LOS ANGELES UNION STATION
FORECOURT AND ESPLANADE IMPROVEMENTS PROJECT

ADDENDUM NO. 1 TO THE ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NUMBER 2016121064

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
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Metro

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SECTION 1.0 PROJECT OVERVIEW

The Los Angeles Union Station Forecourt and Esplanade Improvements Project (project) includes a series of perimeter improvements that will enhance pedestrian accessibility, safety, and connectivity (Figure 1-1, *Project Location Map*) to and from Los Angeles Union Station (LAUS). The project consists of four general project components: the Alameda Street Improvements, the Forecourt Improvements, the partial closure of Los Angeles Street, and repurposing a travel lane on Arcadia Street. The approved project is Alternative 3 of the certified EIR, which includes no left turn on Alameda Street from Los Angeles Street. There are five primary improvements:

- Removing the short-term parking northwest of the entrance to LAUS (approximately 60 spaces) to create a new civic plaza

- Creating a new esplanade along Alameda Street (between Cesar E. Chavez Avenue and Arcadia Street) by narrowing the roadway and reallocating roadway area for the expanded pedestrian and bicyclist multiuse, shared pathway on the eastside, and widened sidewalks on the west

- Reconfiguring the entrance from LAUS to the El Pueblo de Los Angeles State Historic Park by creating a new expanded, raised pedestrian crossing that leads into a new pedestrian plaza that includes a two-way off-street bicycle path through the expanded El Pueblo plaza area near the west side of Los Angeles Street

- Providing pedestrian safety and additional connectivity through the partial closure of Los Angeles Street and closure of the northern LAUS driveway on Alameda Street

- Repurposing the northernmost travel lane on Arcadia Street (adjacent to El Pueblo) between Alameda Street and Spring Street into a tour bus parking area designated for El Pueblo

In addition to the above-mentioned improvements, the Alameda Esplanade would include four changes to the circulation configuration:

- Change three travel lanes in each direction and a left turn center lane to two lanes of travel with a left turn lane/center median and curb side drop-off on the east side of Alameda Street

- Expand sidewalks on both sides of the street into the roadway and create a shared tree-lined multi-use path for both bicyclists and pedestrians on the east side of Alameda Street

- Possibly consolidate bus stop locations on both the east and west side of Alameda Street

- Limit curbside kiss-and-ride drop-off to areas north of the LAUS forecourt

Figure 1-1. Project Location Map

SECTION 2.0 PURPOSE OF THIS ADDENDUM TO THE EIR

The purpose of this Addendum to the previously certified Los Angeles Union Station Forecourt and Esplanade Improvements Project Environmental Impact Report (EIR) is to document and evaluate changes and additions to the project associated with the geotechnical and utility investigation necessary for design and construction, extending the maximum depth of excavation, updating the project schedule, clarifying transportation assumptions, and clarifying mitigation measures pertaining to these investigations.

The California Environmental Quality Act Guidelines (State CEQA Guidelines) Section 15164(a) states, "The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

Section 15162 calls for the preparation of a subsequent EIR when any of the following have occurred:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified, such as:
    a. One or more significant effects was not discussed in the previous EIR;
    b. Significant effects previously examined will be substantially more severe;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects.

This Addendum is being prepared because the Los Angeles County Metropolitan Transportation Authority (Metro) has determined to accelerate selected investigations to better inform the project design, including consideration of increasing the maximum depth of excavation. Metro has determined to undertake the investigations in two phases: (1) geotechnical and utility investigations to inform the project design and (2) utility investigations to be undertaken by the construction contractor. Based on preliminary design efforts and protocols for conducting percolation tests, Metro has determined that the maximum depth of excavation for the project would likely increase from 15 feet below ground surface (bgs) to up to 20 feet bgs to respond to information obtained from the investigations in relation to design, site-specific remediation of soils and/or geology, utility protection or relocations, and investigation documentation and salvage of cultural resources.

The depth of excavation, during construction, may need to be extended from 15 feet bgs to 20 feet bgs to respond to information obtained from the investigations in relation to design, site-specific remediation of soils and/or geology, utility protection or relocations, and investigation documentation and salvage of cultural resources.

The Addendum is the appropriate CEQA document to assess and disclose these changes to the project for the following reasons:

- No substantial changes are proposed to the project which will require major revisions of the previously certified EIR;
- No substantial changes have occurred with respect to the circumstances under which the project is being undertaken; and
- No new information of substantial importance has been identified.

The analysis provides a comparative analysis of the existing conditions at the affected sites and demonstrates why the potential temporary and permanent impacts associated with the project refinements are consistent with the analysis in the EIR and demonstrates that there are no substantial changes that require major revisions to the certified EIR, there are no substantial changes to the circumstances under which the project is being undertaken, and there has been no new information of substantial importance. As a result, the project refinements considered in the Addendum do not result in new or substantially more adverse significant impacts.

SECTION 3.0 PREVIOUS ENVIRONMENTAL REVIEW

3.1 Environmental Impact Report

Metro prepared a Draft EIR for the project and circulated that document for a 45-day public review period, beginning on August 11, 2017, and ending on September 25, 2017. The document was made available to the public at Los Angeles Main Library, Chinatown Branch Library, and the Metro project website. Following the close of the public comment period, a Final EIR was prepared that included the complete Draft EIR, an Executive Summary, and responses to all written and oral comments received during the public review period for the Draft EIR. Metro certified the Final EIR and adopted the Findings of Fact and Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on March 1, 2018 (SCH #2016121064). The EIR identified mitigation measures for biological resources, cultural resources, and hazards and hazardous materials. In addition, the EIR disclosed significant and unavoidable impacts to transportation and traffic, but no feasible mitigation measures were identified. The Notice of Determination (NOD) was filed with the County Clerk on March 2, 2018.

SECTION 4.0 PROJECT DESCRIPTION AND PROPOSED MODIFICATIONS

4.1 Existing Project Description

4.1.1 Location

The project site is located on approximately 6.7 acres in the City of Los Angeles, in the northern portion of the downtown area (Figure 4.1.1-1, *Regional Vicinity Map*). The project is located adjacent to and within LAUS, at 800 North Alameda Street, City of Los Angeles, California 90012, in the U.S. Geological Survey Los Angeles 7.5-minute topographic quadrangle (Figure 1-1; Figure 4.1.1-2, *Topographic Map with USGS 7.5-minute Topographic Quadrangle Index*). The LAUS property is generally bounded by Highway 101 to the south, Alameda Street to the west, Cesar E. Chavez Avenue to the north, and Vignes Street to the east. However, the project site is generally bounded by Alameda Street to the west, Cesar E. Chavez Avenue to the north, LAUS to the east, and Arcadia Street to the south. Specific project elements are located on Alameda Street from Arcadia Street in the south to Cesar E. Chavez Avenue in the north, Arcadia Street from Alameda Street to Spring Street, Los Angeles Street from El Pueblo de Los Angeles to LAUS, and the LAUS Forecourt area. Adjacent to the project to the west are the Chinese American Museum at 425 North Los Angeles Street, El Pueblo de Los Angeles State Historic Park at 125 Paseo De La Plaza, and the Avila Adobe Museum at 10 Olvera Street.

4.1.2 Project Objectives

The project objectives are designed to enhance safety for and compatibility between multi-modal commuters and visitors, including individuals who travel to LAUS to reach local neighborhoods and businesses, as well as those who travel to LAUS to make a connection to another mode of travel. Metro is committed to accommodating existing and future destination and through-transit demands, including those who desire to utilize alternate forms of transit, rather than automobiles. The project also supports local, regional, and state policies with regard to encouraging multi-modal travel and will enhance connectivity to LAUS by creating a safer, more welcoming experience to transit riders and visitors.

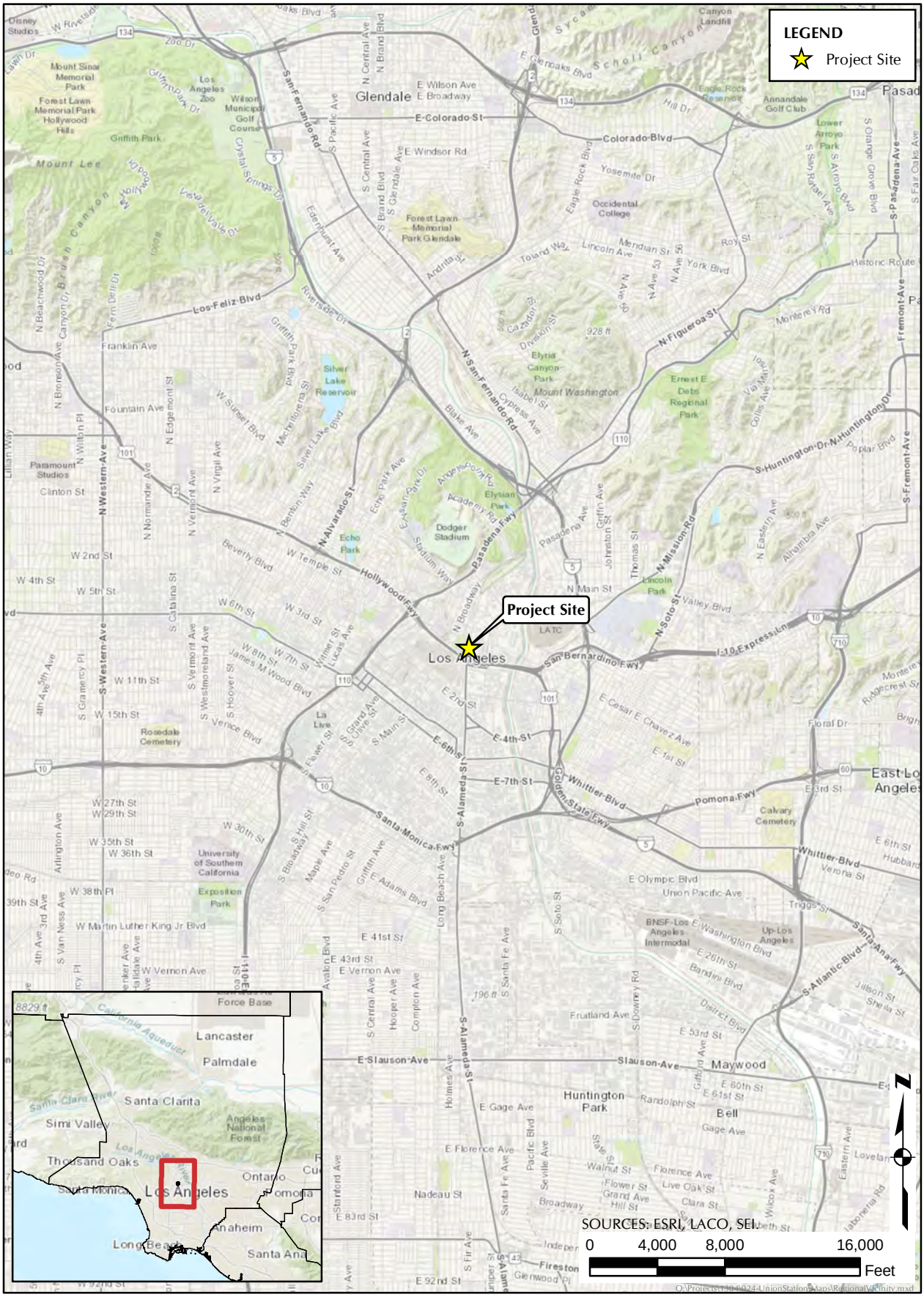


Figure 4.1.1-1. Regional Vicinity Map

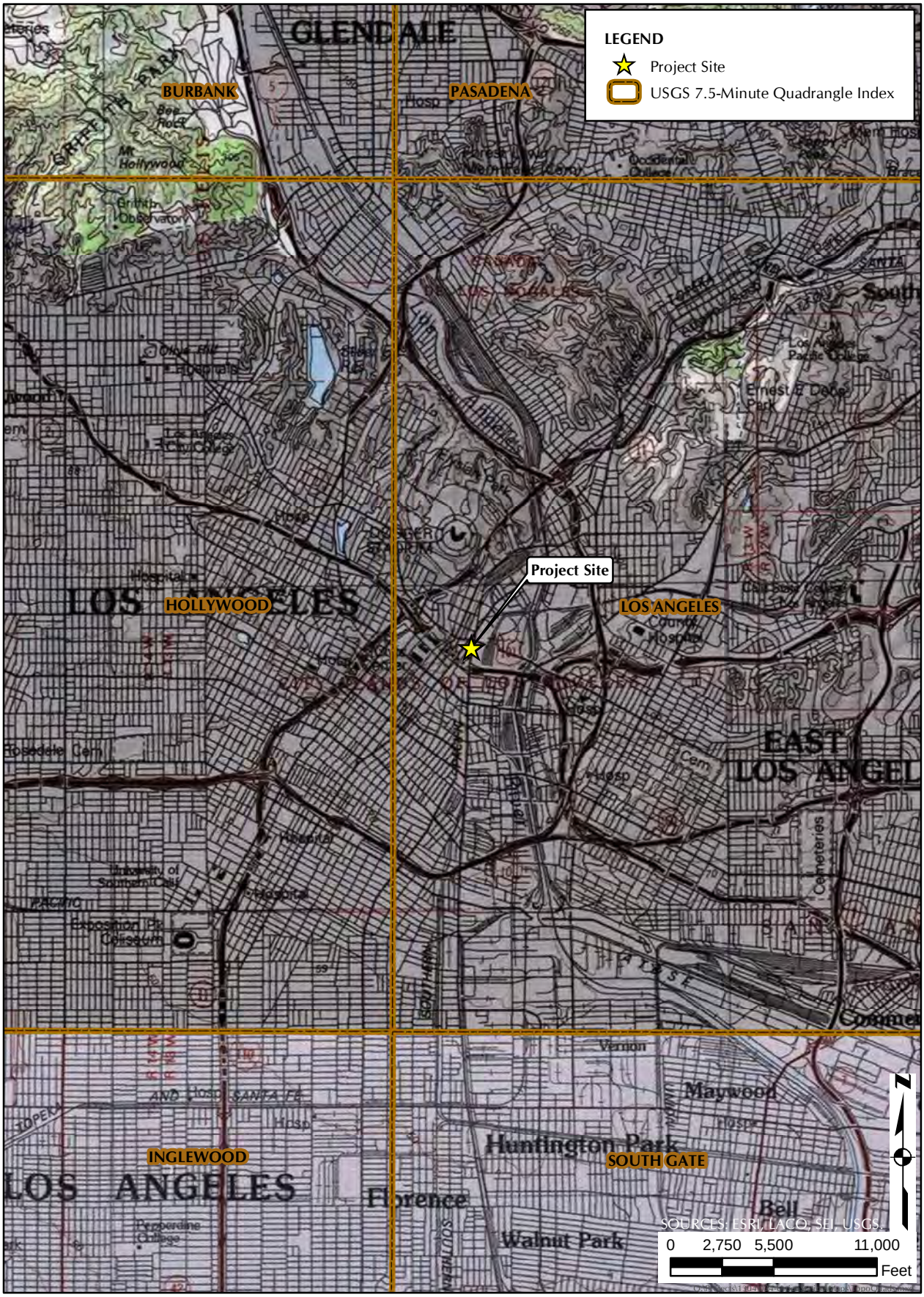


Figure 4.1.1-2. Topographic Map with USGS 7.5-Minute Quadrangle Index

Metro has identified seven primary requisite objectives:

- Protect and enhance LAUS as a national historic resource by advancing clear sight lines and view sheds to the station.[1]
- Prioritize connectivity, convenience, and safety for the most vulnerable users (pedestrians, bicyclists, transit patrons and community stakeholders) to safely navigate to and from the project site.[2,3]
- Advance desirable and accessible public space at the LAUS forecourt that creates a visually porous and permeable connection between Union Station and the surrounding historic and cultural communities.[4]
- Facilitate alternatives to driving by providing infrastructure that enables more walking and bicycling.[5]
- Enhance the safety and quality of pedestrian and bicycle connections between the station and El Pueblo Historic Monument, Father Serra Park, Olvera Street, and nearby business and neighborhoods.[6]
- Advance sustainability by providing for reduced consumptive water use in a cost-effective manner[7] and improving multi-modal facilities that encourage active transportation and reduction in vehicle miles traveled.[8]
- Advance comprehensive planning for LAUS that leverages it as the major regional transportation hub, a destination, and one of the city's foremost landmarks.[9]

[1] National Park Service. 1980. *National Register of Historic Places Inventory Nomination Form.* Available at: https://npgallery.nps.gov/GetAsset?assetID=c72efa93-90ca-40ba-9ca6-ae3d3515cf37

[2] City of Los Angeles Department of City Planning. 2016*. Mobility Plan 2035*. Available at: http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf. Accessed August 2, 2017.

[3] Los Angeles County Metropolitan Transportation Authority. 2015. *Connect US Action Plan*. Available at: https://media.metro.net/projects_studies/union_station/images/LAUSMP_Action_Plan_Final_100515.pdf

[4] County of Los Angeles Department of Public Health. November 2014. *The Plan for a Healthy Los Angeles*. Available at: http://publichealth.lacounty.gov/place/docs/FINAL_CTG%20HIGHLIGHTS%20Plan%20for%20Healthy%20LA_Nov%202014.pdf

[5] Los Angeles County Metropolitan Transportation Authority. June 2012. *Climate Action and Adaptation Plan*. Available at: http://media.metro.net/projects_studies/sustainability/images/Climate_Action_Plan.pdf. Prepared by ICF International.

[6] Southern California Association of Governments. April 2016. *Southern California Association of Governments 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.* Available at: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf

[7] Los Angeles County Metropolitan Transportation Authority. June 2010*. Water Action Plan*. Prepared by ICF International and Brezak & Associates Planning. Available at: http://media.metro.net/projects_studies/sustainability/images/Water_Plan2010_0825.pdf. [8] Southern California Association of Governments. April 2016. *Southern California Association of Governments 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.* Available at: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf

[8] Southern California Association of Governments. April 2016. *Southern California Association of Governments 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.* Available at: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf

[9] City of Los Angeles Department of City Planning. 2016*. Mobility Plan 2035*. Available at: http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf. Policy 3.6, p. 88. Accessed August 2, 2017.

4.1.3 Project Elements

The project focuses on perimeter improvements to improve pedestrian and bicyclist accessibility and connectivity (Figure 4.1.3-1, *Existing Site Plan*). The approved project is Alternative 3 of the EIR, which includes no left turn on Alameda Street from Los Angeles Street. It consists of four general project components: the Alameda Street Improvements, the Forecourt Improvements, the partial closure of Los Angeles Street, and the Arcadia Street El Pueblo tour bus parking (Figure 4.1.3-2, *Approved Project Plan*).

The project improvements include:

- Removing the short-term parking northwest of the entrance to LAUS (approximately 60 spaces) to create a new civic plaza with an outdoor seating area
- Creating a new esplanade along Alameda Street (between Cesar E. Chavez Avenue and Arcadia) by narrowing the roadway and reallocating roadway area for the expanded shared pedestrian and bicyclist multi-use pathway on the eastside and widened sidewalks on the west
- Reconfiguring the entrance from LAUS to the El Pueblo de Los Angeles State Historic Park by creating a consolidated crosswalk that would provide additional pedestrian and bicycle connectivity through the partial closure of Los Angeles Street and closure of the northern LAUS driveway on Alameda Street
- Repurposing the northernmost travel lane on Arcadia Street between Alameda Street and Spring Street into a tour bus parking area designated for El Pueblo

The Alameda Street improvements include:

- Changing three travel lanes in each direction and a left turn center lane to two lanes of travel with a left turn lane/center median and curb side drop-off on the east side of Alameda Street
- Expanding sidewalks on both sides of the street into the roadway
- Creating a shared tree-lined multi-use path for both bicyclists and pedestrians on the east side of Alameda Street
- Possibly consolidating bus stop locations on both the east and west side of Alameda Street
- Limiting curbside kiss-and-ride drop-off to areas north of the LAUS forecourt

4.1.4 Construction

As described in the certified EIR, the construction for the project is anticipated to last seven months starting in the spring of 2020. The traffic analysis assumed a full build-out year of 2029 when high speed rail is planned to be operable at LAUS and Link US construction would also be complete. The project will adhere to local noise ordinances and specified construction Best Management Practices (BMPs), which will reduce impacts from construction on sensitive receptors.

Figure 4.1.3-1. Existing Site Plan

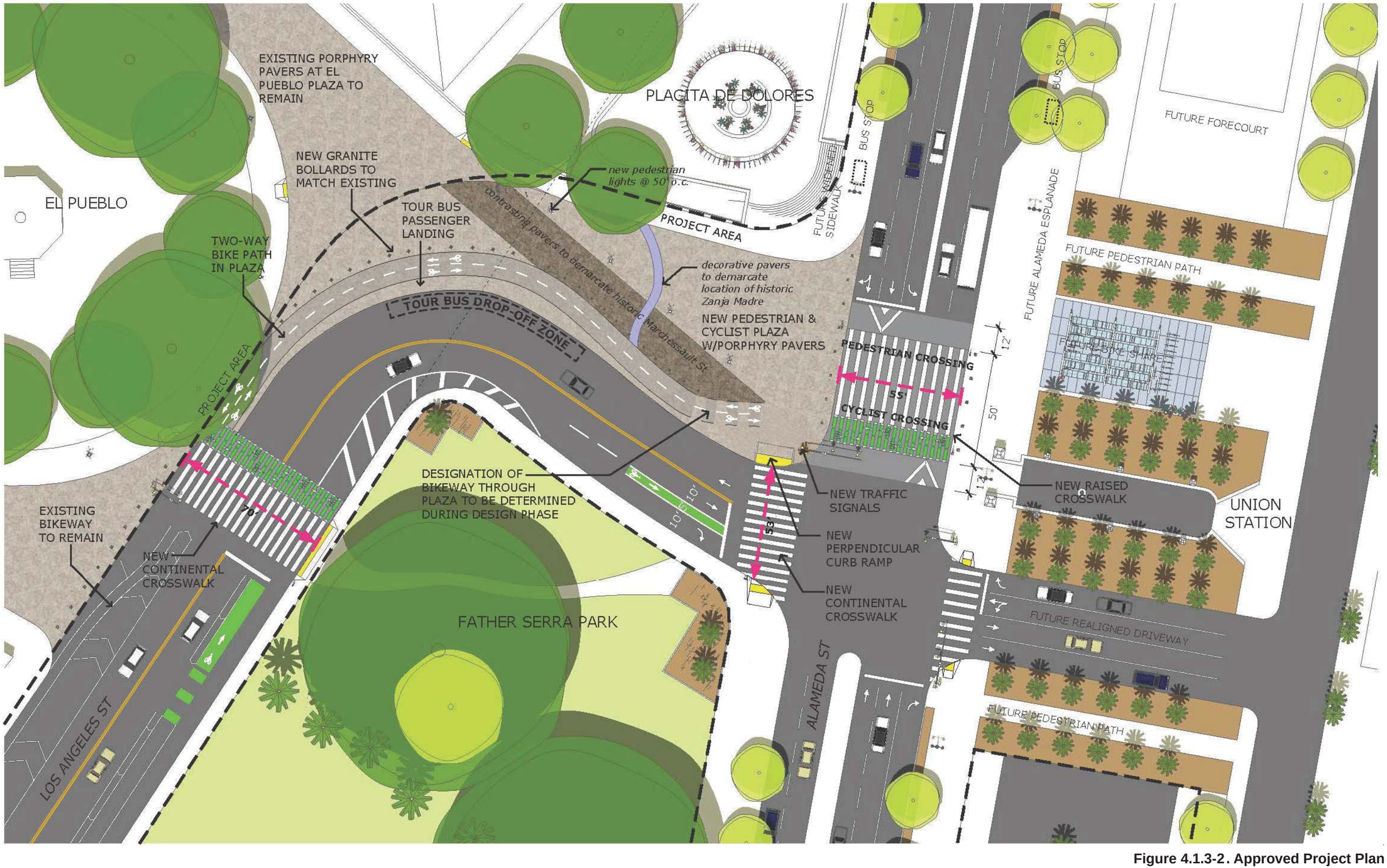
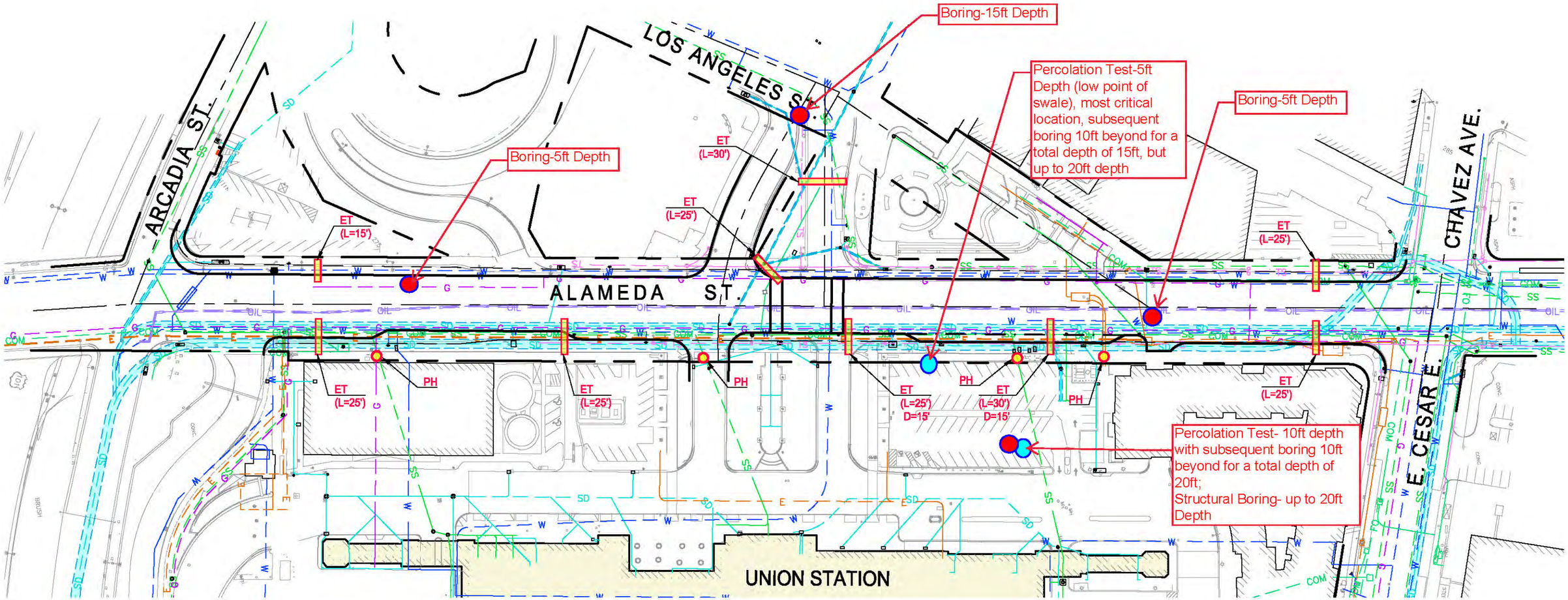


Figure 4.1.3-2. Approved Project Plan

4.2 Proposed Modifications to the Project

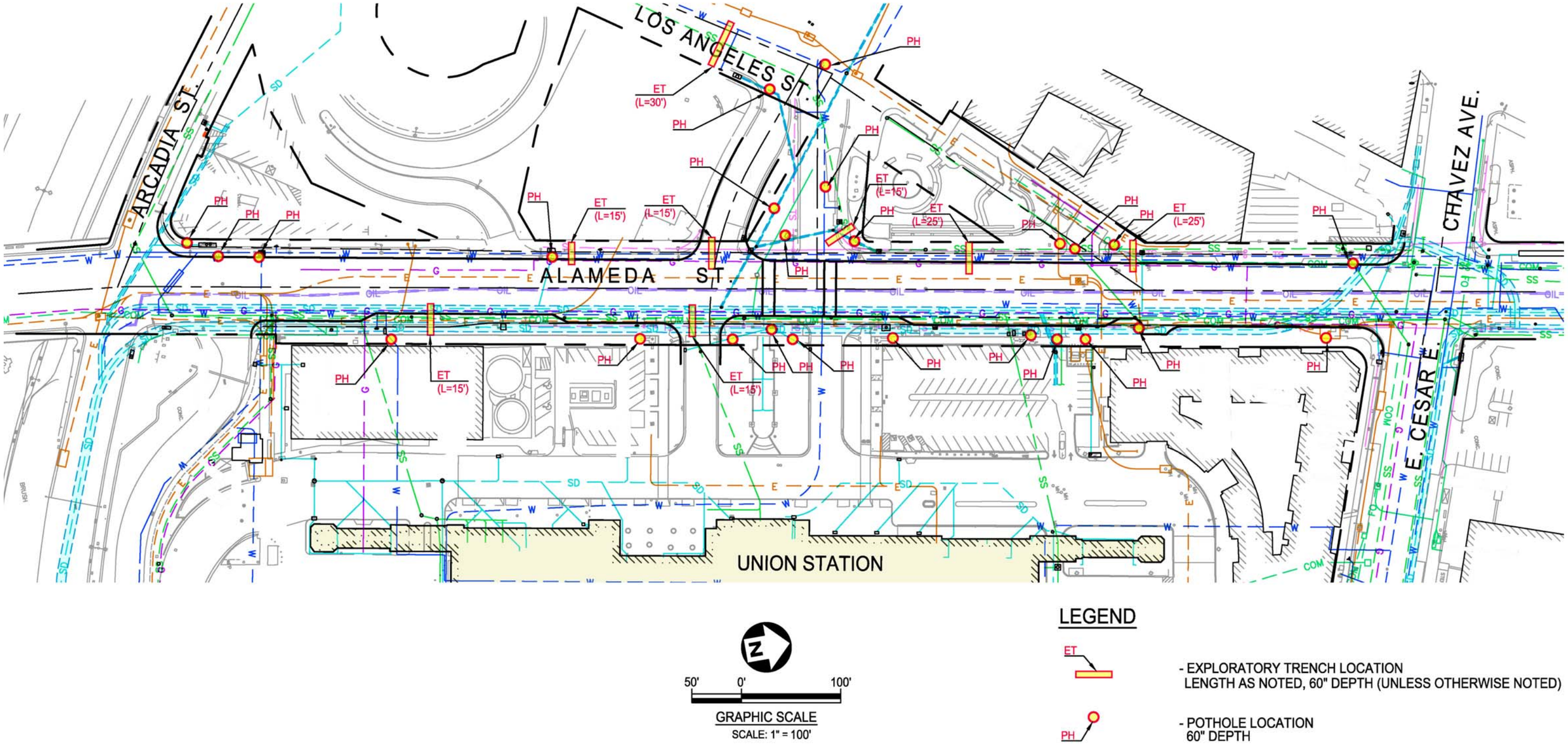
At the time of certification of the Final EIR for the project, the geotechnical investigation and utility investigation were proposed to be undertaken concurrently with the initial phase of construction. Metro has determined to undertake investigations in two phases: (1) geotechnical, utility, and cultural resources investigations to inform the project design (Figure 4.2-1, *LAUS Phase I Investigations Exhibit*); and (2) utility and supplemental cultural resources investigations to be undertaken by a construction contractor, as-needed to inform construction (Figure 4.2-2, *LAUS Phase II Conceptual Potholing and Trenching Exhibit*). Mobilization is anticipated to occur in the first quarter of project construction and would be minimal for these investigations. Investigations would be limited in duration and follow typical construction BMPs.

The 1st phase of investigations is anticipated to be undertaken between July 2018 and the scheduled start of construction in Spring 2020. The 2nd phase of investigations will be undertaken by the construction contractor and is anticipated to start in early 2020 and continue through the end of construction. This Addendum provides more detailed information regarding the location of these geotechnical and utility investigations, the equipment used, the depth of excavation, and the time required to complete each investigation (Table 4.2-1, *Description of Investigations*). The anticipated number of percolation tests, borings, potholing, and trenching will be determined by the contractor. For the purposes of analysis, this Addendum evaluates up to two percolation tests with subsequent borings, four structural soil borings, 29 potholes, and 17 trenches. The investigations are being undertaken to inform the design phase, to satisfy design specifications and utility depths and potential relocation of any site-specific characterization of the geology and soils. In addition, archaeological testing may be undertaken, which may include such methods as, but not be limited to, shovel test pits, layered trenches, and so forth. Additional testing may be conducted during Phase 2 at the discretion of the construction contractor.



Source: Gruen Associates, Psomas

Figure 4.2-1. LAUS Phase 1 Investigations Exhibit



Source: Gruen Associates, Psomas

Figure 4.2-2. LAUS Phase 2 Conceptual Potholing and Trenching Exhibit

TABLE 4.2-1
DESCRIPTION OF INVESTIGATIONS

Activity	#	Range of Depth (ft)	Estimated Time of Activity	General Location	Predicted Equipment
1st Phase (June 2018 to March 2020): Geotechnical and Utility Investigation					
Percolation Tests with subsequent borings	2	5–10	4 hours per test over a period of 8 days	Forecourt	Hand auger equipment and 2 light duty trucks would be necessary for up to 5 ft in depth. For tests beyond 5 ft in depth, a standard truck mounted hollow stem auger drill rig (CME-75 or equivalent) would be used in addition to the 2 light duty trucks.
Structural Borings	4	5–20	4 hours per boring over a period of 8 days	Alameda St., Los Angeles St., and Forecourt	A standard truck mounted hollow stem auger drill rig (CME-75 or equivalent) would be used in addition to the 2 light duty trucks.
Potholing	4	5–15	8 days	Alameda St., Los Angeles St.	Vacuum extraction truck, concrete saw, concrete trucks, dump trucks, skid steer, asphalt paving machine, road roller, asphalt tamper, jack hammer, trench box, 2 light duty worker trucks
Trenching	9	5–15	1 day/trench	Alameda St., Los Angeles St.	Vacuum extraction truck, concrete saw, concrete trucks, dump trucks, skid steer, asphalt paving machine, road roller, asphalt tamper, jack hammer, trench box, 2 light duty worker trucks
Shovel Test Pits	Up to 20	2–4	2 hours per pit over a period of 2 weeks	Forecourt, Alameda St., and Los Angeles St.	Hand shovels, screens
2nd Phase (January 2019 to March 2020): Utility Investigation					
Potholing	25	5–15	1 month	Alameda St., Los Angeles St.	Vacuum extraction truck, concrete saw, concrete trucks, dump trucks, skid steer, asphalt paving machine, road roller, asphalt tamper, jack hammer, trench box, 2 light duty worker trucks
Trenching	8	5–15	1 day/trench	Alameda St. and Los Angeles St.	Vacuum extraction truck, concrete saw, concrete trucks, dump trucks, skid steer, asphalt paving machine, road roller, asphalt tamper, jack hammer, trench box, 2 light duty worker trucks
Shovel Test Pits	Up to 20	2–4	2 hours per pit over a period of 2weeks	Forecourt, eastside of Alameda St., Alameda St. and Los Angeles St.	Hand shovels, screens

4.3.1 Investigations

Investigations will be undertaken in two phases: (1) geotechnical, utility and cultural resources investigations to be undertaken by to inform the project design (Figure 4.2-1); and (2) utility and supplemental cultural resources investigations to be undertaken by a construction contractor, as-needed to inform construction (Figure 4.2-2).

1st Phase of Investigations

The 1st phase of the investigations will include percolation tests, borings, potholing, exploratory trenching, and archaeological shovel test pits. Some of the testing will encroach on public sidewalks and roadways, thus requiring preparation and implementation of a Traffic Control Plan. The exact traffic requirements will be determined by a traffic engineer, and plans shall be submitted and approved by the City of Los Angeles Department of Transportation (LADOT) prior to the start of the investigations. Percolation tests will be undertaken at the proposed LAUS Forecourt (Figure 4.2-1). The purpose of the percolation tests is to provide information regarding the soil stability, porosity, and drainage properties at the site. The percolation tests will follow the standard methodology is American Society for Testing and Materials (ASTM) D3385, which involves a double ring infiltrometer for percolation in soils. The specific method to be used will be confirmed with the contractor. Percolation tests will be up to 10 feet in depth, with a subsequent boring up to 20 feet, and take an average of 4 hours per test. Percolation tests up to 5 feet in depth will require hand auger equipment and two light duty trucks for support (Table 4.2-1). For tests beyond 5 feet, a standard truck-mounted hollow stem auger drill rig would be used instead of the hand auger equipment. In addition to the subsequent boring accompanying the percolation test undertaken on the LAUS site, up to four additional structural borings will be undertaken on Alameda Street and Los Angeles Street (Figure 4.2-1). The purpose of the borings is to provide information regarding the soil structure including the soil composition, soil bearing pressure, and location of the groundwater table. Similar to the percolation tests, the borings will use the standard truck-mounted hollow stem auger drill rig and two light duty trucks for support. Borings will range from 5 to 20 feet in depth and take an average of 4 hours per boring.

The purpose of the potholes and trenches is to provide information regarding underground utilities for possible relocation or avoidance. Potholing will be done with vacuum excavation and completed in accordance with the latest adopted edition and supplements of The Standard Specifications for Public Works Construction and the latest revision of The Brown Book. Both potholing and trenching will require heavy construction equipment which may include, but is not limited to, a vacuum extraction truck, concrete saw, concrete trucks, dump trucks, skid steer, asphalt paving machine, road roller, asphalt tamper, jack hammer, trench box, and two light duty worker trucks. Potholes and trenches will range from 5 to 15 feet in depth. Trenches range from 15 to 30 feet in length. A few trenches may be excavated in layers to inform the evaluation of archaeological resources.

The vicinity of LAUS is an area with a known sensitivity to contain cultural resources as evaluated in the EIR; therefore, Metro may undertake archaeological testing, which may include shovel test pits, layered trenching, and so forth. This Addendum EIR uses shovel test pits as a proxy to evaluate potential environmental impacts from the archaeological testing. Up to 20 shovel test pits will be excavated to a depth of 2 to 4 feet using hand shovels and screens. The results of the shovel testing will determine the location and depth of archaeological deposits within the project area and will be used in the avoidance of significant archaeological resources through project design.

2nd Phase of Investigations

In addition to the investigations undertaken to inform the project design, it is anticipated that the construction contractor will undertake a 2nd phase of the investigations that will include additional potholing, trenching, and potentially archaeological shovel test pits. The exact location of such investigations will be at the discretion of the construction contractor; however, for the purpose of the analysis in this Addendum, the architecture and engineering design team developed a conceptual plan for 2nd phase investigations based on their experience with comparable projects (Figure 4.2-2). Some of the testing will encroach on public sidewalks and roadways, thus requiring preparation and implementation of a Traffic Control Plan. The exact traffic requirements will be determined by a traffic engineer, and plans shall be submitted and approved by the LADOT prior to potholing operation. It is anticipated that the contractor will conduct up to 25 potholes and 8 trenches at multiple locations in the proposed LAUS Forecourt, Alameda Street, and Los Angeles Street (Figure 4.2-2). These locations will be informed by prior investigations conducted in Phase 1. The purpose of the potholes and trenches is to provide information regarding underground utilities for possible relocation or avoidance. Potholing will be done with vacuum excavation and completed in accordance with the latest adopted edition and supplements of The Standard Specifications for Public Works Construction and the latest revision of The Brown Book. Both potholing and trenching will require heavy construction equipment, which may include, but is not limited to, a vacuum extraction truck, concrete saw, concrete trucks, dump trucks, skid steer, asphalt paving machine, road roller, asphalt tamper, jack hammer, trench box, and two light duty worker trucks. Potholing and trenching may occur concurrently within a 30-day time frame. Potholes and trenches will range from 5 to 15 feet in depth. Trenches range from 15 to 30 feet in length.

The vicinity of LAUS is an area with a known sensitivity to contain cultural resources as evaluated in the EIR; therefore, the contractor will likely undertake additional shovel test pits to characterize the vertical and horizontal extent of archaeological resources in construction work area program in conjunction with the 2nd phase of investigations (Figure 4.2-2). Up to 20 shovel test pits will be excavated to a depth of 2 to 4 feet using hand shovels and screens, should the utility assessments occur in areas that were not previously studied via test pits in Phase 1. The results of the shovel testing will the location and depth of archaeological deposits within the project area and will be used in the avoidance of significant archaeological resources through project design.

4.3.2 Revised Schedule

At the time of certification of the Final EIR for the project, the geotechnical investigation and utility investigation were proposed to be undertaken concurrently with the initial phase of construction. The 1st phase of investigations is anticipated to be undertaken between July 2018 and the scheduled start of construction in Spring 2020. The 2nd phase of investigations will be undertaken by the construction contractor and is anticipated to start in early 2020 and continue through the end of construction. Mobilization for the investigation would occur concurrently, or up to one week prior to investigations. Construction mobilizations is anticipated to occur in the first quarter of project construction and would follow typical construction BMPs.

1st Phase of Investigations

Metro has determined to accelerate selected investigations to better inform the project design. The schedule for the 1st phase of investigations may be initiated anytime between July 2018 and the start of construction, which is anticipated in the first quarter of 2020, as described in the certified EIR. Each shovel test will take an average of 2 hours to complete and may occur over a period of up to 1 week. Each percolation test and boring will take an average of 4 hours to complete and may occur over a period of up to 8 days. Each pothole will take an average of 4 hours to complete and may occur over a period of up to 8 days. Each trench will take up to 5 days to complete. All the trenches will be completed over an 8-day period of time and concurrent with the borings. The 1st phase of investigations will not alter the scheduled initiation of the main construction anticipated to start in the first quarter of 2020.

2nd Phase of Investigations

Metro anticipates that the construction contractor may undertake additional investigations including potholing, trenches, and shovel test pits. The schedule for the 2nd phase of investigations will be initiated anytime between early 2020 to the end of construction. Each shovel test will take an average of 2 hours to complete and may occur over a period of up to 1 week. Each pothole will take an average of 4 hours to complete and may occur over a period of up to 30 days. Each trench will take up to 5 days to complete. All the trenches will be completed over a 30-day period of time and will be concurrent with the borings. The 2nd phase of investigations will not alter the scheduled initiation of the main construction anticipated to start in the first quarter of 2020.

4.3.3 Increase in Depth of Excavation

This Addendum to the EIR extends the maximum depth of excavation to up to 20 feet bgs, which is 5 additional feet beyond the 15 feet bgs analyzed in the certified EIR. For the geotechnical and utility investigations, the additional 5 feet is necessary because the percolation tests may need to go to 10 feet bgs in order to inform design. Associated borings will need to be 10 feet deeper than the percolation tests, thereby requiring a final depth of 20 feet bgs. The increase in depth of excavation will provide enough data to properly assess the overall vertical soil profile.

The depth of excavation, during construction, may need to be extended from 15 feet bgs to 20 feet bgs to respond to information obtained from the investigations in relation to design, site-specific remediation of soils and/or geology, utility protection or relocations, and investigation documentation and salvage of cultural resources.

4.3.4 Transportation Features

Metro may also update the Metro transit routes along Alameda to improve efficiency and create a wider path of travel for people walking and biking along Alameda Street. Alameda Street has two bus stops on the east side and two bus stops on the west side serving Metro Route 40. Additionally, Metro Route 40 and 442 serves both bus stops on the west side of the street. Currently, there is low ridership at the bus stops at the intersection of Cesar E. Chavez Avenue and Alameda Street as well as the intersection of El Monte Busway and Alameda Street. Metro is exploring the feasibility of consolidating the two Metro Bus Route 40 stops on the east side of Alameda Street by eliminating one at the intersection of El Monte Busway and Alameda Street and keeping the bus stop in front of LAUS. Similarly, on the west side of Alameda Street, Metro may consolidate the two 40 and 442 stops by eliminating the stops at the

intersection of Cesar E. Chavez Avenue and Alameda Street and keeping the bus stop in front of El Pueblo directly across the street from LAUS. These stops serve most of the ridership on Metro Route 40 and 442. Co-locating all bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would result in better amenities for bus patrons due to the tree canopy and wider sidewalks associated with the Esplanade, as well as the pedestrian safety benefits provided by the Los Angeles crossing.

SECTION 5.0 IMPACT DISCUSSION

The analyses provided below address each of the environmental issues analyzed in the certified EIR and focus on the potential changes in environmental impacts due to proposed modifications to the project. The analysis of each environmental issue first summarizes the findings of the certified EIR, and then discusses the potential physical effects of the proposed modifications, which in this case is the two-phased investigation, revised schedule, increase in depth of excavation, and transportation features. The triggers for the approved mitigation measures are clarified in light of the modifications (Table 5-1, *Triggers for Mitigation Measures*). The mitigation measures are the same as in the certified EIR.

TABLE 5-1
TRIGGERS FOR MITIGATION MEASURES

Environmental Impact	Mitigation Measure (MM)	Trigger of MM	Phase I Activity That Could Trigger MM	Phase II Activity That Could Trigger MM
The project would not result in impacts to biological resources in relation to movement of any migratory fish or wildlife species or with an established wildlife corridor. The project would have the potential to result in impacts to biological resources in relation to impeding the use of native wildlife nursery sites.	MM-BIO-1: *Nesting Bird Avoidance*. Within one week (7 days) prior to the start of construction, ground disturbance, or vegetation trimming/removal activities and within nesting bird season, which occurs between February 1 and August 31, a qualified biologist shall conduct pre-construction nesting bird surveys to identify the presence of nesting birds protected by the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act, and the California and federal Endangered Species Acts. If nesting birds are encountered during the preconstruction nesting surveys, a 150-foot radius (from the center point of the tree location, i.e., a 300-foot diameter) disturbance-free buffer, pursuant to the MBTA, shall be established around each nest, and no activities shall be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. If for any reason an active bird nest must be removed during the nesting season, the applicant shall be required to obtain all necessary permits from the United States Fish and Wildlife Service and the California Department of Fish and Wildlife authorizing the nest relocation. Whenever feasible, removal of existing trees and ground disturbance, and/or vegetation removal/trimming activities within a 150-foot radius of trees with active nests shall take place outside of the nesting bird season.	One week (7 days) prior to scheduled pre-construction or construction activities (including ground disturbance and vegetation trimming/ removal) that will be conducted within a 150-foot radius of mature trees during nesting bird season (February 1 to August 31). A qualified biologist shall conduct a survey before these activities commence to verify that there are no nesting birds protected by the MBTA, the Bald and Golden Eagle Protection Act, and the California and federal Endangered Species Acts before activities commence.	☒ Percolation test* ☒ Borings* ☒ Potholing* ☒ Trenches* ☐ Shovel test pits *If within 150 feet of a tree and within bird nesting season (February 1 to August 31)	☒ Potholing* ☒ Trenches* ☒ Shovel test pits* *If within 150 feet of a tree and within bird nesting season (February 1 to August 31)
As designed, the elements of the project comply with the Secretary of the Interior's Standards, and would not result in a substantial adverse change to this component of the historical resource pursuant to Section 15064.5(b) of the State CEQA Guidelines. The project would have the potential to result in a significant impact to historical resources as defined in Section 15064.5(b) of the State CEQA Guidelines.	MM-CULTURAL-1: *Archaeological and Historical Resources – Avoidance and Monitoring*. Completion of a Worker Education and Awareness Program (WEAP) for all personnel who will be engaged in ground-disturbing activities shall be required prior to the start of ground-disturbing activities. This shall include training that provides an overview of cultural resources that might potentially be found and the appropriate procedures to follow if cultural resources are identified. This requirement extends to any new staff prior to engaging in ground disturbing activities. An environmental sensitive area shall be established through the use of construction fencing to minimize the potential for built environment resources to be damaged during construction activities. Metro shall require monitoring by a safety qualified archaeologist and Native American monitor of all ground-disturbing activities according to the protocols and guidelines of the project specific archaeological and paleontological monitoring program to ensure project safety. In the event that previously unknown unique archaeological resources, significant historical resources, or tribal cultural resources are encountered during construction, the resources shall either be left in situ and avoided; or the resources shall be salvaged, recorded, and reposited consistent with the provisions of a Phase III data recovery program consistent with the provisions of a Cultural Resources Management Plan. Data recovery is not required by law or regulation. It is, however, the most commonly agreed-upon measure to mitigate adverse effects to archaeological sites eligible or listed under Section 106 Criterion D, as it preserves important information that would otherwise be lost.	A WEAP will be conducted with personnel who will be engaged in ground-disturbing activities on the first day of construction. All ground disturbance activities will be monitored by an archaeologist and Native American monitor.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☒ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits

TABLE 5-1
TRIGGERS FOR MITIGATION MEASURES

Environmental Impact	Mitigation Measure (MM)	Trigger of MM	Phase I Activity That Could Trigger MM	Phase II Activity That Could Trigger MM
As designed, the elements of the project comply with the Secretary of the Interior's Standards, and would not result in a substantial adverse change to this component of the historical resource pursuant to Section 15064.5(b) of the State CEQA Guidelines. The project would have the potential to result in a significant impact to historical resources as defined in Section 15064.5(b) of the State CEQA Guidelines.	MM-CULTURAL-2: *CRMP and Pre-Construction Testing.* Prior to construction, a Cultural Resource Management Plan (CRMP) will be prepared that will target areas within the archaeological APE most likely to contain buried cultural resources. Subsurface test excavation will be conducted to ensure that the Project will identify and evaluate significant archaeological resources. A research design and work plan will be focused on the physical identification of intact subsurface archaeological remains. Prior to construction, Phase II archaeological testing will be conducted in areas most likely to contain buried cultural resources in soils that have been predominantly *in situ* during the past 50 years within the boundaries of recorded unique archaeological resources, significant historical resources as defined in Section 15064.5(a) of the State CEQA Guidelines, or tribal cultural resources as defined in AB 52. If resources are discovered during Phase II testing prior to construction, they will be evaluated for significance with criteria set forth in the CRMP. If significant archaeological deposits are found during test excavations prior to construction, a mitigation plan will be developed to ensure that important archaeological data are not lost. The mitigation plan will include methods by which prehistoric, protohistoric, and historical archaeological deposits will be avoided or recovered prior to construction. If the testing determines no unique archaeological resources or significant historical resources, including potential tribal cultural resources, then the work shall proceed consistent with the provisions of MM-CULTURAL-1. Where the project site has been subject to testing within two years of the proposed activity and no unique archaeological resources, significant cultural resources, or tribal cultural resources are known from the project site, work shall proceed per the provision of Mitigation Measure CULTURAL-1. a. If the testing determines potential unique archaeological resources or significant historical resources, including potential tribal cultural resources, at a depth that will be affected by the ground-disturbing activities, one of two courses of action shall be employed: 1. Where avoidance is feasible, the ground disturbance shall be modified to avoid the potentially significant resource, and the work shall then proceed consistent with the provisions of MM-CULTURAL-1. An archaeological monitor shall be present during ground-disturbing activities. In addition, consultation shall be undertaken with the local Native American Tribal contacts designated by the NAHC to determine if a Native American monitor shall also be present during all or a portion of the ground-disturbing activities. 2. Where avoidance is not feasible, a Phase II evaluation of the cultural resources shall be undertaken to determine the significance of the cultural resource. If the Phase II investigation identifies a unique/eligible cultural resource	The results of the geotechnical investigations will be used to prepare a CRMP. A research design and archaeological testing plan will be prepared based on the results of the geotechnical investigation. A CRMP will be required prior to trenching. Other Phase 1 activities may proceed prior to preparation of the CRMP.	☐ Percolation test ☐ Borings ☐ Potholing ☒ Trenches ☐ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits

TABLE 5-1
TRIGGERS FOR MITIGATION MEASURES

Environmental Impact	Mitigation Measure (MM)	Trigger of MM	Phase I Activity That Could Trigger MM	Phase II Activity That Could Trigger MM
	within the area proposed for ground-disturbing work, Metro shall determine whether to avoid the resource through redesign or proceed with a Phase III data recovery program consistent with the provisions of a Cultural Resource Management Plan. The work shall then proceed consistent with the provisions of MM-CULTURAL-1.			
The project would have the potential to result in significant impact on archaeological resources as defined in Section 15064.5(b) of the State CEQA Guidelines.	MM-CULTURAL-1 and MM-CULTURAL-2	A WEAP will be conducted with personnel who will be engaged in ground-disturbing activities on the first day of construction. All ground disturbance activities will be monitored by an archaeologist and Native American monitor. The results of the geotechnical investigations will be used to prepare a CRMP. A research design and archaeological testing plan will be prepared based on the results of the geotechnical investigation.	MM-CULTURAL-1 ☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☒ Shovel test pits MM-CULTURAL-2 ☐ Percolation test ☐ Borings ☐ Potholing ☒ Trenches ☐ Shovel test pits	MM-CULTURAL-1 ☒ Potholing ☒ Trenches ☒ Shovel test pits MM-CULTURAL-2 ☒ Potholing ☒ Trenches ☒ Shovel test pits
The project would have the potential to result in significant impacts to paleontological resources as defined in Section 15064.5(b) of the CEQA Guidelines.	MM-CULTURAL-3: *Paleontological Resources – Paleontological Monitoring*. Impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource from the proposed project shall be reduced to below the level of significance by monitoring, salvage, and curation of unanticipated paleontological resources discovered during ground-disturbing activities in previously undisturbed native soils located 6 or more feet below the ground surface that would have the potential to contact geologic units with a high to moderate potential to yield unique paleontological resources. Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. If paleontological resources are encountered during ground-disturbing activities, work stops, an assessment of the site is conducted. No work shall proceed within immediate vicinity until the salvage and recovery of those resources consistent with standards for such recovery established by the Society of Vertebrate Paleontology is completed. At the time that work is continued to be authorized, Metro shall require and be responsible for salvage and recovery of those resources consistent with standards for such recovery established by the Society of Vertebrate Paleontology. Paleontological Resource Sensitivity Training shall be required for all project personnel prior to the start of ground-disturbing activities in geologic units with a moderate to high potential to yield unique paleontological resources. This shall include a brief field training that provides an overview of fossils that might potentially be found, and the appropriate procedures to follow if fossils are identified. This requirement shall extend to any new staff joining the project.	Paleontological Resource Sensitivity Training will be conducted with personnel who will be engaged in ground-disturbing activities on the first day of construction. Construction monitoring by a qualified paleontological monitor shall be implemented during all ground-disturbing activities 6 feet or more below the ground surface.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☐ Shovel test pits	☒ Potholing ☒ Trenches ☐ Shovel test pits

TABLE 5-1
TRIGGERS FOR MITIGATION MEASURES

Environmental Impact	Mitigation Measure (MM)	Trigger of MM	Phase I Activity That Could Trigger MM	Phase II Activity That Could Trigger MM
	Construction monitoring by a qualified paleontological monitor shall be implemented during all ground-disturbing activities that affect previously undisturbed geologic units 6 feet or more below the ground surface and have the potential to encounter geologic units with a moderate to high potential to yield unique paleontological resources. In the event that a paleontological resource is encountered during construction, all ground-disturbing activity within 100 feet of the find shall be halted until a qualified paleontologist can evaluate the significant of the discovery. Additional monitoring recommendations may be required. If the resource is found to be significant, the paleontologist shall determine the most appropriate treatment and method for removing and stabilizing the specimen. Curation of the any significant paleontological finds shall be required with a qualified repository, such as the Natural History Museum of Los Angeles County. Within 90 days of the completion of any salvage operation or monitoring activities, a mitigation report shall be submitted to Metro with an appended, itemized inventory of specimens. The report and inventory, when submitted to Metro, shall signify the completion of the program to mitigate impacts to paleontological resources.			
The project would have the potential to result in significant impacts to human remains as defined in Section 15064.5(b) of the CEQA Guidelines.	*MM-CULTURAL-4: Regulatory Requirements – Human Remains*. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are encountered during excavation activities, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours. In accordance with Section 5097.98 of the California PRC, the NAHC shall immediately notify the person(s) it believes to be the Most Likely Descendant of the deceased Native American. The descendants shall complete their inspection and make a recommendation within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with Metro, the disposition of the human remains. The Most Likely Descendant's recommendation shall be followed if feasible, and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials. If Metro rejects the Most Likely Descendant's recommendations, the agency shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (14 California Code of Regulations §15064.5(e)).	County Coroner shall be notified within 24 hours of the discovery of human remains on the project site. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the NAHC in Sacramento within 24 hours.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☒ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits

TABLE 5-1
TRIGGERS FOR MITIGATION MEASURES

Environmental Impact	Mitigation Measure (MM)	Trigger of MM	Phase I Activity That Could Trigger MM	Phase II Activity That Could Trigger MM
The project would have the potential to result in significant impacts to tribal resources as defined in Section 15064.5(b) of the State CEQA Guidelines.	MM-CULTURAL-1 and MM-CULTURAL-2	A WEAP will be conducted with personnel who will be engaged in ground-disturbing activities on the first day of construction. All ground disturbance activities will be monitored by an archaeologist and Native American monitor. The results of the geotechnical investigations will be used to prepare a CRMP. A research design and archaeological testing plan will be prepared based on the results of the geotechnical investigation.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☒ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits
The project has the potential to result in significant Impacts to hazards and hazardous materials during construction in relation to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. There would less than significant operational impacts to hazards and hazardous materials related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	MM-HAZ-1: If soil in the vicinity of the former railroad tracks alignment along Alameda Street and the rail spurs into the Forecourt parking area is planned for excavation and off-site disposal as part of the proposed project improvements, soil shall be sampled and analyzed for the potential presence of petroleum hydrocarbons, metals and persistent pesticides. The samples should be analyzed for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), CCR Title 22 Metals, and organochlorine pesticides (OCPs) using United States EPA Methods 8015B(M), 8260B, 6010B/7471A, and 8081, respectively. This methodology should be documented in a Soil Management Plan prior to construction. During construction, soil excavations conducted on site shall be monitored for visible soil staining and odor. Impacted soils shall be disposed off site in accordance with pertinent local, state, and federal regulatory guidelines.	If soil in the vicinity of the former railroad tracks alignment along Alameda Street and the rail spurs into the Forecourt parking area is planned for excavation and off-site disposal as part of the proposed modifications.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☐ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits
The project has the potential to result in significant Impacts to hazards and hazardous materials during construction in relation to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The potential exists for subsurface pollutants to be present as a result of a former gasoline station, which occupied the triangular property at the southwest corner of Alameda Street and Cesar Chavez.	MM-HAZ-2: If soil in the vicinity of the former gasoline station is planned for excavation and off-site disposal as part of the proposed project improvements, soil sampling shall be performed along the west side of Alameda Street within the Project area, in the vicinity of the former gasoline station. Soil samples should be analyzed for the presence of TPH, VOCs, and lead using United States S EPA Methods 8015B(M), 8260B, and 6010B, respectively. Prior to construction, a Soil Management Plan should be prepared. During construction, soil excavations conducted on site shall be monitored for visible soil staining and odor. Impacted soils shall be disposed off site in accordance with pertinent local, state, and federal regulatory guidelines.	If soil in the vicinity of the former gasoline station is planned for excavation and off-site disposal as part of the proposed modifications.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☐ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits
The project has the potential to result in significant Impacts to hazards and hazardous materials during construction in relation to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The historic yellow traffic markings	MM-HAZ-3: If yellow traffic markings are removed separately from the adjacent pavement, the markings shall be removed and sampled for lead chromate prior to construction, consistent with the current Caltrans' Standard Special Provisions (SSP).	Removal of yellow traffic markings separately from the adjacent pavement.	☐ Percolation test ☐ Borings ☐ Potholing ☐ Trenches ☐ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits

TABLE 5-1
TRIGGERS FOR MITIGATION MEASURES

Environmental Impact	Mitigation Measure (MM)	Trigger of MM	Phase I Activity That Could Trigger MM	Phase II Activity That Could Trigger MM
(thermoplastic and paint) used to demarcate lanes in the street may potentially contain hazardous levels of lead chromate.				
The potential presence of hydrocarbons, metals, and persistent pesticides in soil along or adjacent to former railroad tracks along Alameda Street represent a potential environmental concern. There is potential of naturally occurring oil seeps within the project area, or impacted soil from a crude oil pipeline beneath Alameda Street.	MM-HAZ-4: Should evidence of naturally-occurring oil seeps within the Project area, or impacted soil from a crude oil pipeline beneath Alameda Street be observed, the Caltrans Unknown Hazard Procedures shall be implemented during construction activities.	When naturally occurring oil seeps within the project area, or impacted soil from a crude oil pipeline beneath Alameda Street are observed.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☐ Shovel test pit	☒ Potholing ☒ Trenches ☒ Shovel test pits
The construction of the project would have the potential to result in significant impacts to hazards and hazardous materials with respect to the emission of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. There would be less than significant operational impacts to hazards and hazardous materials related to exposing schools to hazardous emission as a result of operation or maintenance of the project.	MM-HAZ-1, MM-HAZ-2, MM-HAZ-3, and MM-HAZ-4	If soil in the vicinity of the former railroad tracks alignment along Alameda Street and the rail spurs into the Forecourt parking area is planned for excavation and off-site disposal as part of the proposed modifications; or if soil in the vicinity of the former gasoline station is planned for excavation and off-site disposal as part of the proposed modifications; or when naturally occurring oil seeps within the project area, or impacted soil from a crude oil pipeline beneath Alameda Street are observed.	☒ Percolation test ☒ Borings ☒ Potholing ☒ Trenches ☐ Shovel test pits	☒ Potholing ☒ Trenches ☒ Shovel test pits

5.1 Aesthetics

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to scenic vistas and visual character/quality and no impacts in regard to scenic resources within a state scenic highway or creation of a new source of substantial light or glare. The proposed modifications to the project would not affect the viewsheds of the 20 City-identified scenic views/vistas (historic features) within a half-mile radius of the project site or the number of existing or planned trees on the project site. The project, including the proposed modifications to the project, cannot be viewed from officially designated or eligible state scenic highways, historic parkways, or County scenic highways, due to distance and intervening topography and the built environment. The project, including the proposed modifications to the project, would not result in a new source of nighttime light or daytime glare. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to aesthetics than the approved project, and mitigation would not be required.

5.1.1 Two-Phased Investigations

The certified EIR evaluated aesthetics impacts from the project within a half-mile radius of the project site. The type of equipment required for investigations is similar in size to that evaluated for the construction scenario for the EIR. The percolation testing, borings, potholing, test pit, and trenching activities would all be underground and involve placement of temporary equipment as tall as a drill rig for structural boring to a depth of 20 feet bgs. Excavation activity sites would be restored to the original surface condition upon completion. As with the approved project, the proposed modifications to the project would not affect views to or from historic features in the project area because excavation activities would be underground and the equipment would not be large enough to obstruct views. Excavation activities would not require removal of existing mature trees. The percolation testing, borings, potholing, test pit, and trenching activities would all be conducted in compliance with applicable County and/or City of Los Angeles requirements. As stated in the certified EIR, the project site is located within the middle of an approximately 3,500-square-mile urbanized area characterized by very high existing levels of nighttime light, and the proposed modifications to the project would result in no impacts in regard to creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to aesthetics.

5.1.2 Revised Schedule

The temporary impacts on aesthetics related to visual character of the area and light and glare associated with investigations are consistent with the area, magnitude, and duration evaluated for the construction scenario contained in the certified EIR. Accelerating the two phases of investigations extends the total duration of visibility of construction equipment by less than 5 percent of that evaluated in the EIR. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to aesthetics.

5.1.3 Increase in Depth of Excavation

An increase in depth of excavation for construction and the geotechnical and utility investigations would not affect the findings in the certified EIR related to aesthetics because excavation activities would be

underground and excavation activity sites within the project site would be restored to the original surface condition or to the proposed project, after construction. The additional depth of excavation would not affect scenic vistas, visual character, visibility from state-designated highways, or light and glare. As with the approved project, the proposed modifications to the project would not affect views to or from historic features in the project area because the excavation activities would be underground and the equipment would not be large enough to obstruct views. Therefore, the proposed modifications related to increasing the maximum depth of construction activities, including geotechnical and utility studies, to 20 feet bgs would result in no new or substantially more adverse impacts related to aesthetics.

5.1.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to aesthetics because it would not affect views to or from historic features in the project area. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to aesthetics.

5.2 Agriculture and Forestry Resources

As with the approved project, the proposed modifications to the project would result in no impacts in regard to agriculture and forestry resources because the project is located within an urban and built-up land area with no existing agricultural or forest land use, and all pre-construction and construction activities would be undertaken within the urban and built-up land area. The proposed modifications to the project would not affect the project site's urban context with no existing agricultural or timberland harvesting uses. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to agriculture and forestry resources than the approved project, and mitigation would not be required.

5.2.1 Two-Phased Investigations

The certified EIR evaluated potential agriculture and forestry resources impacts from the project within the vicinity of the project site. All percolation testing, borings, potholing, test pit, and trenching activities would take place within an urban context with no agricultural, forest, or timberland resources; therefore, as with the approved project, there are no impacts on agricultural or forestry resources. Thus, there would be no new or substantially more adverse impacts related to agriculture and forestry resources.

5.2.2 Revised Schedule

The acceleration of investigations would not affect the findings in the certified EIR related to agriculture and forestry resources because excavation activity sites would be located within an urban context with no agricultural or timberland harvesting uses. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to agriculture and forestry resources.

5.2.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR related to agriculture and forestry resources because the excavation activity sites would be located within an urban context with no agricultural or timberland harvesting uses. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to agriculture and forestry resources.

5.2.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to agriculture and forestry resources because the transportation features would be located within an urban context with no agricultural or timberland harvesting uses. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to agriculture and forestry resources.

5.3 Air Quality

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to conflicting with or obstructing implementation of applicable air quality plans, violating any air quality standard or contributing substantially to an existing or projected air quality violation, having a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, exposing sensitive receptors to substantial pollutant concentrations, and exposing a substantial number of people to objectionable odors. The proposed modifications to the project would not result in substantially more severe impacts to energy consumption and therefore would not affect the conclusions in the certified EIR to air quality resulting from such energy use (Table 5.3-1, *Fuel Consumption from Construction Equipment*). For tests/borings greater than 5 feet, a drill rig would be used such as a CME-75 Truck Mounted Auger Drill or equivalent. The drill's engine would be rated to a U.S. Environmental Protection Agency (EPA) Tier 3 emissions certified diesel engine standard or better. The additional construction equipment required for the proposed modifications would not substantially worsen the impacts to air quality because fuel use would not substantially increase.

TABLE 5.3-1
FUEL CONSUMPTION FROM CONSTRUCTION EQUIPMENT

Investigation Phase	# of Equipment	Equipment Type	# Hours/ Day	# Days	Total Hours	HP	Load Factor	GAL/ Hour	Total GAL
Phase 1									
	1	Hand auger equipment	4		32	85	0.78	17	549
	1	Drill rig	4		32	221	0.5025	29	920
	1	Concrete saw	8		64	81	0.73	15	979
	1	Skid steer	8		64	65	0.3685	6	397
	1	Pavers	6		48	130	0.42	14	678
	1	Roller	6		48	80	0.38	8	378
	1	Jack hammer	4		32	85	0.78	17	549
	1	Hand shovels/ screens	4	10	40				
Phase 2									
	1	Concrete saw	8		160	81	0.73	15	2,449
	1	Skid steer	8		160	65	0.3685	6	992
	1	Pavers	6		120	130	0.42	14	1,696
	1	Roller	6		120	80	0.38	8	944
	1	Jack hammer	4		80	85	0.78	17	1,373
	1	Hand shovels/ screens	4	10	40				
Total GAL for two-phased investigations									11,904
Certified EIR Total GAL									61,932

NOTE: HP = horsepower; GAL = gallons. No fuel usage is expected from hand shovels.

5.3.1 Two-Phased Investigations

The certified EIR evaluated air quality impacts from the project, including the criteria air pollutants from worker, vendor, and hauling trips to and from the project study area and for construction equipment, inclusive of investigations. The fuel usage associated with the two phases of investigations comprises approximately 19 percent of the total estimated fuel consumption for the construction project. Because the air quality emissions are calculated based upon the fuel usage in the heavy construction equipment and because air quality emissions in the certified EIR were well below the thresholds, these investigations would not result in new or substantially more adverse impacts to air quality than those addressed in the certified EIR. Similarly, the proposed modifications related to a two-phased approach to investigations would have no effect on air quality in the subsequent operational phase of the project.

Therefore, the proposed modifications would result in no new or substantially more adverse impacts related to air quality.

5.3.2 Revised Schedule

Accelerating the schedule for investigations changes the timing of criteria air pollutants. The total duration of operation of construction equipment would increase by approximately 1 to 2 months. The equipment used for the investigations would be less fuel intensive and on average smaller than those required for construction. Spreading out the investigations has the potential to reduce daily activity, particularly, in the first quarter of construction by advancing the investigations. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to air quality.

5.3.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR for air quality. The increase in the maximum depth of excavation would be accomplished with an overall increase in duration of construction activities of approximately 1 to 2 months to accommodate accelerated investigations, with no anticipated change in the overall duration of construction activities. Fuel usage in regard to increased depth of excavation would not substantially increase the impacts to air quality during construction and would have no effect on the air quality during operation (Table 5.3-1). Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to air quality.

5.3.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to air quality because the construction activities associated with the bus stops would be less than significant compared to emissions calculated for the project. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to air quality.

5.4 Greenhouse Gas Emissions

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to generating greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant effect on the environment. As with the approved project, the proposed modifications to the project would result in no impact in regard to conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. As demonstrated in Table 5.3-1, the proposed modifications to the project would not result in substantially more severe impacts to energy consumption and therefore would not affect the conclusions in the certified EIR regarding GHG emissions resulting from such energy use, and mitigation would not be required.

5.4.1 Two-Phased Investigations

The certified EIR evaluated GHG impacts from the project, including emissions from worker, vendor, and hauling trips to and from the project study area and for construction equipment, inclusive of

investigations. Inherently, GHG emissions are a global issue and would not be affected by localized minor adjustments in the project study area. The fuel usage from a two-phased approach to investigations is a relatively minor component, approximately 19 percent, of the fuel that would be used to construct the project (Table 5.3-1). Because GHG emissions in the certified EIR were well below the reporting threshold of 25,000 metric tons of carbon dioxide equivalent (CO_2e) emissions, these investigations would not result in new or substantially more adverse impacts to air quality than those addressed in the certified EIR. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to GHG emissions.

5.4.2 Revised Schedule

The total duration of operation of construction equipment would increase by approximately 1 to 2 months, in conjunction with acceleration of the schedule of investigations. The equipment used for the investigations would be less fuel intensive and on average smaller than the equipment required for construction. As with the certified EIR, the net effect of the project would be to facilitate attainment of goals specified in the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) to decrease per capita GHG emissions by facilitating increased per capita miles traveled by walking and cycling. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to GHG emissions.

5.4.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR for GHG emissions. The increase in the maximum depth of excavation would be accomplished with an overall increase in duration of construction activities of approximately 1 to 2 months to accommodate accelerated investigations, with no anticipated change in the overall duration of construction activities. Fuel usage in relation to increasing depth of excavation would not substantially increase the impacts to GHG during construction and would have no effect on GHG emissions during operation (Table 5.3-1). Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to GHG emissions.

5.4.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to GHG emissions because the construction activities associated with the bus stops would be accomplished as part of the evaluated construction. Fuel usage associated with the revised bus stop and route would be comparable to the existing condition and would not substantially increase the impacts to GHG during construction and would have no effect on GHG emissions during operation (Table 5.3-1). Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to GHG emissions.

5.5 Biological Resources

As with the approved project, the proposed modifications to the project would result in no impacts in regard to biological resources because the proposed modifications to the project would remain within

an urban context with no known sensitive biological resources. However, as with the approved project, non-native trees present at and around the project site have the potential to serve as temporary nesting sites for birds protected under the Migratory Bird Treaty Act (MBTA). As with the approved project, implementation of MM-BIO-1 would avoid conflicts with the MBTA. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to biological resources than the approved project, and implementation of MM-BIO-1 would be required during nesting bird season (February 1 to August 31).

5.5.1 Two-Phased Investigations

The certified EIR evaluated potential biological resources impacts from the project within a 5-mile radius surrounding the project site. As with the project evaluated in the certified EIR, there are no special status species, state-designated sensitive habitat, waters of the United States, migratory corridors or nursery habitat, or existing or proposed Habitat Conservation Plan or Natural Community Conservation Plan areas present in the areas affected by investigations. As with the approved project, non-native trees present at and around the project site have the potential to serve as temporary nesting sites for birds protected under the MBTA. As with the approved project, implementation of MM-BIO-1 would avoid conflicts with the MBTA. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to biological resources.

5.5.2 Revised Schedule

The accelerated schedule for investigations would not affect the findings in the certified EIR because excavation activity sites would remain within an urban context with no known sensitive biological resources. Implementation of MM-BIO-1 would be required to avoid potential impacts to migratory bird nesting sites for pre-construction and construction activities during nesting bird season. Therefore, the proposed modifications related to an accelerated schedule for investigations would result in no new or substantially more adverse impacts related biological resources.

5.5.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because excavation activity sites within the project site would be located within an urban context with no known sensitive biological resources. The drill rig would be taller to provide a deeper excavation. Excavation activities would not require the removal of existing mature trees. As with the approved project, implementation of MM-BIO-1 would be required to avoid potential impacts to migratory bird nesting sites for all investigations during nesting bird season. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to biological resources.

5.5.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to biological resources because transportation features within the project site would be located within an urban context with no known sensitive biological resources. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to biological resources.

5.6 Cultural Resources

As with the approved project, the proposed modifications to the project would result in less than significant impacts after mitigation in regard to historic resources, archaeological resources, paleontological resources, human remains, and tribal cultural resources. The proposed modifications to the project would not affect additional cultural resources on the project site. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to cultural resources than the approved project, and additional mitigation measures would not be required. As with the approved project, implementation of MM-CULTURAL-1, MM-CULTURAL-2, MM-CULTURAL-3, and MM-CULTURAL-4 would be required as shown in Table 5-1.

5.6.1 Two-Phased Investigations

The certified EIR evaluated cultural resources impacts from the project within a half-mile radius of the project site (Figures 4.2-1 and 4.2-2). The certified EIR evaluated the impacts of ground disturbing for the proposed locations of the percolation tests, borings, potholing, and trenching activities associated with both phases of investigations for cultural resources. No known cemeteries will be impacted by the additional investigations. The two-phased investigations would not affect the findings in the certified EIR because the cultural and tribal cultural resources associated with the project modifications are the same as or comparable to those evaluated in the certified EIR. The additional geotechnical and utility investigations will be conducted in the area that has been previously analyzed. A CRMP will be required prior to trenching. Other Phase 1 activities may proceed prior to preparation of the CRMP. As with the approved project, implementation of MM-CULTURAL-1, MM-CULTURAL-2, MM-CULTURAL-3, and MM-CULTURAL-4 when applicable would reduce impacts to below the level of significance. MM-CULTURAL-1, MM-CULTURAL-3, and MM-CULTURAL-4 will apply to both Phase 1 and Phase 2 activities. Therefore, the proposed modifications related to a two-phased approach to construction activities would result in no new or substantially more adverse impacts related to cultural resources.

5.6.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR because the timing of when the impacts occur does not affect the aerial extent or magnitude of impacts. As with the approved project, implementation of MM-CULTURAL-1, MM-CULTURAL-2, MM-CULTURAL-3, and MM-CULTURAL-4 when applicable would reduce impacts to below the level of significance. MM-CULTURAL-1, MM-CULTURAL-3, and MM-CULTURAL-4 will apply to both Phase 1 and Phase 2 activities. A CRMP will be required prior to trenching. Other Phase 1 activities may proceed prior to preparation of the CRMP. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to cultural resources.

5.6.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because excavation activity below 6 feet will be monitored for paleontological resources and the archaeological resources within the project site do not extend below 20 feet in depth. The percolation tests, borings, potholing, and trenching activities will be earth-moving activities, and will involve temporary placement of heavy equipment such as a drill rig for structural boring to a depth of 20 feet bgs within the planned footprint of the forecourt. The increase in depth of excavation for construction and geotechnical/utility

investigations would not affect the findings in the certified EIR because the cultural resource mitigation measures will be implemented for the construction activities when required. As with the approved project, implementation of MM-CULTURAL-1, MM-CULTURAL-2, MM-CULTURAL-3, and MM-CULTURAL-4 when applicable would reduce impacts to below the level of significance. A CRMP will be required prior to trenching. Other Phase 1 activities may proceed prior to preparation of the CRMP. MM-CULTURAL-1, MM-CULTURAL-3, and MM-CULTURAL-4 will apply to both Phase 1 and Phase 2 activities. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to cultural resources.

5.6.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to cultural resources because the transportation features would not affect the aerial extent or magnitude of impacts. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to cultural resources.

5.7 Energy

As with the approved project, the proposed modifications to the project would result in no impact in regard to conflicting with adopted energy conservation and other sustainability metrics in local plans. As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to using energy resources in a wasteful and inefficient manner and decreasing reliance on fossil fuels such as coal, natural gas, and oil. The proposed modifications to the project would result in no new or substantially more severe impacts to energy than the approved project, and mitigation would not be required.

During Phase 1, hand auger equipment is not anticipated to have notable fuel usage. For percolation tests/borings greater than 5 feet, a drill rig, such as a CME-75 Truck Mounted Auger Drill or equivalent, would be used. A concrete saw, skid steer, paver, roller, and jack hammer would be required for the potholing and trenching. The construction equipment would be supported by a vacuum extraction truck, a concrete truck, and a dump truck and two light duty trucks and would supplement these activities for an estimated additional 80 truck trips (10 trips/day * 8 days).

During Phase 2, a concrete saw, skid steer, paver, roller, and jack hammer or equivalent would be required for the potholing and trenching. The construction equipment would be supported by a vacuum extraction truck, a concrete truck, a dump truck, and two light duty trucks for an estimated additional 200 truck trips (10 trips/day * 20 days).

In total for both Phase 1 and 2, the fuel usage from the construction equipment is anticipated to increase by about 19 percent (or 11,904 gallons of diesel) compared to the equipment evaluated in the certified EIR (Table 5.3-1). The additional estimated 280 truck trips (168 vendor trips and 112 worker trips) would result in about 79 additional gallons of gasoline. This would be a approximately 10 percent increase from the gasoline fuel use of 760 gallons listed in the certified EIR.

5.7.1 Two-Phased Investigations

The certified EIR evaluated energy impacts from the project, including consumptive energy use from worker, vendor, and hauling trips to and from the project study area and for construction equipment, inclusive of investigations. The energy use for the equipment required for both phases of investigations is consistent with the equipment analyzed for the approved project. The fuel usage associated with the two phases of investigations comprises approximately 19 percent of the total estimated fuel consumption for the construction project. The equipment used for the investigations would be less fuel intensive and on average smaller than the equipment required for construction. Therefore, completing investigations in two phases would not result in new or substantially more adverse impacts to energy than those addressed in the certified EIR. Similarly, the proposed modifications related to a two-phased approach to investigations would have no effect on energy in the subsequent operational phase of the project. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to energy.

5.7.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR because the investigations would not substantially add to the energy needs of the project during construction and would have no effect on the energy required by the project during operation. Therefore, the proposed modifications related to an accelerated schedule for investigations would result in no new or substantially more adverse impacts related to energy.

5.7.3 Increase in Depth of Excavation

The increase in the maximum depth of excavation would be accomplished with no anticipated change in the overall duration of construction activities. The equipment used for the investigations would be less fuel intensive and on average smaller than the equipment required for construction. Fuel usage in relation to an increased depth of excavation would not substantially increase the impacts to consumptive use of energy during construction and would have no effect on the consumptive use of energy during the operational phase of the project (Table 5.3-1). Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to energy.

5.7.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to energy because the fuel usage in relation to the construction activities associated with the bus stops would not substantially increase the impacts to consumptive use of energy during construction and would have no effect on the consumptive use of energy during the operational phase of the project (Table 5.3-1). Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to energy.

5.8 Geology and Soils

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to exposing people or structures to potential adverse effects, including the risk of loss,

injury, or death involving strong seismic ground shaking; exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction; substantial soil erosion or the loss of topsoil; being located on a geologic unit or soil that is unstable or that would become unstable as a result of the project; and being located on an expansive soil. As with the approved project, the proposed modifications to the project would result in no impacts in regard to exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides; and to having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems.

No known active faults are located within the project study area, and the project study area is not located within the 2001 California Geological Survey (CGS) Alquist-Priolo Earthquake Fault Zone (APEFZ) map[10] or City of Los Angeles Safety Element Fault Rupture Study Areas.[11] All structures will be designed in accordance with appropriate industry standards, including established engineering and construction practices and methods. While the study area is located within a CGS-mapped liquefaction zone, previous geotechnical investigations[12,13] have found the area unlikely to be susceptible to liquefaction. Based on the type of soils identified in the project study area, expansive soils are not expected to be a concern. The project's sanitary sewer flows will be connected to municipal sewer systems, and no septic tanks or alternative wastewater disposal systems are proposed. Based on the relatively level topography of the project study area, the landslide potential is low. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to geology and soils than the approved project, and mitigation would not be required.

5.8.1 Two-Phased Investigations

The certified EIR evaluated impacts to geology and soils from the project related to construction and operational phases of the project. The evaluation included the exposure of construction workers and visitors and property to risks and hazards in relation to Alquist-Priolo study zones, ground acceleration, and known soil hazards. The analysis of the construction scenario was inclusive of investigations. Accelerating investigations does not change the area affected by risks associated with geology and soils (Figures 4.2-1 and 4.2-2). Percolation testing, borings, potholing, test pit, and trenching activities would not result in new or substantially more adverse impacts than those analyzed in the certified EIR. Therefore, the proposed modifications to the project would result in no new or substantially more adverse impacts related to geology and soils.

5.8.2 Revised Schedule

The revised project schedule would not affect the conclusions in the certified EIR in regard to geology and soils because the percolation testing, borings, potholing, test pit, and trenching activities would not exacerbate underlying geological conditions within the project area. Existing geologic conditions would

[10] California Geological Survey. 2001. Alquist-Priolo Earthquake Fault Zone (APEFZ) maps, Geographic Information System (GIS) data files.

[11] City of Los Angeles Department of City Planning. Adopted 26 November 1996. *Safety Element of the Los Angeles City General Plan, City Plan Case No. 95-0371*.

[12] Diaz Yourman & Associates. Revised 29 October 2009. Geotechnical Investigation, Union Station, Mail Dock Conversion to Passenger Platform, Los Angeles, California.

[13] Diaz Yourman & Associates. Revised 4 August 2010. *Preliminary Foundation Report, Union/Patsaouras Plaza Busway Station, 07-LA-10PM 17.20, LA Busway Bridge OH, Bridges Nos. 53-2673 &53-New (POC), Los Angeles, California*.

remain unchanged by the project modifications. Additionally, excavation activity sites within the project site would be temporarily restored to the original surface condition upon completion before construction activities commence (anticipated in 2020). Therefore, the proposed modifications related to an accelerated schedule for investigations would result in no new or substantially more adverse impacts related to geology and soils.

5.8.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because the percolation testing, borings, potholing, test pit, and trenching and later, construction activities to a 5-foot greater depth would not exacerbate underlying geological conditions within the project area. The percolation testing, borings, potholing, test pit, and trenching activities would require temporary placement of equipment required for structural boring to a depth of 20 feet bgs within the planned footprint of the forecourt. Existing geologic conditions would remain unchanged by the project modifications. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to geology and soils.

5.8.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to geology and soils because it would not alter the requirements for grading or excavation within the project area. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to geology and soils.

5.9 Hazards and Hazardous Materials

As with the approved project, the proposed modifications to the project would result in no impacts in regard to being located on a site which is included on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5; being located within an airport land use plan, or within two miles of a public airport or public use airport; being within the vicinity of a private airstrip; impairing implementation or physically interfering with an emergency response plan or emergency evacuation plan; and exposing people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The review of the California Department of Toxic Substances Control (DTSC) environmental regulatory database compilation does not indicate that the project site is included on a list of hazardous materials sites compiled pursuant to the Government Code Section 65962.5. However, the EDR report identifies sites at LAUS that are associated with rail and bus operations. As stated in the certified EIR, a total of 63 hazardous materials sites are located within one-quarter mile of the project site.[14] There are no public airports or public use airports within two miles of the project study area. There are no private airports within two miles of the project study area. Based on information obtained from the City of Los Angeles Fire Department, the project site is not included in any emergency response plan or any emergency

[14] Kleinfelder. 2 August 2017. Hazardous Waste Initial Site Assessment The Los Angeles Union Station Forecourt and Esplanade Improvements Project.

evacuation plan.[15] Based on the review of fire severity hazard zone maps developed by the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a severe fire hazard zone.[16]

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to the routine transport, use, or disposal of hazardous materials. The transport, use, and storage of hazardous materials are governed by a range of federal, state, and local statutes and regulations. As a public agency, Metro is required to have an adopted Business Plan that regulates the use, storage, and transport of materials such as cleaning supplies, fuels, herbicides, and pesticides. The purpose of a Business Plan is to prevent or minimize the damage to public health and safety and the environment from a release or threatened release of hazardous materials. It also satisfies community right-to-know laws. Businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity must (1) inventory their hazardous materials, (2) develop a site map, (3) develop an emergency plan, and (4) implement a training program for employees. Businesses must submit this information electronically to the statewide information management system (California Environmental Reporting System, or CERS). As with the approved project, implementation of MM-HAZ-1, MM-HAZ-2, MM-HAZ-3, and MM-HAZ-4 would be required at the location of the former railroad tracks along Alameda Street and the forecourt. MM-HAZ-1 is applicable only to the areas of old railroad track alignment.

5.9.1 Two-Phased Investigations

The certified EIR evaluated impacts to hazards and hazardous materials from the project related to both the construction and operational phases of the project. The evaluation was based on regional data that included all known hazardous material sites within a one-mile radius of the project site, which is inclusive of all the areas affected by both phases of investigations (Figures 4.2-1 and 4.2-2).[17] Investigations including the percolation testing, borings, potholing, test pit, and trenching activities would trigger MM-HAZ-1, MM-HAZ-2, and MM-HAZ-4 at the location of the former railroad tracks along Alameda Street and the forecourt. Soils samples recovered from the percolation testing, borings, potholing, test pit, and trenching activities will be tested for potential contaminants identified in MM-HAZ-1, MM-HAZ-2 at the location of the former railroad tracks along Alameda Street and the forecourt. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to hazards and hazardous materials.

5.9.2 Revised Schedule

The revised project schedule would not affect the conclusions in the certified EIR in regard to hazards and hazardous materials because excavation activity sites would be temporarily restored to the original surface condition upon completion before the commencement of construction activities, anticipated in 2020. Advancing the schedule for percolation testing, borings, potholing, test pit, and trenching

[15] Humphrey, Brian, Los Angeles Fire Department, Public Service Officer. 9 December 2013. Telephone conversation with André Anderson, Sapphos Environmental, Inc., Senior Environmental Compliance Specialist, Pasadena, CA.

[16] State of California Department of Forestry and Fire Protection (CAL FIRE). 2007. Very High Fire Hazard Safety Zone Map, Los Angeles, CA. Sacramento, CA.

[17] Los Angeles County Metropolitan Transportation Authority. 2 August 2017. *Hazardous Waste Initial Site Assessment for the Los Angeles Union Station Forecourt and Esplanade Improvements Project Los Angeles, California*. Prepared by Kleinfelder.

activities to as early as July 2018 would not generate any impacts beyond those evaluated in the certified EIR. The proposed modifications to the project have been proposed to inform the design and construction of the project. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to hazards and hazardous materials.

5.9.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because the percolation testing, borings, potholing, test pit, and trenching activities, and later, construction activities to a 5-foot greater depth would not exacerbate existing conditions in regard to hazards and hazardous materials. The percolation testing, borings, potholing, test pit, and trenching activities would require temporary placement of equipment required for structural boring to a depth of 20 feet bgs within the planned footprint of the forecourt. Additionally, the proposed project modifications will require the need for implementation of mitigation measures MM-HAZ-1 and MM-HAZ-2 at the location of the former railroad tracks along Alameda Street and the forecourt. Soils samples recovered from the percolation testing, borings, potholing, test pit, and trenching activities would be tested for potential contaminants identified in MM-HAZ-1 and MM-HAZ-2 at the location of the former railroad tracks along Alameda Street and the forecourt. Investigations including the percolation testing, borings, potholing, test pit, and trenching activities would trigger MM-HAZ-1, MM-HAZ-2, and MM-HAZ-4 at the location of the former railroad tracks along Alameda Street and the forecourt. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to hazards and hazardous materials.

5.9.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to hazards and hazardous materials because it would not exacerbate existing conditions in regard to hazards and hazardous materials. Compliance with MM-HAZ-1, MM-HAZ-2, and MM-HAZ-4, as specified for Alameda Esplanade and Los Angeles crossing would resolve effects related to hazards and hazardous materials to below the level of significance. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to hazards and hazardous materials.

5.10 Hydrology and Water Quality

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to violation of any water quality standards or waste discharge requirements; and no impacts in regard to substantially depleting groundwater supplies, altering the existing drainage pattern of the site or area that would result in substantial erosion or siltation off site, or substantially increase the rate or amount of surface runoff that would result in flooding on site or off site, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of pollute run off, otherwise substantially degrade water quality, place housing or structures in a 100-year flood hazard area that would impede or redirect flood flows, expose people or structures to significant risk from the failure of a levee or dam, and inundation by seiche, tsunami, or mudflow.

As with the approved project, the proposed modifications to the project would be subject to the required provisions of the Stormwater Pollution Prevention Plan (SWPPP) that would minimize the potential for erosion and siltation. As a result, any potential sources of polluted runoff would be effectively controlled. As with the approved project, the proposed modifications to the project would not create or contribute runoff water that would exacerbate any existing deficiencies in the storm drain system or provide substantial additional sources of polluted runoff. As with the approved project, stormwater or any runoff waters would be directed into existing storm drains under the proposed modifications to the project. As with the approved project, the proposed modifications to the project would occur in accordance with the Los Angeles Building Code Sections 91.7000 through 91.7016, which require necessary permits, plan checks, and inspections to reduce the effects of sedimentation and erosion. Additionally, the proposed modifications to the project would occur in accordance with standard procedures established by the Regional Water Quality Control Board (RWQCB) and project compliance with the City's Standard Urban Stormwater Mitigation Plan (SUSMP) requirements. As with the approved project, the proposed project modifications are not located within a 100- or 500-year floodplain, or within inundation and tsunami hazard areas delineated in the City of Los Angeles Safety Element. Therefore, the proposed modifications to the project would not result in new or substantially more adverse impacts to hydrology and water quality than the approved project, and mitigation would not be required.

5.10.1 Two-Phased Investigations

The certified EIR evaluated hydrology and water quality impacts from the project outside of the project site (Figures 4.2-1 and 4.2-2). The percolation testing, borings, potholing, test pit, and trenching activities would involve placement of temporary drilling equipment for structural boring to a depth of up to 20 feet bgs. The proposed modifications to the project would be subject to the requirements of the Los Angeles Building Code Sections 91.7000 through 91.7016, which require necessary permits, plan checks, and inspections to reduce the effects of sedimentation and erosion. Additionally, the proposed modifications to the project would occur in accordance with standard procedures established by the RWQCB and project compliance with the City's SUSMP requirements. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to hydrology and water quality.

5.10.2 Revised Schedule

The revised project schedule would not affect the conclusions in the certified EIR in regard to hydrology and water quality and would not result in new impacts or any significantly more adverse impacts. As with the approved project, the proposed modifications to the project would be subject to the requirements of the Los Angeles Building Code Sections 91.7000 through 91.7016, which require necessary permits, plan checks, and inspections to reduce the effects of sedimentation and erosion. Additionally, the proposed modifications to the project would occur in accordance with standard procedures established by the RWQCB and project compliance with the City's SUSMP requirements. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to hydrology and water quality.

5.10.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because the proposed project modifications would be subject to the requirements of the Los Angeles Building Code Sections 91.7000 through 91.7016, which require necessary permits, plan checks, and inspections to

reduce the effects of sedimentation and erosion. The percolation testing, borings, potholing, test pit, and trenching activities would require temporary placement of equipment required for structural boring to a depth of 20 feet within the planned footprint of the forecourt. Additionally, the proposed modifications to the project would occur in accordance with standard procedures established by the RWQCB and project compliance with the City's SUSMP requirements. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to hydrology and water quality.

5.10.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to hydrology and water quality because construction and demolition would occur in accordance with standard procedures established by the RWQCB and project compliance with the City's SUSMP requirements. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to hydrology and water quality.

5.11 Land Use and Planning

As with the approved project, the proposed modifications to the project would result in no impacts in regard to physical division of an established community, conflicting with any applicable land use plan, policy, or regulation, or conflicting with any applicable habitat conservation plan or natural community conservation plan. As with the approved project, the proposed modifications to the project would provide a civic plaza and enhanced pedestrian and cycling path of travel for residents, workers, and visitors, including the transit population, in the project area. The improvements are aligned with the existing regional and local transportation network, which facilitates multi-modal movement through the neighborhood. As with the approved project, the proposed modifications to the project would be consistent with the City of Los Angeles General Plan, zoning code, and Landscape Ordinance, in addition to the SCAG 2016 RTP/SCS, Mobility Plan 2035, Plan for a Healthy Los Angeles, Central City Community Plan, Central City North Community Plan, Draft Downtown Community Plan 2040 (DTLA 2040), Alameda District Specific Plan (ADP), and the City of Los Angeles Mobility Plan 2035. As with the approved project, the proposed modifications to the project would be located in a heavily urbanized area, and there are no Habitat Conservation Plans or Natural Community Conservation Plans with boundaries that intersect the project site. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts, and mitigation would not be required.

5.11.1 Two-Phased Investigations

The certified EIR evaluated land use and planning impacts from the project outside of the project site (Figures 4.2-1 and 4.2-2). The percolation testing, borings, potholing, test pit, and trenching activities would all be underground and involve placement of temporary drilling equipment for structural boring to a depth of up to 20 feet bgs. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to land use and planning.

5.11.2 Revised Schedule

The revised project schedule would not affect the conclusions in the certified EIR in regard to land use and planning, and would not result in new impacts or significantly more adverse impacts. The proposed modifications to the project, including the revised schedule, would still provide the same project elements for residents, workers, and visitors, including the transit population, in the project area. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to land use and planning.

5.11.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because the proposed project modifications would not result in physical division of an established community; conflict with any applicable land use plan, policy, or regulation; or conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan. The percolation testing, borings, potholing, test pit, and trenching activities would require temporary placement of equipment required for structural boring to a depth of 20 feet within the planned footprint of the forecourt. The proposed modifications to the project, including the increase in depth of excavation, would still provide a civic plaza and enhanced pedestrian and cycling path of travel for residents, workers, and visitors, including the transit population, in the project area. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to land use and planning.

5.11.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to land use and planning as the project would enhance pedestrian and cycling travel for residents, workers, and visitors, including the transit population. The improvements are aligned with the existing regional and local transportation network, which facilitates multi-modal movement through the neighborhood. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to land use and planning.

5.12 Mineral Resources

As with the approved project, the proposed modifications to the project would result in no impacts in regard to mineral resources. There are no active or abandoned mines, oil fields, or extraction facilities on or adjacent to the project site. As stated in the certified EIR, the project site is located within a CGS-designated Mineral Resources Zone (MRZ) 3, which contains known mineral occurrences of undetermined mineral resources significance underground. However, this MRZ-3 zone inaccessible in the existing condition and would continue to be inaccessible after construction of the project. The nearest mineral resource site is an active oil field located approximately one-quarter mile south of the project site. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to mineral resources than the approved project, and mitigation would not be required.

5.12.1 Two-Phased Investigations

The certified EIR evaluated mineral resources impacts from the project within at least a 10-mile radius of the project site. As with the approved project, the proposed modifications to the project would not improve or decrease access to mining extraction and mineral resources of undetermined significance in the underlying MRZ-3 zone, which is inaccessible in the existing condition and would continue to be inaccessible after construction of the project. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to mineral resources.

5.12.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR because mineral extraction activity sites within the project site are currently inaccessible for mining extraction, and mineral resources of undetermined significance in the underlying MRZ-3 zone would continue to be inaccessible after construction of the project. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to mineral resources.

5.12.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because it would not improve or decrease access to mining extraction and mineral resources of undetermined significance in the underlying MRZ-3 zone, which is inaccessible in the existing condition and would continue to be inaccessible after construction of the project. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to mineral resources.

5.12.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to mineral resources because it would not improve or decrease access to mining extraction and mineral resources of undetermined significance in the underlying MRZ-3 zone, which is inaccessible in the existing condition and would continue to be inaccessible after construction of the project. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to mineral resources.

5.13 Noise

As with the approved project, the proposed modifications to the project would result in less than significant impacts in regard to exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As with the approved project, the proposed modifications to the project would result in no impacts in regard to noise in relation to public airports or private airstrips as the project is not located near a public or private airport. Project design features and BMPs consistent with the City of Los Angeles Municipal Code requirements articulated in Section 112.05 and Section 41.40 would be implemented to reduce the

temporary increase in noise levels from construction of the proposed project modifications to less than significant levels. The use of temporary noise mufflers barriers and blankets or similar would reduce noise levels for construction equipment by up to 15 A-weighted decibels (dBA). Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to noise than the approved project, and mitigation would not be required.

5.13.1 Two-Phased Investigations

The certified EIR evaluated noise impacts from the project outside of the project site (Figures 4.2-1 and 4.2-2). As with the approved project, the proposed modifications to the project incorporate design features and BMPs consistent with the City of Los Angeles Municipal Code requirements articulated in Section 112.05 and Section 41.40, which would be implemented to reduce the temporary increase in noise levels from construction activities to less than significant levels. Additionally, the use of temporary noise mufflers, barriers, and blankets or similar would reduce noise levels for construction equipment by up to 15 dBA. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to noise.

5.13.2 Revised Schedule

The revised project schedule would not affect the conclusions in the certified EIR in regard to noise, and would not result in new impacts or significantly more adverse impacts. As with the approved project, the proposed modifications to the project incorporate design features and BMPs consistent with the City of Los Angeles Municipal Code requirements articulated in Section 112.05 and Section 41.40, which would be implemented to reduce the temporary increase in noise levels from construction activities to less than significant levels. Additionally, the use of temporary noise mufflers, barriers, and blankets or similar would reduce noise levels for construction equipment by up to 15 dBA. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to noise.

5.13.3 Increase in Depth of Excavation

An increase in depth of excavation for construction and geotechnical and utility investigations would not affect the findings in the certified EIR because the proposed project modifications would not result in new impacts or significantly more adverse impacts. The percolation testing, borings, potholing, test pit, and trenching activities would require temporary placement of equipment required for structural boring to a depth of 20 feet within the planned footprint of the forecourt. As with the approved project, the proposed modifications to the project incorporate design features and BMPs consistent with the City of Los Angeles Municipal Code requirements articulated in Section 112.05 and Section 41.40, which would be implemented to reduce the temporary increase in noise levels from construction activities to less than significant levels. Equipment used for geotechnical investigation can range from 80 to 90 dBA (L_{max} at 50 feet).[18] Additionally, the use of temporary noise mufflers, barriers, and blankets would reduce noise levels for construction equipment by up to 15 dBA. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to noise.

[18] Federal Highway Administration. Accessed 12 June 2018. *Construction Noise Handbook.* Available at: https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm

5.13.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to noise because the project incorporates design features and BMPs consistent with the City of Los Angeles Municipal Code requirements articulated in Section 112.05 and Section 41.40, which would be implemented to reduce the temporary increase in noise levels from construction activities to less than significant levels. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to noise.

5.14 Population and Housing

As with the approved project, the proposed modifications to the project would result in no impacts in regard to population and housing. The proposed modifications to the project would not induce population growth or displace existing housing or people as the excavation activities would not extend infrastructure and would be limited to nonresidential areas within roads or rights-of-way. The proposed modifications to the project would not displace existing residents at Mozaic Apartments located to the north of LAUS. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to population and housing than the approved project, and no mitigation would be required.

5.14.1 Two-Phased Investigations

The certified EIR evaluated population and housing impacts from the project within the project site and adjacent parcels, including the proposed location for additional excavation outside the project site. Excavation activity sites would be restored to the original surface condition upon completion or to the approved project condition after construction. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to population and housing.

5.14.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR because excavation activities within the project site would not affect population growth or displacement of people or housing. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to population and housing.

5.14.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because excavation activities within the project site would not affect population growth or displacement of people or housing. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to population and housing.

5.14.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to population and housing because the transportation features would not affect population growth or displacement of people or housing. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to population and housing.

5.15 Public Services

As with the approved project, the proposed modifications to the project would result in no impacts related to public services. As with the approved project, the proposed modifications to the project would not induce population growth and would not involve or require the construction of new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to public services than the approved project, and no mitigation would be required.

5.15.1 Two-Phased Investigations

The certified EIR evaluated public services impacts from the project within a 1- to 2-mile radius of the project site. The percolation testing, borings, potholing, test pit, and trenching activities would all be underground and would involve placement of temporary equipment as tall as a drill rig for structural boring to a depth of 20 feet bgs. Excavation activity sites would be restored to the original surface condition upon completion or to the approved project condition after construction. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to public services.

5.15.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR because excavation activity sites within the project site would be restored to the original surface condition upon completion before construction activities commence. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to public services.

5.15.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because excavation activity sites within the project site would be restored to the original surface condition upon completion after the geotechnical and utility investigations and to the approved project condition after construction. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to public services.

5.15.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to public services because the transportation features would not induce population growth and would not involve or require the construction of new or physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to public services.

5.16 Recreation

As with the approved project, the proposed modifications to the project would result in no impacts in regard to recreation. The proposed modifications to the project would not induce population growth. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to recreation than the approved project, and no mitigation would be required.

5.16.1 Two-Phased Investigations

Excavation activity sites would be restored to the original surface condition upon completion or to the approved project condition after construction. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to recreation.

5.16.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR because excavation activity sites within the project site would be restored to the original surface condition upon completion before construction activities commence. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to recreation.

5.16.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR because excavation activity sites within the project site would not impact any parks and/or open spaces. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to recreation.

5.16.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to recreation because the transportation features would not affect the project's creation of a civic plaza or induce population growth. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to recreation.

5.17 Transportation and Traffic

As with the approved project, the proposed modifications to the project would result in no impact in regard to resulting in a substantial disruption to traffic during construction; conflicting with an applicable congestion management program; a change in air traffic patterns; substantially increasing hazards due to a design feature or incompatible uses; inadequate emergency access; and conflicting with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. As with the approved project, the proposed modifications to the project would result in significant and unavoidable impacts in regard to conflicting with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit. Specifically, significant and unavoidable impacts would occur related to intersections and freeway ramps. As stated in the certified EIR, no feasible mitigation measures have been identified.

The proposed modifications to the project would help the design team avoid hazards in formulating the final design. The proposed modifications would have no effect on emergency access or air traffic patterns. The project would continue to be consistent with Congestion Management Program for Los Angeles County and policies, plans and programs for transit and active transportation. As with the approved project, the proposed modifications would follow the Los Angeles Municipal Code for the hours of construction and adhere to the construction management standard practices. The additional two phases for investigations would add a minimal number of trips per day compared to the 22 peak daily trips stated in the certified EIR, and construction-related traffic effects would remain temporary. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to transportation and traffic than the approved project.

5.17.1 Two-Phased Investigations

The two-phased investigations would not affect the findings in the certified EIR for transportation and traffic. The certified EIR evaluated transportation and traffic impacts from the project via a multi-modal simulation model network. The analysis included 41 study intersections and six freeway ramps. The area modeled extended as far north as Alpine Street, east to Mission Rd., south to 1st St., and west to Hill St. Therefore, the proposed modifications related to a two-phased approach to investigations would result in no new or substantially more adverse impacts related to transportation and traffic.

5.17.2 Revised Schedule

The project schedule would not affect the findings in the certified EIR for transportation and traffic. Significant impacts to intersections and off ramp queueing would be unchanged by the proposed modifications. As the work would occur within a public street right-of-way, the proposed modifications would adhere to the Los Angeles Municipal Code for allowable hours of construction and would need to follow the construction management standard practices listed below.

- A site-specific construction worksite traffic control plan should be prepared and submitted to LADOT for review and approval prior to the start of any construction work within the public right-of-way. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures (if any) would not be allowed, local traffic detours (if

any), protective devices and traffic controls (such as barricades, cones, flag persons, lights, warning beacons, temporary traffic signals, warning signs), access limitations for abutting properties (if any), and provisions to maintain emergency access through construction work areas.

- Provide safety precautions for pedestrians and bicyclists with measures such as protection barriers and signage indicating alternative pedestrian and bicycle access routes where existing facilities would be affected.

- Provide advance notice of planned construction activities to any affected residents, businesses, and property owners in the vicinity of the construction site.

- Coordinate with emergency service providers (police, fire, ambulance and paramedic services) to provide advance notice of ongoing construction activity and construction hours).

- Coordinate with public transit providers (Metro, LADOT DASH, etc.) to provide advance notice of ongoing construction, construction hours. Determine bus stops that would be affected by construction and appropriate bus stop relocation, as needed.

No additional requirements beyond the certified EIR would be necessary. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to transportation and traffic.

5.17.3 Increase in Depth of Excavation

An increase in depth of excavation would not affect the findings in the certified EIR for transportation and traffic. While the proposed modifications would require additional heavy construction equipment and a limited number of construction worker trips, there would be no substantial impact to transportation and traffic. Construction standard practices from the certified EIR would remain unchanged. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to transportation and traffic.

5.17.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to transportation and traffic because the transportation features would focus on safety improvements and efficiency in transit service. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to transportation and traffic.

5.18 Utilities and Service Systems

As with the approved project, the proposed modifications to the project would result in no impacts in regard to exceeding wastewater treatment requirements of the applicable regional water quality control board; requiring or resulting in the construction of new water or wastewater treatment facilities; requiring or resulting in the construction of new stormwater drainage facilities or expansion of existing facilities; having sufficient water supplies available to serve the project from existing entitlements and resources; resulting in a

determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; being served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and compliance with federal, state, and local statutes and regulations related to solid waste. The proposed modifications to the project would not induce substantial population growth directly or indirectly that would result in exceedance of wastewater treatment requirements, result in the need for new water or wastewater treatment facilities, result in the construction or expansion of stormwater drainage facilities, require new water supplies, result in an increase in the need for wastewater treatment, or increase solid waste. The project site would continue to be serviced by existing City of Los Angeles water and wastewater utility lines and stormwater and solid waste facilities. Therefore, the proposed modifications to the project would not result in new or substantially more severe impacts to utilities and services systems than the approved project, and mitigation would not be required.

5.18.1 Two-Phased Investigations

The certified EIR evaluated utility impacts from the project outside of the project site (Figures 4.2-1 and 4.2-2). The percolation tests, borings, potholing, and trenching activities would all be underground and involve placement of temporary drilling equipment for structural boring to a depth of up to 20 feet. Therefore, the proposed modifications related a two-phased approach to investigations would result in no new or substantially more adverse impacts related to utilities and service systems.

5.18.2 Revised Schedule

The revised project schedule would not affect the findings in the certified EIR because excavation activity sites within the project site would be restored to the original surface condition upon completion before construction activities commence (anticipated in 2020) and to the approved project condition after construction is complete. Therefore, the proposed modifications related to an accelerated schedule of investigations would result in no new or substantially more adverse impacts related to utilities and service systems.

5.18.3 Increase in Depth of Excavation

An increase in depth of excavation for construction and geotechnical and utility investigations would not affect the findings in the certified EIR because the proposed project modifications would not increase population and would not induce population growth and any accompanying wastewater flow increases in the area, either directly or indirectly. The percolation testing, borings, potholing, test pit, and trenching activities would require temporary placement of equipment required for structural boring to a depth of 20 feet within the planned footprint of the forecourt. As with the approved project, the proposed modifications to the project are intended to serve existing and anticipated residents, workers, visitors, and the transit population. The proposed modifications would result in no direct impacts in regard to population growth because they would not involve the construction of new housing units or businesses. As with the approved project, the proposed modifications to the project would result in no indirect impacts in regard to utilities because it is limited to landscape improvements and the creation of a civic plaza and pedestrian and cycling improvements. Therefore, the proposed modifications related to increasing the maximum depth of construction activities to 20 feet bgs would result in no new or substantially more adverse impacts related to utilities and service systems.

5.18.4 Transportation Features

Co-locating bus stop activity adjacent to the Alameda Esplanade and Los Angeles crossing would not affect the findings in the certified EIR related to utilities and service systems because the transportation features would not induce population growth as the project is limited to landscape improvements and the creation of a civic plaza and pedestrian and cycling improvements. Therefore, the proposed modifications related to consolidating the bus stops would result in no new or substantially more adverse impacts related to utilities and service systems.

SECTION 6.0 CONCLUSION

As required by CEQA Guidelines Section 15164, an addendum to a previously certified EIR shall be prepared if some changes or additions to a project are necessary and none of the conditions warranting the preparation of a subsequent EIR are present. As demonstrated in the analysis included in Section 5.0, this Addendum is the appropriate document to analyze the proposed modifications to the project related to the geotechnical investigation and utility work, increase in depth of excavation, revised schedule, and transportation clarifications:

- No substantial changes are proposed to the project which will require major revisions of the previously prepared and certified EIR;

- No substantial changes have occurred with respect to the circumstances under which the project is being undertaken; and

- No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified, has been identified.