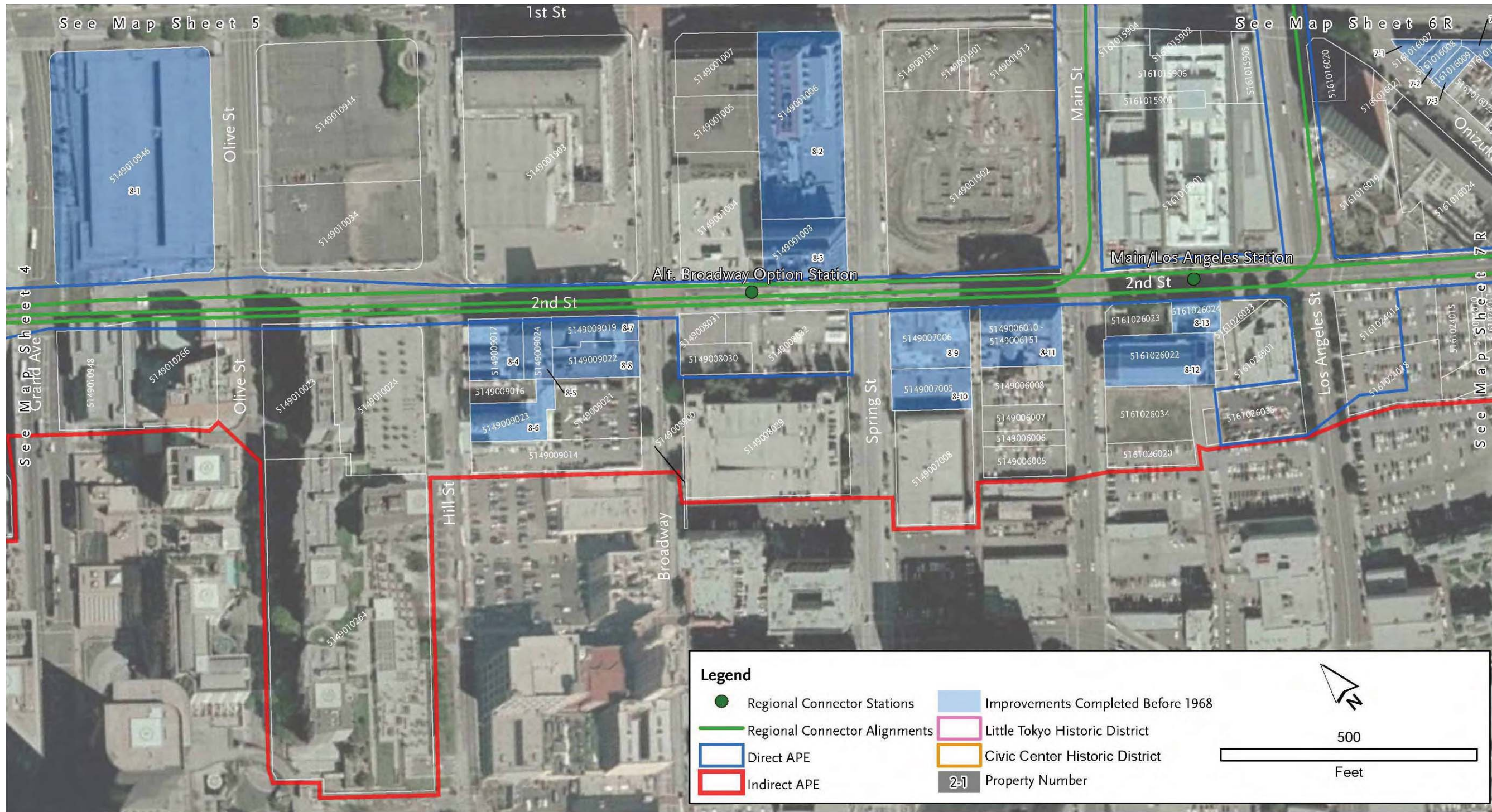
Figure E-6. Area of Potential Effects Map, Sheet 6

Sheet 6R of 9 Revised December 23, 2009



Sheet 7R of 9 Revised December 23, 2009

Figure E-7. Area of Potential Effects Map, Sheet 7



Sheet 8 of 9

Figure E-8. Area of Potential Effects Map, Sheet 8



Sheet 9R of 9 Revised December 23, 2009

Figure E-9. Area of Potential Effects Map, Sheet 9

APPENDIX F

LETTER REGARDING ZANJA MADRE NATIONAL REGISTER NOMINATION

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov



June 4, 2009

Christeen Taniguchi
Galvin Preservation Associates, Inc.
1611 S. Pacific Coast highway, Suite 104
Redondo Beach, CA 90277

**Re: Zanja Madre
National Register of Historic Places Nomination**

Dear Ms. Taniguchi:

Thank you for submitting the Zanja Madre National Register nomination. The nomination provides a good overview of the history of the Zanja Madre, and discusses its beginnings in 1781 as an interconnected open ditch system, the introduction of enclosed pipes to the system, and its abandonment in 1904 as the City of Los Angeles' dominate water system. The overview introduces the context in which the system's significance can be evaluated under National Register Criterion A in the area of Engineering for important associations with the urban and agricultural development of Los Angeles. However, the nomination also indicates that the Zanja Madre water system no longer retains sufficient integrity to meet National Register eligibility, and that only a 75-foot segment of the Zanja Madre is being nominated.

Segments of linear resources can meet eligibility requirements for listing on the National Register if the nominated segment retains integrity, and is sufficiently long enough to convey the significance of the resource of which it represents. The nomination does not demonstrate how this segment of the Zanja Madre meets National Register eligibility requirements under Criterion A. While the segment is "directly associated" with the Zanja Madre, the nomination does not discuss how this small segment of the extensive water conveyance system conveys the Zanja Madre's significance for important associations with the development of Los Angeles (the historic context developed in the nomination for Criterion A eligibility).

It is possible for a segment of a larger resource to meet eligibility requirements if it can be documented to be a rare surviving element of the larger system. In this case, the nomination must establish the segment as the only or best surviving element of the system and demonstrate that the segment retains the essential physical features necessary to convey historic character of the resource. Although the nomination states, "this 75 foot long segment is by far the longest example left intact from this important period in the city's history" the nomination does not establish that as fact. A discussion of all of the components that made up the Zanja Madre system, including the

Ms. Taniguchi
June 4, 2009
Page 2 of 2

underground linear features, structures, and buildings associated with the system, and an analysis of the existing conditions of extant components would be necessary to understand the rarity of the segment. The nomination would still need to establish that enough of the property is surviving to convey significance.

If you determine the segment of the Zanja Madre might have the potential to meet National Register eligibility as a rare surviving example and will be redrafting the nomination, a few technical errors will need to be addressed. We would be happy to discuss the revision suggestions for the Zanja Madre nomination with you if you feel it would be of benefit. Please contact me at 916-653-5789, ctoffelmier@parks.ca.gov.

Sincerely,



Cynthia Toffelmier
State Historian II

CC: Wilbur Babb, Community Relations in Rail Operations, Los Angeles County
Metropolitan Transportation Authority