

Metro

*Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
3rd Floor Board Room*



Agenda - Final

Thursday, October 18, 2018

10:15 AM

**One Gateway Plaza, Los Angeles, CA 90012,
3rd Floor, Metro Board Room**

Construction Committee

Robert Garcia, Chair

Jacquelyn Dupont-Walker, Vice Chair

Kathryn Barger

Janice Hahn

James Butts

Shirley Choate, non-voting member

Phillip A. Washington, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES
(ALSO APPLIES TO BOARD COMMITTEES)

PUBLIC INPUT

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

CONDUCT IN THE BOARD ROOM - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

REMOVAL FROM THE BOARD ROOM The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

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The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

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NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

CALL TO ORDER**ROLL CALL****APPROVE Consent Calendar Item(s): 26, 27**

Consent Calendar items are approved with one motion unless held by a Director for discussion and/or separate action.

CONSENT CALENDAR

- 26. SUBJECT: DIVISION 21 MIDWAY YARD, MAIN SHOP, BLOWDOWN MODIFICATION** [2018-0576](#)

RECOMMENDATION

CONSIDER:

- A. FINDING that awarding a design-build contract pursuant to Public Utilities Code Section 130242(a) will achieve certain private sector efficiencies in the integration of design, project work, and components related to real property renovation, improvements, and construction work for Project 204094, Division 21 Midway Yard, Main Shop, Blowdown Modification; and

(REQUIRES A TWO-THIRDS VOTE OF THE BOARD)

- B. AUTHORIZING the Chief Executive Officer to solicit and award low bid design-build contracts for renovations, improvements, and construction for Division 21 Midway Yard, Main Shop, Blowdown Modification, pursuant to Public Utilities Code Section 130242.

- 27. SUBJECT: STATUS REPORT ON AIRPORT METRO CONNECTOR PROJECT** [2018-0619](#)

RECOMMENDATION

RECEIVE AND FILE this status report on the Airport Metro Connector (AMC) project (the Project).

Attachments: [Attachment A – Project Design Update](#)

NON-CONSENT

28. **SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT** [2018-0629](#)

RECOMMENDATION

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

Attachments: [Presentation](#)

29. **SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE ACTIVITIES** [2018-0623](#)

RECOMMENDATION

RECEIVE AND FILE Program Management Quarterly Change Report

Attachments: [Attachment A to October Construction Committee.pdf](#)

30. **SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER/MODIFICATION CONSTRUCTION SPOT CHECKS** [2018-0583](#)

RECOMMENDATION

RECEIVE AND FILE Office of the Inspector General change order/modification construction spot checks report.

Attachments: [Attachment A - Spot Check](#)

[Presentation](#)

31. **SUBJECT: RAIL OPERATIONS CENTER TRANSIT PASSENGER INFORMATION SYSTEM** [2018-0531](#)

RECOMMENDATION

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer to award Contract No. OP111922000 for the Crenshaw/LAX Rail Operations Center (ROC) Transit Passenger Information System (TPIS) to B&C Transit, Inc. for an amount of \$719,950 for the Base Work; an amount of \$378,774 for the Regional Connector Option 1; an amount of \$378,774 for the Westside Purple Line Extension (WPLE) Segment-1 Option 2; an amount of \$100,274 for the WPLE Segment-2 Option-3; and an amount of \$100,274 for the WPLE Segment-3 Option-4, for a total firm fixed price contract amount of \$1,678,046, subject to resolution of any properly submitted protest, if any; and

- B. APPROVING Contract Modification Authority in the amount of \$500,000 and authorize the CEO to execute individual Contract Modifications within the Board approved Contract Modification Authority for potential change orders and cost increase associated with the contract extended period.

Attachments: [Attachment A - Procurement Summary R5](#)
[Attachment B - DEOD Summary.pdf](#)

**32. SUBJECT: DIVISION 20 PORTAL WIDENING AND TURNBACK
 FACILITY**

[2018-0588](#)

RECOMMENDATION

CONSIDER:

- A. CERTIFYING the Final Environmental Impact Report (FEIR);
- B. AUTHORIZING the Chief Executive Officer (CEO) to file a Notice of Determination with the Los Angeles County Clerk and State of California Clearinghouse;
- C. ADOPTING the:
1. Findings of Fact and Statement of Overriding Considerations (FF/SOC) in accordance with the California Environmental Quality Act (CEQA); and
 2. Mitigation Monitoring and Reporting Plan (MMRP).

Attachments: [Attachment A - Findings of Fact and Statement of Overriding Considerations.pdf](#)
[Attachment B - Mitigation Monitoring and Reporting Plan](#)
[Attachment C – Notice of Determination](#)
[Attachment D – Project Map](#)
[Attachment E – Public Engagement Summary Report](#)

**33. SUBJECT: WESTSIDE PURPLE LINE EXTENSION SECTION 2
PROJECT**[2018-0364](#)**RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to execute a Memorandum of Agreement (MOA) with the City of Beverly Hills (City) to accommodate construction of the Wilshire/Rodeo Station, contingent upon execution of a settlement agreement.

Attachments: [MOA with CBH Purple Line Section 2_10 12 18 \(4\)](#)

SUBJECT: GENERAL PUBLIC COMMENT[2018-0666](#)

RECEIVE General Public Comment

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

**COMMENTS FROM THE PUBLIC ON ITEMS OF PUBLIC INTEREST WITHIN COMMITTEE'S
SUBJECT MATTER JURISDICTION****Adjournment**

**Board Report**

File #: 2018-0619, **File Type:** Informational Report**Agenda Number:** 27.

**CONSTRUCTION COMMITTEE
OCTOBER 18, 2018****SUBJECT: STATUS REPORT ON AIRPORT METRO CONNECTOR PROJECT****ACTION: RECEIVE AND FILE****RECOMMENDATION**

RECEIVE AND FILE this status report on the Airport Metro Connector (AMC) project (the Project).

ISSUE

This report provides an update from staff on the following: (1) design progress to date and path forward, (2) coordination with Southern California Gas Company (SCG) for the relocation of two 30" high pressure gas lines, (3) update on real estate acquisition to secure the required property for construction of the AMC Station; and (4) continued coordination with Los Angeles World Airports (LAWA).

BACKGROUND:**Airport Metro Connector Station Design**

As part of the environmental clearance, conceptual design, and planning process, Metro Planning had previously provided quarterly updates to keep the Board informed as to progress of the AMC station design and LAWA coordination through the concept phase. The previous update was provided to the Board at the 30% design level. To date, the following major project milestones were achieved:

- Completed schematic design (April 2017)
- Completed NEPA/CEQA Environmental Clearance (April 2017)
- Completed 30% preliminary engineering documents (December 2017)
- Initiated eminent domain proceedings and made payment of just compensation (August 2018)

Now that the design process has progressed to 60% complete, Metro Program Management Department has now transitioned to the lead role in order to oversee the project through completion of the final design work, the bid and award phase, and construction of the AMC project.

With the design of the AMC station now at 60% complete, the site plan, building massing,

adjacencies, and architecture of the station project are now largely fixed. Intensive collaboration and coordination with LAWA staff and the automated people mover (APM) concessionaire has resulted in a design that is well coordinated between both agencies and seamlessly connects Metro's light rail transit (LRT), bus, and bicycle modes with the LAWA APM.

Primary features of the AMC station include a single LRT platform concept for the Crenshaw/LAX and Green Line LRT lines, which has been incorporated for ease of train operations and more efficient wayfinding and passenger access. The AMC station also includes a 32 berth bus plaza for boarding/alighting and layovers, a bike hub, a kiss and ride location, and a mezzanine structure which seamlessly connects all of the passenger modes to the APM station. The station has a very robust landscaping program within both the interior and exterior of the project, and will incorporate a public art commission by the Los Angeles artist Glenn Kaino. At present, the AMC project will achieve a minimum Leadership in Energy and Environmental (LEED) rating of Gold. A site plan and visual renderings of the current station design are included as Attachment A.

As the design continues to progress, the Metro project team will continue meeting with LAWA and the APM concessionaire on a regular basis to insure that the AMC station and APM are well coordinated and stay on schedule.

Utility Investigation and Environmental Work

In November 2017, potholing was conducted at eight (8) locations within the future Metro project site for purposes of locating two gas lines and to confirm the scope of advanced utility relocation work required for the Project. Staff is currently working with SCG and LAWA on the design of the relocated gas lines to accommodate future AMC and APM construction activities. Completion of gas line relocation design is targeted for October 2018, with relocation of the gas lines scheduled to begin in January 2019.

Environmental investigation and remediation activities are currently being completed as part of the preparation of the AMC site for utility relocation and eventual construction of the AMC Station. Phase II soil boring investigations were completed in August 2018, and monitoring/remediation wells placed by the previous property owners will be relocated in accordance with Regional Water Quality Control Board requirements.

Real Estate

Metro Real Estate continues to work with Hertz to acquire the project site and obtain the necessary right-of-entry documents required to relocate utilities and construct the AMC and APM projects. Staff anticipates that the required critical time lines will be achieved so that utility relocations can begin by the end of 2018, enabling site work and construction of the AMC Station to begin in early 2020. Real Estate has also worked closely with LAWA and Hertz to assure that the property is available to the APM concessionaire for construction of the APM foundations within the Hertz property.

Coordination with LAWA

Metro and LAWA are working closely together to assure coordination on the following:

- Intermodal coordination between all modes including APM
- Reconfiguration of the LAX City Bus Center
- Plans to widen Arbor Vitae St and Aviation Blvd adjacent to the AMC Project site
- Design and implementation strategy for multi-use (bicycle/pedestrian) path on Aviation Boulevard
- Property acquisition and timing
- Construction sequencing and staging
- Ongoing soil remediation activities at AMC Project site
- Design and easements in place for relocating gas lines

NEXT STEPS

Now that staff and our consultants have progressed the AMC design work through 30% to 60%, the project management responsibilities have transitioned to Metro's Program Management Department, with support from Countywide Planning as necessary. Staff will continue to proceed with property acquisition, completing the design, and completing utility relocations. Also, staff will provide a series of stakeholder briefings on the AMC project design and the ongoing coordination with LAWA. As the project advances toward major construction in 2020, staff will continue to update the Board at key project milestones. The AMC is expected to open for revenue service in Spring/Summer 2023, in coordination with revenue service of the LAWA APM.

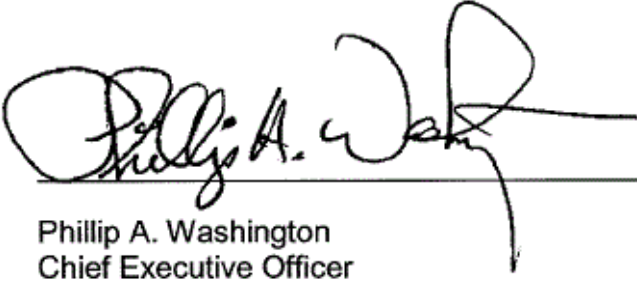
ATTACHMENTS

Attachment A - Project Design Update

Prepared by:

Rick Meade, SEO, Project Management, (213) 922-7382
Timothy Lindholm, EO, Capital Projects (213) 922-7297

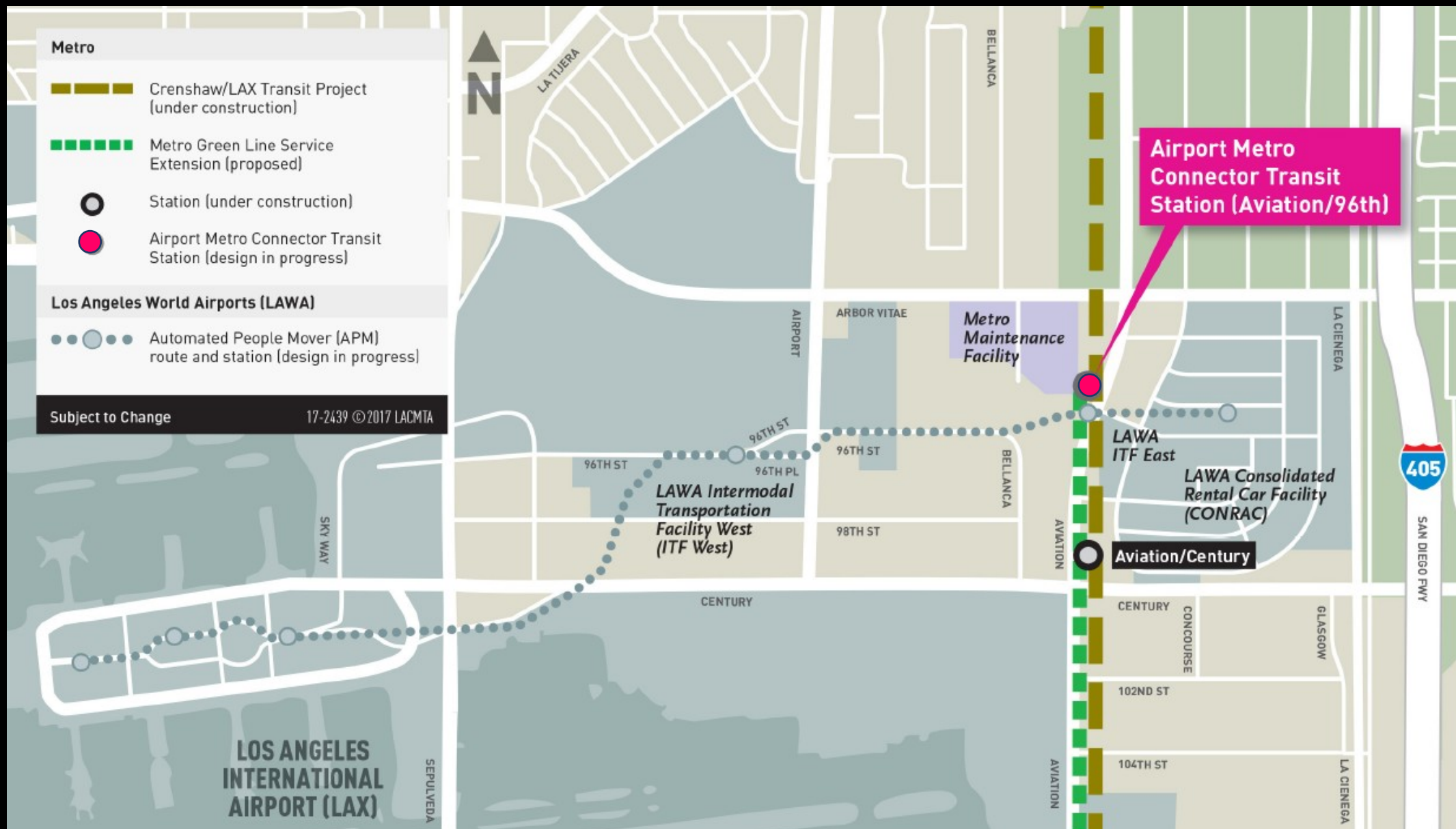
Reviewed by: Richard Clarke, Chief Program Management Officer, (213) 922-7557,



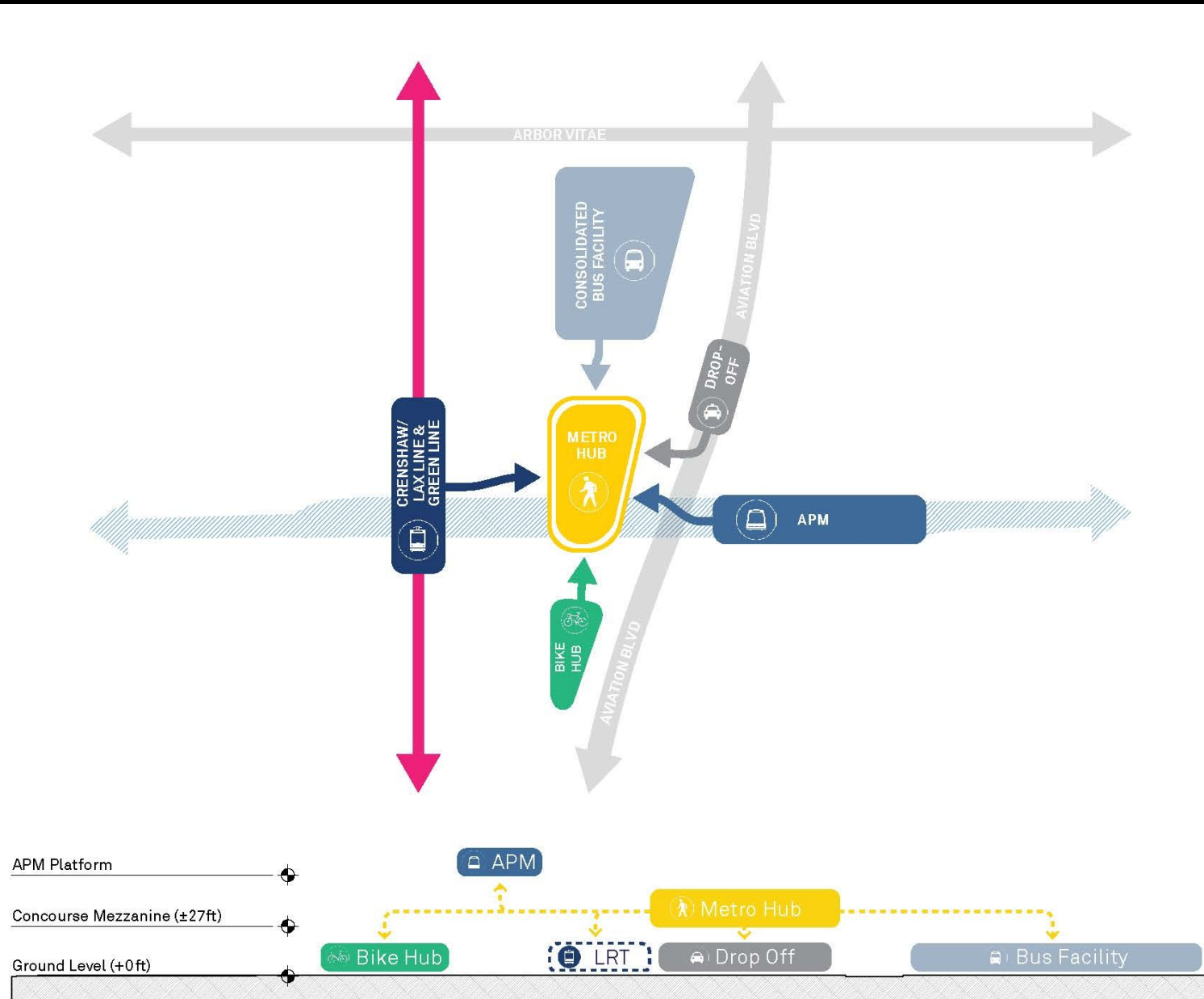
Phillip A. Washington
Chief Executive Officer

Airport Metro Connector Station
| 60% DESIGN PRESENTATION

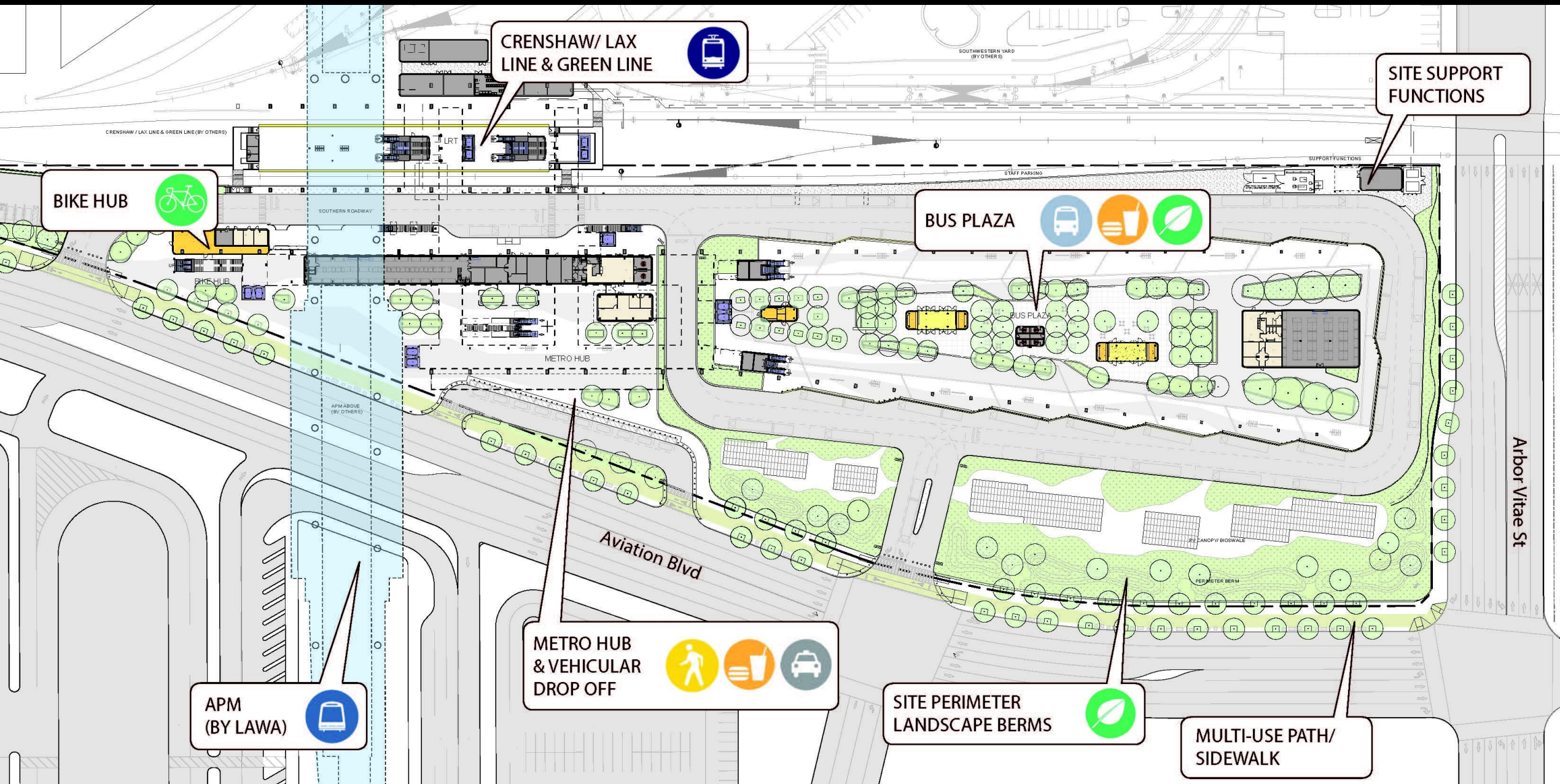
Airport Metro Connector Station | PROJECT AREA



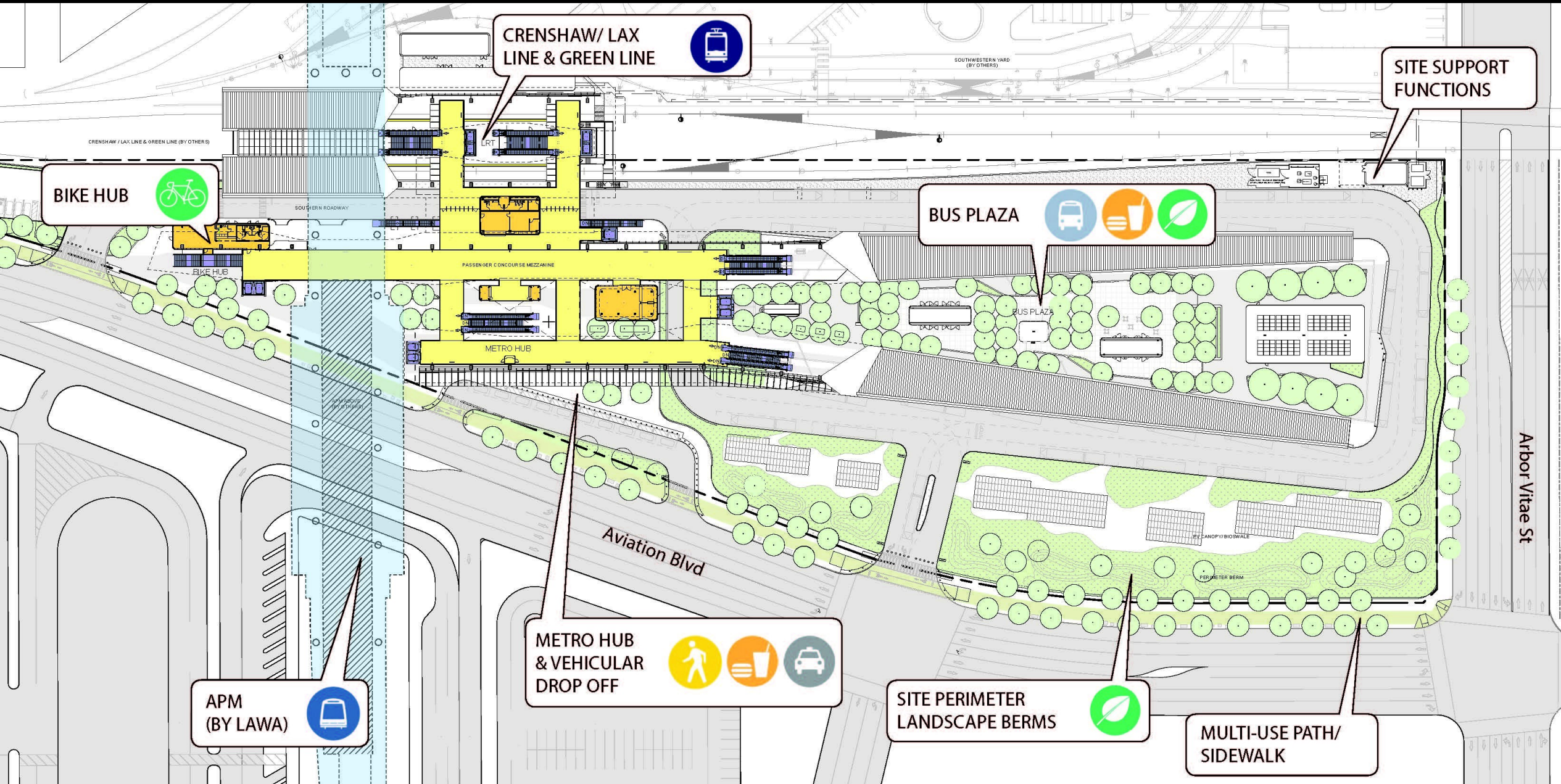
Airport Metro Connector Station | PROGRAMMATIC CONCEPTS



Airport Metro Connector Station | GROUND FLOOR AND SITE PLAN



Airport Metro Connector Station | MEZZANINE LEVEL PLAN



Airport Metro Connector Station | BIRD'S EYE VIEW



BIKE HUB



CRENSHAW/ LAX
LINE & GREEN LINE



BUS PLAZA



SITE SUPPORT
FUNCTIONS

APM
(BY LAWA)



METRO HUB
& VEHICULAR
DROP OFF



SITE PERIMETER
LANDSCAPE BERMS



MULTI-USE PATH/
SIDEWALK

Aviation Blvd

Arbor Vieja St

Airport Metro Connector Station
| STREET VIEW OF MAIN ELEVATION



Airport Metro Connector Station
STREET VIEW OF BIKE HUB



Airport Metro Connector Station
| MAIN GROUND FLOOR ENTRANCE





Airport Metro Connector Station

MEZZANINE LEVEL VIEW TO APM PLATFORM



↑ LAX / Bike Hub / Bus Plaza / Exit Aviation Blvd

Airport Metro Connector Station
CRENSHAW LINE RAIL PLATFORM



Airport Metro Connector Station
MEZZANINE LEVEL VIEW TO BUS PLAZA



Airport Metro Connector Station

BUS PLAZA



Board Report

File #: 2018-0629, **File Type:** Oral Report / Presentation

Agenda Number: 28.

**CONSTRUCTION COMMITTEE
OCTOBER 18, 2018**

SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT

ACTION: ORAL REPORT

RECOMMENDATION

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

DISCUSSION

Update report covering the month of October 2018 by the Chief Program Management Officer.

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Gary Baker, EO Project Mgmt., (213) 893-7191
- **Westside Purple Line Ext 1** - James Cohen, EO Project Mgmt., (213) 922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Westside Purple Line Ext 3** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **The New Blue** - Androush Danielians, EO Project Engr., (213) 922-7598
- **I-210 Barrier Replacement** - Androush Danielians, EO Project Engr., (213) 922-7598
- **I-5 North** - Abdollah Ansari, Sr EO Construction & Engr., (213) 922-4781
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213) 922-7592

Program Management Major Project Status Report

Presented By

Richard Clarke

Chief Program Management Officer
















October 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority



PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Project is 86.5 % complete. Contractor is continuing to fall behind schedule. The forecast revenue service date is under review.
Regional Connector			Project is 52% complete and proceeding on schedule and within budget.
Westside Purple Line Extension-Section 1			Project is 41% complete.
Westside Purple Line Extension-Section 2			Project is 11% complete.
Westside Purple Line Extension-Section 3			<ul style="list-style-type: none"> FTA approval for Entry into Engineering received. FTA approval for Letter of No Prejudice (LONP) is expected in Fall 2018. Award of Contract C1151 Tunnel will occur after LONP approval is received from the FTA.
Patsaouras Plaza			Project is approximately 65% complete. Metro issued Order of Suspension August 3 rd due to archaeological and Native American issues. Significant impacts to project schedule and budget expected.
Willowbrook/Rosa Parks Station			Early Start Construction Work is 95% complete. Package A+C Work, completed demolition of existing buildings and started grading operations.
Metro Blue Line Projects			Early Start Work is at 85% completion. Establishing baseline schedule for all three contracts and Metro internal work.
I-210 Barrier Replacement			Finding effective mitigation measures to some of the non-standard freeway features along with mitigation measures to alleviate freeway traffic disruption during construction are delaying the project.

October 2018



On target



Possible problem



Major issue




Metro 2

Construction Committee

Los Angeles County Metropolitan Transportation Authority

CRENSHAW/LAX TRANSIT PROJECT

 BUDGET		
	Current	Forecast
TOTAL COST	\$2,058M	\$2,058M

 SCHEDULE		
	Current	Forecast
REVENUE OPERATION	Fall 2019	Under Review

- Overall Project Progress is 86.5% complete; working with contractor to address schedule
- Contractor continues critical underground structures, track, systems and testing activities
- Removal of street decking/street restoration continues along Crenshaw Blvd



Street restoration at Martin Luther King Jr. Station

October 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 3

REGIONAL CONNECTOR TRANSIT PROJECT

OK BUDGET

	Current	Forecast
TOTAL COST	\$1,810M	\$1,810M

* Includes Board approved LOP budget plus finance costs.

- Overall Project Progress is 52%
- Underground:** Construction continues in left, right and center drifts of the crossover cavern utilizing Sequential Excavation Method (SEM); walkway installation activities are underway in tunnels
- Little Tokyo/Arts District Station:** Excavation and related support of utilities continues at both the Station and Wye Junction
- Historic Broadway Station:** Concrete placement is underway in entrance invert
- Grand Av Arts/Bunker Hill Station:** Permanent structural concrete construction continues at station invert, walls, sumps, and tunnel eye
- Flower Street:** Decking is complete; excavation and utility protection are ongoing; structural concrete operations have been initiated

OK SCHEDULE

	Current Winter 2021-2022	Forecast Winter 2021-2022
REVENUE		
OPERATION		



Rebar and UMP installation at Grand Av Arts/Bunker Hill Station



Excavation around utilities and deck beams on Flower Street

October 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 4

WESTSIDE PURPLE LINE EXTENSION – SECTION 1

BUDGET

	Current	Forecast
TOTAL COST*	\$3,154M	\$3,154M

* Includes Board approved LOP budget plus finance costs.

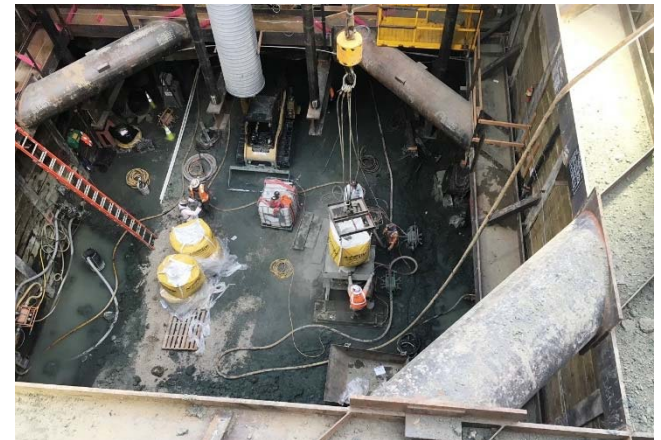
SCHEDULE

	Current	Forecast
REVENUE	Fall	Fall
OPERATION	2024 (FFGA)	2023

- Overall Project Progress is 41% complete.
- Wilshire/Western Retrieval Shaft:** Support bracing for the Blast Relief Shaft (BRS) is complete and Level C excavation/bracing continues. Excavation to the bottom of the Western Retrieval Shaft anticipated in October 2018.
- Wilshire/La Brea Station:** TBM assembly, testing and tunnel related track installation is near completion. Tunneling is planned to start in September 2018.
- Wilshire/Fairfax Station:** Level D excavation, waler/strut installation continues. Installation of canopy/soil nails (1st Phase) is nearing completion. Fine grading has commenced with mudmat pours scheduled to start in December 2018.
- Wilshire/La Cienega Station:** Level A waler/strut installation and Level B excavation for the main station box continues. Maintenance of surface aesthetics per the COBH MOA is ongoing.



TBM Assembly at Wilshire/La Brea Station



Wilshire/Western Retrieval Site

October 2018
Construction Committee

Los Angeles County Metropolitan Transportation Authority



On target



Possible problem



Major issue



Metro 9

WESTSIDE PURPLE LINE EXTENSION – SECTION 2

BUDGET

	Current	Forecast
TOTAL COST*	\$2,530M	\$2,530M

* Includes Board approved LOP budget plus finance costs.

SCHEDULE

	Current Winter 2026 (FFGA)	Forecast Summer 2025
REVENUE		
OPERATION		

- Overall project progress is 11% complete.
- Final design progress is 80% complete.
- Century City Constellation:
 - Civil work for LADWP Power completed in August 2018, and civil work for AT&T will complete in late October 2018. Cable pulling and splicing will continue until November 2019.
 - Setup of construction staging areas is ongoing.
- Wilshire/Rodeo:
 - Southern California Gas and AT&T utility relocations completed in October 2018.
 - City of Beverly Hills approved Memorandum of Agreement (MOA) for the C1120 Contract in August 2018.



Concrete Placement for Staging Area Driveway in Century City



SCG Utility Work in Beverly Hills

October 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

OK BUDGET

	Current	Forecast
TOTAL COST*	TBD	\$3,664M

* Includes finance costs.

OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	TBD	Winter 2027

- FTA approval for Entry into Engineering received.
- FTA approval for Letter of No Prejudice (LONP) received.
- C1151 Tunnel Contract – Contract award anticipated late November/early December.
- C1152 Stations, Trackwork and Systems Contract – Request for Qualifications (RFQ)/Request for Proposals (RFP) was issued on September 15, 2017. Proposals were received on August 22, 2018 and are under review.
- C1153 Advanced Utility Relocations (AUR) Contract – Overall progress is 42% complete.



October 2018



On target



Possible problem



Major issue




Metro 11

Construction Committee

Los Angeles County Metropolitan Transportation Authority

PATSAOURAS PLAZA BUSWAY STATION

 BUDGET	Current	Forecast
TOTAL COST	\$39.7M	\$TBD

 SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Winter 2018	Fall 2019

- Overall project progress approximately 65% complete
- Metro sent Order of Suspension to PBPS contractor on August 3, 2018 due to archaeological and Native American resource issues
 - Current construction resumption anticipated January 7, 2019
 - Project team is working diligently to resume construction with the consulting parties:
 - Federal Transit Administration
 - State Office of Historic Preservation
 - Advisory Council for Historic Preservation
 - Caltrans
 - Native American tribes
- Construction resumption is dependent upon successful consultation with the parties and completion of the following final drafts sent to the consulting parties on September 13, 2018:
 - Project level Programmatic Agreement (New)
 - Revised 2012 PBPS Cultural Resources Mitigation and Discovery Plan
 - Archaeological Identification, Evaluation and Treatment Plan (New)
- Archaeological and Native American issues anticipated to deplete project contingency requiring LOP budget increase once full extent of impact realized

October 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

WILLOWBROOK/ROSA PARKS STATION

OK BUDGET		
	Current	Forecast
TOTAL COST	\$109.3M	\$109.3M

OK SCHEDULE		
	Current Summer 2020	Forecast Summer 2020
SUBSTANTIAL COMPLETION		

- Early Start Phase (Package E) Construction at 95% completion.
- Removal of AC pipe and final installation of GSW water line is underway.
- Place curb on east side of Willowbrook Avenue West.
- Begin demobilization and end early start construction.
- Excavate and install underground utilities and building footings.
- Federal Transit Administration has approved the new southern crossing.



Early Start Construction and Demolition for Package A+C

October 2018



On target



Possible problem



Major issue


Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 9

THE NEW BLUE

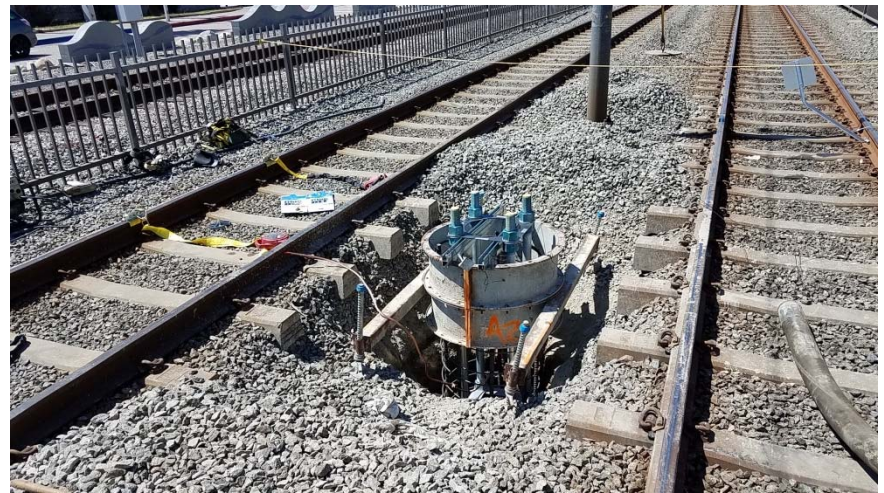
 BUDGET	Current	Forecast
TOTAL COST	\$221.3M	\$221.3M

 SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Fall 2019	Fall 2019

- MBL Resignaling Design is at 95%
- MBL Resignaling Early Start work is at 85% (Potholing, foundation and other underground construction)
- Establishing baseline construction schedule for all three projects (including Rosa Parks Willowbrook Station)
- The New Blue project is scheduled to begin January 2019




Modifying Existing Duct Bank



New OCS Foundation

October 2018

 On target

Possible problem

 Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



I-210 BARRIER REPLACEMENT PROJECT

◆ BUDGET		
TOTAL COST	Current	Forecast
	\$11.08M	\$11.08M
	Design	Design

◆ SCHEDULE		
Complete Design	Current	Forecast
	Summer	Summer
	2019	2019

- Obtained concurrence from Caltrans that the segment of the project from Michillinda to Iconic Bridge in both eastbound and westbound directions the barriers could be replaced without closure of HOV lane during construction:
 - Minimized traffic disruption during construction within this segment
 - Separate environmental document and final design for this segment will be prepared sooner while the environmental and final design of remaining portion that is more involved is completed.
- Continuing engineering, traffic analysis and coordination.



Newly Installed Caltrans Freeway Sign



Incident in 2014



Newly Installed Speed Limit Sign

October 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 11

I-5 NORTH: SR 118 TO SR 134



October 2018
Construction Committee
Los Angeles County Metropolitan Transportation Authority

I-5 NORTH: SR 118 TO SR 134

Project Managed by Caltrans :

- Approved budget: \$853.96 M
- Estimated Cost to Complete Construction: TBD

Accomplishments:

Seg. 1: SR118 to SR170:

Open to traffic. Contract acceptance and close out in progress

Seg. 2: SR170 to Buena Vista:

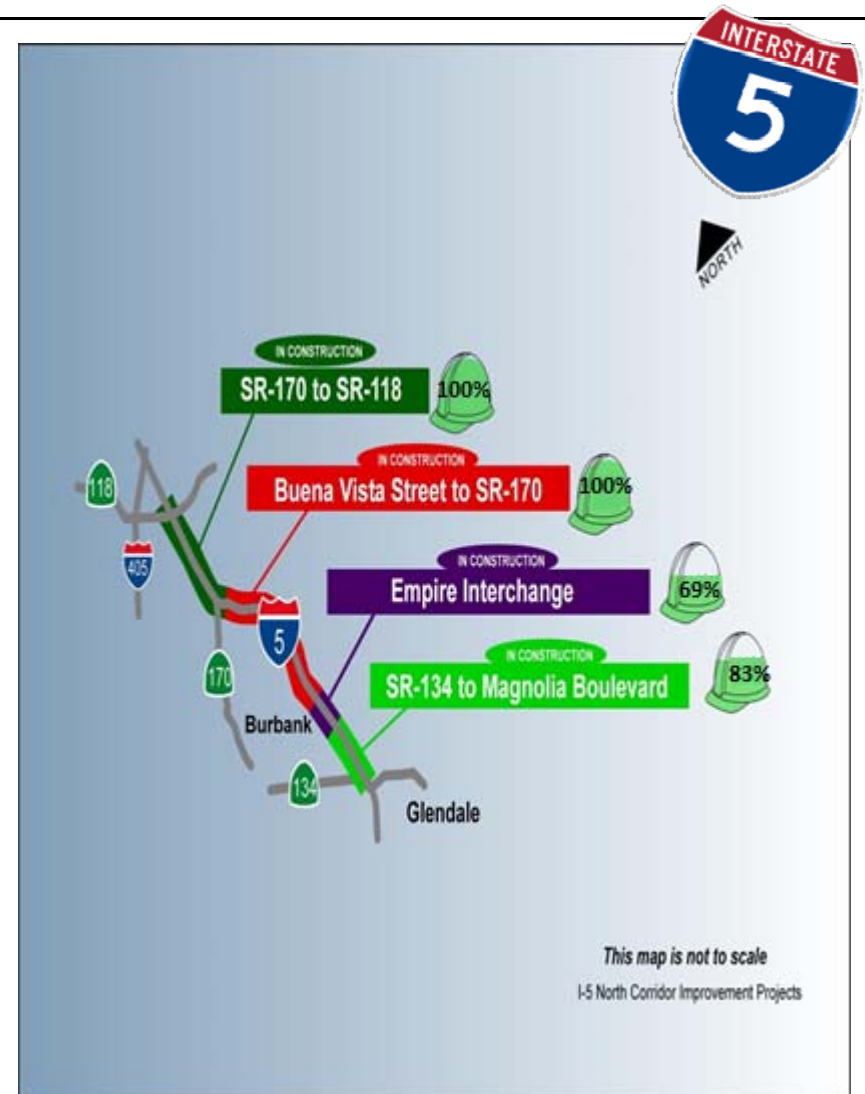
Open to traffic. Contract acceptance and close out in progress. Final Settlement approved by the Board in September 2018.

Seg. 3: Buena Vista to Magnolia

Construction in progress (69% Complete) including Empire Avenue Interchange

Seg 4: Magnolia Blvd to SR134:

Construction in progress (83% Complete)



October 2018

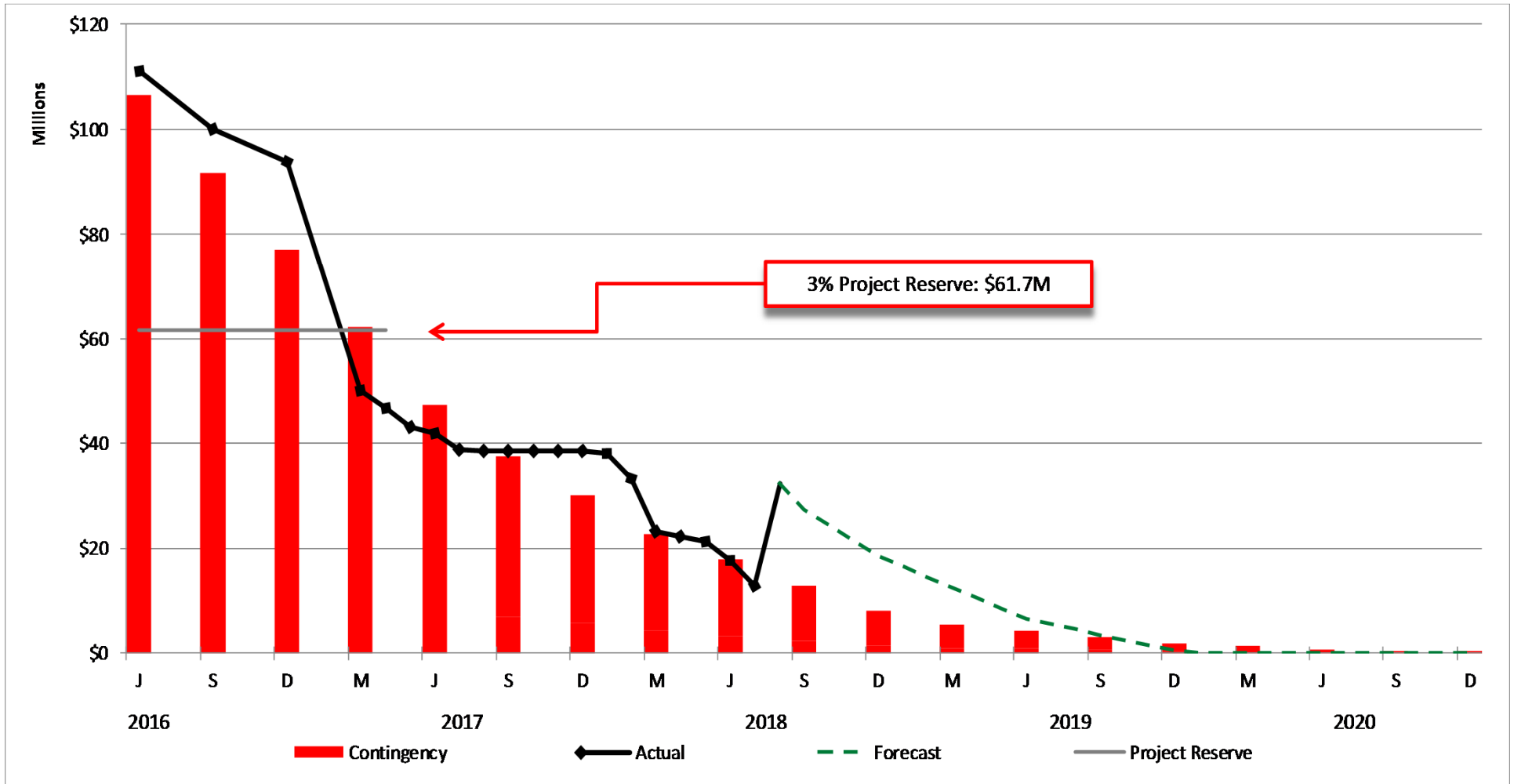
Construction Committee

Los Angeles County Metropolitan Transportation Authority

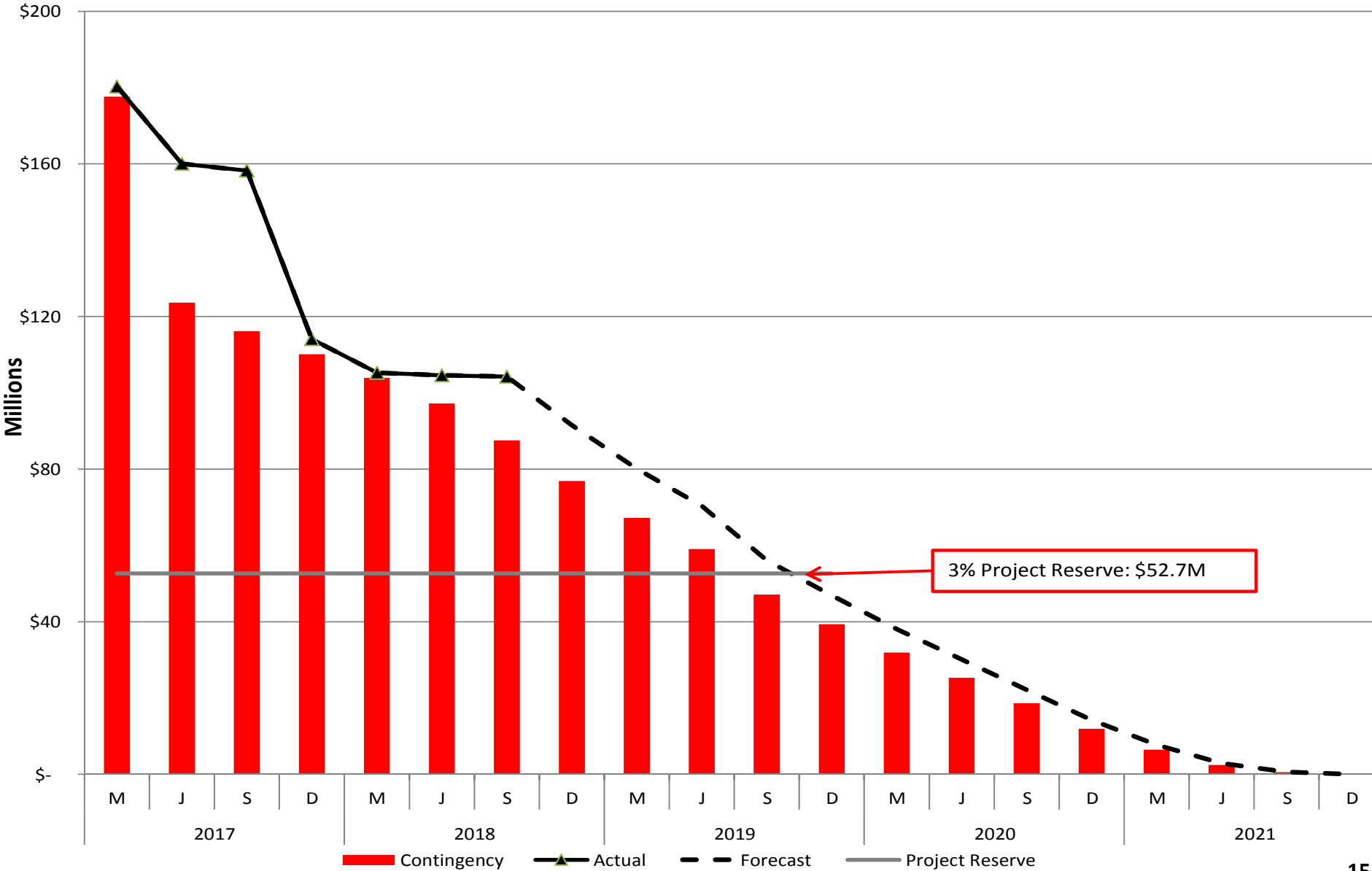
Crenshaw/LAX Transit Project

Project Cost Contingency Drawdown

August 2018



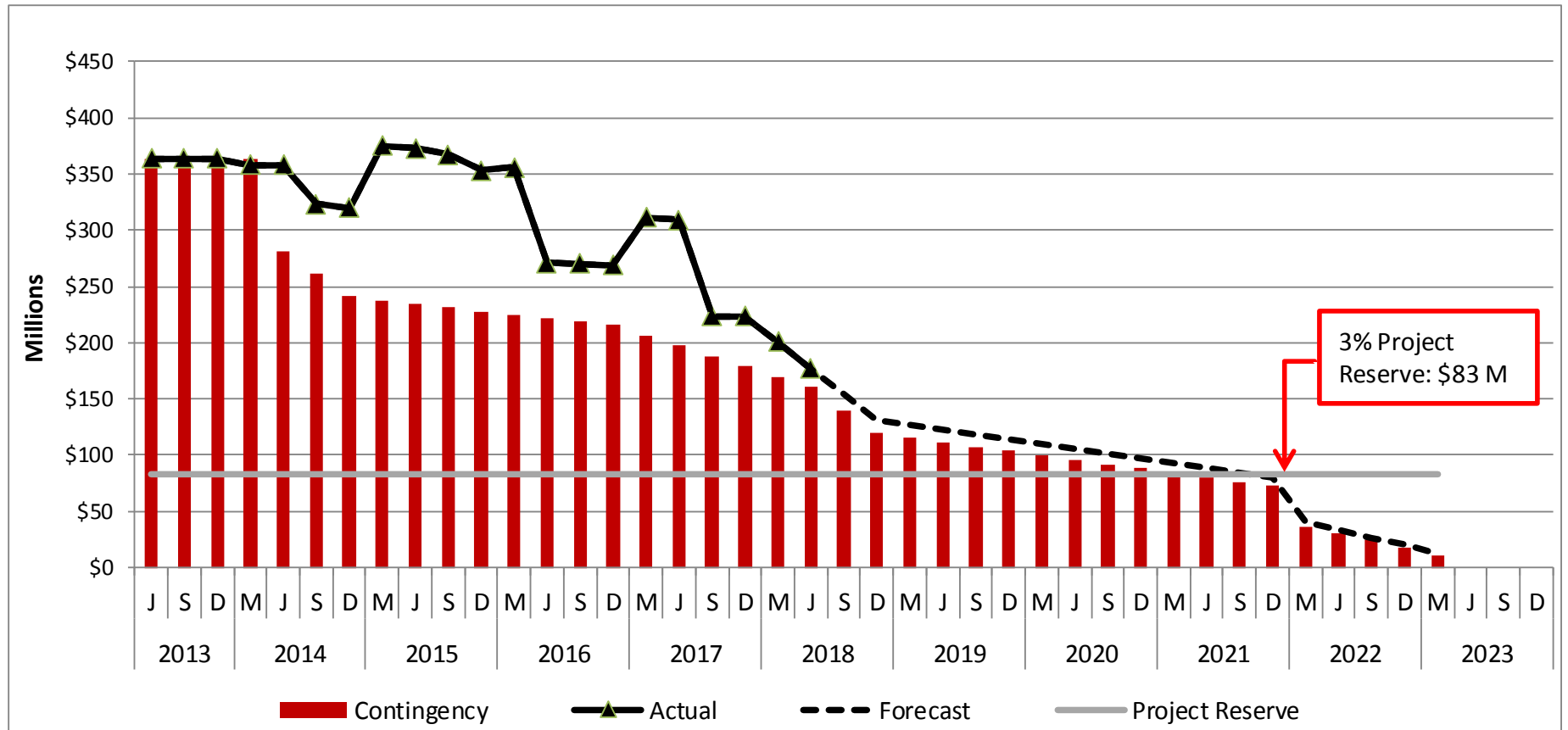
Regional Connector Project Cost Contingency Drawdown



Westside Purple Line Extension – Section 1

Project Cost Contingency Drawdown

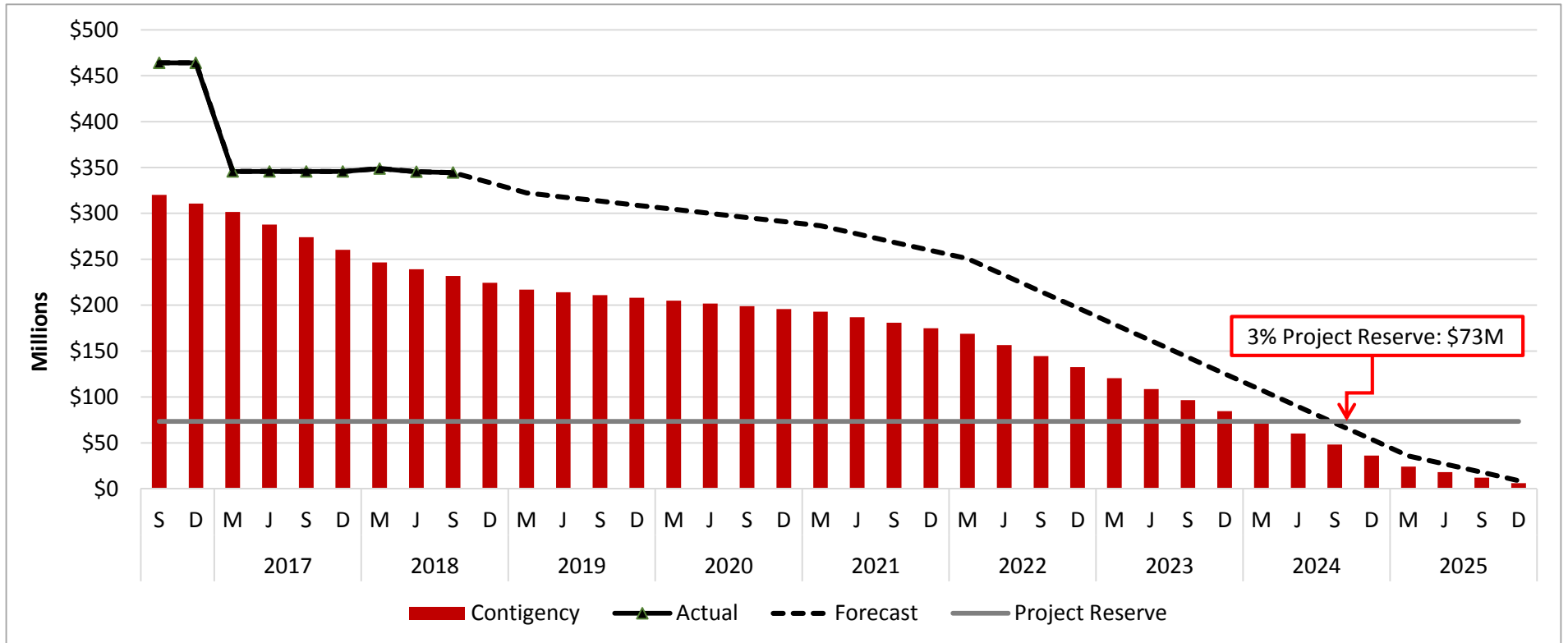
August 2018



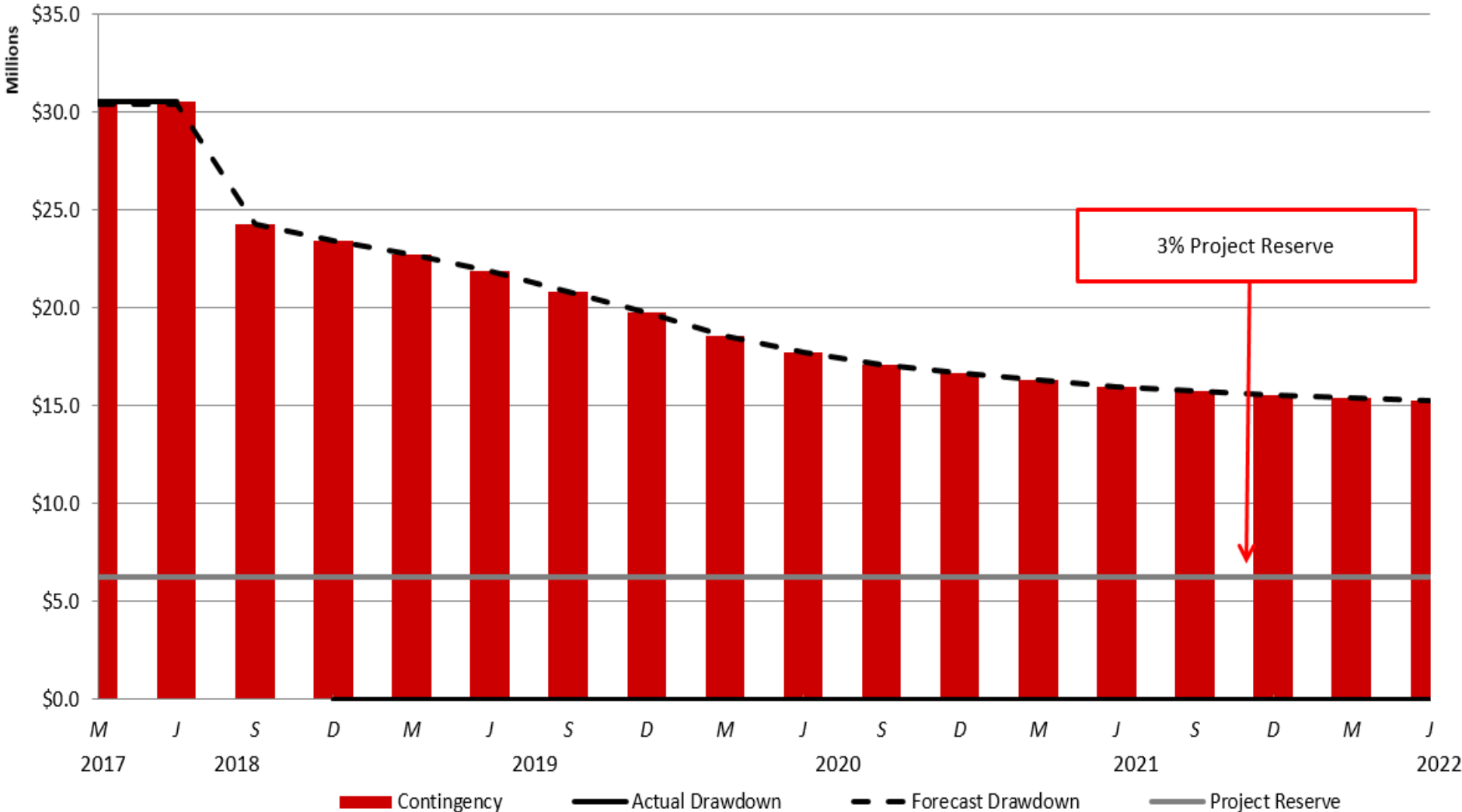
Westside Purple Line Extension – Section 2

Project Cost Contingency Drawdown

August 2018



The New Blue Project Cost Contingency Drawdown



- Blue Line Signal Rehabilitation
- Blue Line Track and System Refurbishment



Board Report

File #: 2018-0623, **File Type:** Informational Report

Agenda Number: 29.

CONSTRUCTION COMMITTEE OCTOBER 18, 2018

SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE ACTIVITIES

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE Program Management Quarterly Change Report

DISCUSSION

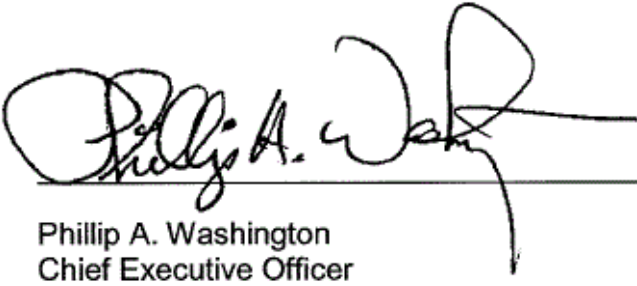
At the January 26, 2018 Board meeting, the Board approved the continuation and expansion of the delegation of authority within Life of Project (LOP) budget management on all Transit and Regional Rail Capital Projects. Staff was directed to provide quarterly reports to the Board on change orders and modifications that are above \$500,000. The change activities for the reporting period between June 1, 2018 and August 31, 2018 are included in Attachment A.

ATTACHMENTS

Attachment A - [Quarterly Change Report for Reporting Period between June 1, 2018 - August 31, 2018]

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr. EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Gary Baker, EO Project Mgmt., (213) 893-7191
- **Westside Purple Line Ext 1** - James Cohen, EO Project Mgmt., (213) 922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **The New Blue** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Report** - Brian Boudreau, Sr. EO Program Control, (213) 922-2474



Phillip A. Washington
Chief Executive Officer

CRENSHAW/LAX TRANSIT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2018 - August 31, 2018)

A. DESIGN BUILD CONTRACT - Contract No. C0988 - WALSH SHEA CORRIDOR CONSTRUCTORS							
MOD/CHANGE #	DESCRIPTION <small>(if the change is a unilateral, explain in BOLD fonts that is why this is unilateral and a modification will follow upon negotiation is finalized between Contractor and Metro).</small>	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
MOD-00341.1	Radio System - Additional Tunnel Amplifiers: Procure, install, and test additional radio amplifiers in certain tunnel crosspassage locations as depicted in the Metro approved AFC (Approved for Construction) Communications Systems Design prepared by WSCC. The work shall include all of the necessary appurtenances required for a complete installation.	510 - Owner Design Change	2/5/2018	8/1/2018	\$ 730,353.22	\$678,287.00	
MOD-00342.1	Radio System - Additional Head-end Equipment: Relocate the Uplink above ground antennas from their original proposed location at the TPSS #8 site to their new location above ground at the CLAX Exposition Station. Provide all of the necessary detailed design, material, equipment, and labor for a complete installation.	510 - Owner Design Change	2/5/2018	8/1/2018	\$ 918,762.66	\$862,138.00	
MOD-00347.2	Underground 1 (UG1) Center Walkway Lighted Handrail: Replace the non-lighted center handrails in the two (2) covered sections of UG1 with lighted handrails to provide an added measure of walkway lighting to facilitate evacuation of patrons during an emergency situation.	330 - Safety Conditions	8/16/2018	8/31/2018	\$ 1,669,709.80	\$1,600,000.00	
MOD-00354	City of Los Angeles (COLA) Request to Replace Concrete Street Light and Signal Poles with Steel Poles - Martin Luther King (MLK) area: Revise street lighting design for Segment C limits between 48th St to Exposition Blvd per LABSL comments on the Segment C 85%-2 Street Lighting Design. Restore steel 15 ft. /40 ft. Davit pedestrian/street lights poles, and remove/replace concrete street light poles with steel 40 ft. Davit light poles.	510 - Owner Design Change	9/8/2016	6/15/2018	\$ 1,577,184.00	\$1,350,000.00	
MOD-00374	Claim 108 DRB Determination - Water Service Relocation: Metro is reimbursing WSCC for its claimed costs in accordance with the project Disputes Review Board (DRB) finding of merit to WSCC's Claim 108 on April 24, 2018. The parties agreed on April 9, 2018 to accept the DRB's findings as binding.	620 - Comprehensive Claims	7/5/2018	8/17/2018	\$ 936,650.00	\$936,650.00	
MOD-00380	3 Shades of Gray: Contractor shall revise concrete shades and concrete finishes per the design changes. 1) Platforms at all stations. 2) Concourse at underground stations. 3) Plaza at Expo, Vernon, La Brea and Century Stations.	510 - Owner Design Change	8/16/2018	8/31/2018	\$ 4,450,797.85	\$880,000.00	
CO-00173.5	Fire Rated Conduit and Cable for Tunnel Emergency Lighting: Provide procurement and construction of additional wires and junction boxes for galvanized rigid conduit for emergency lighting at underground tunnels. This change is required because the Metro Rail Design Criteria for this type of product is not UL certified and this change provides a UL certified product.	510 - Owner Design Change	8/21/2018	8/20/2018	\$ 7,666,921.68	\$2,600,000.00	
CO-00175.2	Underground (UG) Conduit and Cable for Twenty (20) UG3 and UG4 Tunnel Booster: Provide a fire rated cable conduits and circuits for 1. UG3 TUNNEL BOOSTER FANS (TBF) and 2. UG4 TUNNEL BOOSTER FANS (TBF). Metro and the Contractor have reached agreement on cost related quantities and materials to base contract work versus out-of-scope work, but have not reached agreement on the specific productivity rates for both credit for in-scope work and out-of-scope work.	730 - Outside Agency	6/15/2018	6/15/2018	\$ 14,754,806.40	\$671,376.00	

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 1, 2018 - August 31, 2018)

A) DESIGN BUILD CONTRACT C0988 - WALSH SHEA CORRIDOR CONSTRUCTORS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
MOD-00304	<u>Back Charge for Metro payments to COLA for in scope of contract (Traffic Control Officer) TCO Services:</u> This credit change is to back charge WSSC for TCO for the period of January 2014 thru June 30, 2017 (paid by Metro to LADOT per the Master Cooperative Agreement with City of Los Angeles.)	900 - Other	Credit between \$1M and \$5M
MOD-00335.1	<u>Cable Transmission System Update - Construction:</u> construct a Cable Transmission System (CTS) capable of multiple service types including E-Line, E-LAN, and E-Tree. Each CTS FW-9500 Node shall be connected to the adjacent FW-9500 Node by optical fibers from the 144 strand Cable A and the 144 strand Cable B. Each CTS FW-9500 Node chassis shall contain four (4) Transmit and Receive (Tx/Rx) cards. Two (2) Tx/Rx cards serve Cable A and Cable B North transmissions to Rail Operations Center (ROC) via the Expo Line; and two (2) Tx/Rx cards serve Cable A and Cable B South transmissions to ROC via the Green Line.	510 - Owner Design Changes	Between \$1M and \$5M
CO204	<u>Radio Redundancy Radio Rooms:</u> Contractor shall provide labor, materials and equipment to construct two new radio rooms at Underground Guideways UG-1 and UG-3.	110 - Extra Work	Between \$500K - \$1M
CO-00129	<u>Elimination Of Crossover at Sta 56+57.50 (North of 104th Street):</u> Eliminate the crossover at Sta. 56+57.50, north of 104th (or sought of Aviation/Century Station) and provide a credit to Metro labor, material and equipment, testing and commissioning to furnish and install crossover.	120 - Deletion of Work	Credit between \$500K - \$1M
CO-00180.1	<u>Cable Transmission System (CTS) Update - Construction:</u> The CTS communications platform has been Synchronous Optical Network (SONET), which is a legacy communications technology. The SONET network complicates, if not prohibits critical communication paths between stations (Finite Element Method/Electromagnetic Pulse (FEM/EMP) station to station Comms) in the event the Rail Operations Center (ROC) is unavailable. Metro Engineering has elected to update the CTS to a Native Ethernet platform. The change to Ethernet - facilitates implementation of a remote/backup ROC (Survivable Remote Site Telephony) and station to station communication, facilitates maintenance, future proofs the network and is cost effective.	510 - Owner Design Changes	Between \$1M and \$5M
CO-00204	<u>Radio Redundancy Radio Rooms:</u> The baseline contract documents only required open niches at UG-1 and UG-3, but Metro required that fully enclosed radio rooms be constructed to contain and secure the radio system equipment. This added scope of work is a change to the Contract.	110 - Extra Work	Between \$500K - \$1M
CO-00209.1	<u>Preliminary 45 Day Acceleration:</u> Contractor shall accelerate schedule critical activities at specified locations over the next 45 days to benefit the project's schedule. The estimated period of performance is from Mar 12, 2018 to April 25, 2018. Contractor is behind schedule. Contractor and Metro have identified work activities to accelerate that will benefit the Project's schedule.	N/A	Between \$1M and \$5M

B) PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

REGIONAL CONNECTOR TRANSIT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2018 -August 31, 2018)

A. DESIGN BUILD CONTRACT - Contract No. C0980 - REGIONAL CONNECTOR CONSTRUCTORS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
B. PROFESSIONAL SERVICES CONTRACT							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
C. OTHER AGREEMENTS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A) DESIGN BUILD CONTRACT C0980 - Regional Connector Constructors

CHANGE	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
C0980-CN-00099	REVISE 2ND/HOPE STATION PEDESTRIAN (CONSTRUCTION): Construct the 2nd/Hope Pedestrian Bridge in accordance with revised design.	110 - Extra Work	Between \$1M and \$5M
C0980-CN-00106.1	REVISIONS TO METRO COMMUNICATIONS SYSTEMS: This change revises eliminates the Fujitsu Flashwave 9500 as a Metro-Furnished Good. Contractor shall procure the Optical Network switch using Native Ethernet (10GB); re-configure the existing Gold Line Eastside Cable Transmission System (CTS) to operate via the communications room at Location 61A of Division 20; and relocate the existing Little Tokyo CTS node and associated circuits to the communications room at Location 61A of Division 20.	110 - Extra Work	Between \$500K and less than \$1M
C0980-CN-00111	ADDITIONAL ACOUSTICAL TREATMENTS FOR AREAS NOT SPECIFIED IN THE PROJECT: Construct additional acoustical treatments in all stations beyond what was indicated in the Contract Documents. This change includes approximately 92,471 SF of additional acoustical treatments.	110 - Extra Work	Between \$1M and \$5M
C0980-CN-00145	ADD WYE JUNCTION FAN PLANT (CONSTRUCTION): Construct an additional fan plant at the 1st & Alameda Junction (also referred to as the "wye") based on the following approved MODs: C0980-MOD 0033/CN 00053.2 Add "Wye" Junction Fan Plant Design Only and C0980-MOD 0087/CN-00108 Revision to Wye Junction Fan Plant Design. This work also includes the elimination of the previously designed eight tunnel booster fans with all associated mechanical, electrical and system components.	110 - Extra Work	Between \$10M and \$15M
C0980-CN-00148	PLATFORM STAND-ALONE VALIDATORS: Addition of six (6) Stand-Alone Validators at transfer station platforms.	110 - Extra Work	Between \$500K and less than \$1M
C0980-CN-00158	2ND AND BROADWAY STATION REVISED OVERBUILD DESIGN PARAMETERS (CONSTRUCTION): Contractor shall provide all necessary labor, materials, and supervision to redesign various components of the 2nd and Broadway Station, and to design and construct an overbuild load transfer system in accordance with the Revised Overbuild Loading Parameters to accommodate future development by Tribune, including relocation of the emergency stairways, ventilation shafts/ducts and other elements as needed to accommodate the Overbuild Structure Load Transfer System.	110 - Extra Work	Between \$1M and \$5M

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

D. OTHER AGREEMENTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
N/A	EXTENSION OF MANGROVE LEASE WITH CITY OF LOS ANGELES	N/A	N/A	TBD	N/A	Between \$10M and \$15M
N/A	PERMANENT EASEMENT FOR FAN PLANT AT MANGROVE	N/A	N/A	TBD	N/A	Between \$1M and \$5M
N/A	MITIGATIONS FOR ENCROACHMENT UPON LADWP SERVICE FACILITIES	N/A	N/A	TBD	N/A	Between \$1M and \$5M
N/A	PERMANENT EASEMENT FOR PLACEMENT OF MSE WALL AND BRIDGE RAMP ONTO LADWP PROPERTY	N/A	N/A	TBD	N/A	Between \$1M and \$5M

WESTSIDE PURPLE LINE EXTENSION - SECTION 1 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2018 - August 31, 2018)

MOD/CHANGE #	DESCRIPTION	Change Type	Submission	Approval Date	Contractor's	Approved Amount
A. DESIGN BUILD - CONTRACT NO. C1045 - SKANSKA-TRAYLOR-SHEA, A JOINT VENTURE						
MOD-55	Radio Subsystem Redundancy: Procure and install a complete switching network to allow failover switching on Westside Purple Line Extension (WPLE) Sections 1 and 2 including redundancy of the radio system. Metro has revised the radio system to avoid a Single Point of Failure of the primary radio system.	Extra Work	6/18/2018	7/31/2018	\$1,050,509.41	\$935,096.00
MOD-57	La Brea Utility hanging Changes for Sewer and Storm Drains: Accommodates additional utility supports required by LABOE for the Sewer and Storm Drain Lines at the Wilshire/La Brea Station.	Extra Work	5/15/2018	6/18/2018	\$858,694.51	\$720,189.00
MOD-58	La Brea - Additional Instrumentation: Provides new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/La Brea Station. Given the larger than expected settlement predictions, LABOE has requested additional instrumentation to be installed.	Extra Work	5/25/2018	6/14/2018	\$5,877,106.00	\$1,386,678.00
MOD-60	Accommodate City of Beverly Hills (COBH) Memorandum of Agreement (MOA): This Change will compensate the Design-Build Contractor for revised work hours, holiday schedule and additional mitigation measures required by the Memorandum of Agreement (MOA). Work is currently being performed under the terms of the MOA with the City of Beverly Hills (COBH).	Extra Work	6/18/2018	8/7/2018	\$20,828,391.00	\$18,993,374.00
MOD-61	Additional Support of Excavation (SOE) Design Work - La Brea Station: Provides new/revised criteria that the Contactor must now use for the design and evaluation of the SOE for the Wilshire/La Brea Station.	Extra Work	7/5/2018	8/1/2018	\$1,277,305.00	\$1,078,680.00
A. DESIGN BUILD - CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP						
	Nothing to Report This Period					
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
B. PROFESSIONAL SERVICES CONTRACT						
	Nothing to Report This Period					
MOD/CHANGE #	DESCRIPTION	Change Type	Submission	Approval Date	Contractor's	Approved Amount
C. OTHER AGREEMENTS						
	Nothing to Report This Period					

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude
A. DESIGN BUILD - CONTRACT NO. C1045 - SKANSKA-TRAYLOR-SHEA, A JOINT VENTURE			
CN-43.4	Isolate Track Circuits at Wilshire: Design, construct, install and test new Audio Frequency (AF) Track Circuit equipment at Wilshire/Western. This new equipment will be isolated from the existing track circuit equipment. This change is issued to avoid potential safety issues related to failures of track circuits due to equipment between different manufactures, when placed into service.	Safety Conditions	Between \$500K - \$1M
CN-66	La Brea - Additional Dewatering Treatment and Discharge Costs: The Contractor has encountered two different 'Differing Site Conditions' (DSC) that have resulted in additional costs to operate and maintain the dewatering systems.	Extra Work	Between \$1M - \$5M
CN-67.1	Tactile Guidance: Construction and Plaza Material Change: This change was requested by Metro Systemwide Planning in coordination with Metro American Disabilities Act (ADA). Two tone tiles to be installed at all three stations to ensure sufficient contrast to meet ADA requirements.	Extra Work	Between \$500K - \$1M
CN-68	Increased Ventilation of Station Ancillary Rooms: Change to increase the ventilation requirements at the station stairs and corridor areas to accommodate surrounding soils.	Owner Design Changes	Between \$1M - \$5M
CN-72.1	Stations - Art Related Changes: Installation of Light-Emitting Diode (LED) lighting at the plaza level (edge of the art glass) to reduce the foot-candle requirements and art area. This change will reduce the cost of installation and Storage of Work.	Deletion of Work	Between \$500K - \$1M
CN-77.1	Additional Interpretation for Building Settlement - Project Wide: The additional instrumentation required by Metro and LABOE will require additional reporting and analysis by the contractor. This change will accommodate the additional analysis and reporting.	Extra Work	Between \$1M - \$5M
CN-78.1	Fairfax - DWP Ductbank Conflicts with Deck Beams: The location of LADWP ductbanks at Wilshire/Fairfax Station were higher than indicated on the as-built drawings. This change accommodates the mitigation efforts needed to remediate the higher ductbank.	Extra Work	Between \$500K - \$1M
CN-79	Western - Property Status Change (Fee to TCE) Impacts, Parcel W-0103: Accommodates the change in parcel handoff status from a 'Fee Take' to a 'Temporary Construction Easement' (TCE).	Extra Work	Between \$500K - \$1M
CN-83	Western - Additional Dewatering and Treatment: To accommodate the higher than expected groundwater inflows experienced at the Wilshire/Western	Extra Work	Between \$1M - \$5M
CN-84	Western – Impacts from Metro SOE Deviation Request: Provides new/revised criteria that the Contactor must now use for the design and evaluation of the Support of Excavation (SOE) for the Wilshire/Western Retrieval Shaft.	Extra Work	Between \$500K - \$1M
CN-87	La Brea - Bracing Impacts due to DWP ductbank (ECI-004): Accommodates the re-installation of four struts at Wilshire/La Brea Station due to conflicts with the existing electrical ductbanks.	Extra Work	Between \$1M - \$5M
CN-93	La Brea - Center Access Shaft - Design and Construction Costs (incl ECI-003): Construction of a central muck shaft on Wilshire Blvd at La Brea Station to help increase station excavation rates and facilitate material placement.	Extra Work	Between \$500K - \$1M
CN-99	Oil Well Horizontal Investigation in lieu of Tunnel Boring Machine (TBM) Probe-ahead: Change to accommodate horizontal directional drilling to locate abandoned oil wells.	Extra Work	Between \$1M - \$5M
CN-102	Goldier Gas Investigation and Report: Change to accommodate additional Geotechnical field work, analysis and investigation.	Extra Work	Between \$500K - \$1M
CN-122	Alternative Soil Disposal: This change covers the additional fees for the disposal of clean and contaminated non-hazardous soils due to the change in the Conditional Use Permit (CUP) by the County of Los Angeles.	Extra Work	Between \$5M - \$10M
TBD	La Cienega SCE Line (N-S) at Hamilton Dr. to Remain: This change is to accommodate identified SCE infrastructure to be protected in place until in lieu of being abandoned at the La Cienega Station area.	Extra Work	Between \$1M - \$5M
TBD	Western Waterline Break (DSC): Due to corrosion, an existing 8" DWP waterline pipe broke and flooded the Wilshire/Western Retrieval Shaft. This change is for draining and cleaning the Wilshire/Western Retrieval Shaft and for the appropriate support system for the 8" DWP pipe to be put into place.	Differing Site Condition	Between \$1M - \$5M
TBD	Stations - Art Lighting for Escalator Walls for all Stations	Extra Work	Between \$500K - \$1M
TBD	Western - Electromagnetic Pulse (EMP) Interface and Networking: This Change Notice (CN) allows the contractor to install the equipment required to integrate the existing Emergency Management System (EMS) at Wilshire/Western and Wilshire/Normandie Stations with the WPLE Section 1 project. This scope of work was previously to be performed by Metro Operations.	Owner Design Changes	Between \$500K - \$1M
TBD	Track Crossovers - Construction: This change accommodates the costs associated with installing the fully guarded crossover.	Owner Design Changes	Between \$500K - \$1M
TBD	Tunnel Reach 3 - Additional Gas Testing and Assessment	Safety Conditions	Between \$1M - \$5M

A. DESIGN BUILD - CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP			
CN-16	Install Street Lights Both Sides, Trees and Drip Irrigation: Site restoration in accordance with LABOE requirements.	Extra Work	Between \$500K - \$1M
MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude
B. PROFESSIONAL SERVICES CONTRACTS - DESIGN SUPPORT SERVICES DURING CONSTRUCTION - CONTRACT NO. PS43502000 - WSP USA, Inc.			
	Nothing to Report This Period		
B. PROFESSIONAL SERVICES CONTRACTS - CONSTRUCTION MANAGEMENT SUPPORT SERVICES - CONTRACT NO. MC071 - WESTSIDE EXTENSION SUPPORT TEAM, A JOINT VENTURE			
	Nothing to Report This Period		
MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude
C. OTHER AGREEMENTS			
	Nothing to Report This Period		

WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2018 - August 31, 2018)

A. DESIGN BUILD CONTRACT - CONTRACT No. C1120 -TUTOR PERINI-O & G (TPOG) A JV							
MOD/CHANGE # (add CO# for Mods if available)	DESCRIPTION <small>(if the change is a unilateral, explain in BOLD fonts that is why this is unilateral and a modification will follow upon negotiation is finalized between Contractor and Metro).</small>	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
MOD-00015	Century City Constellation Station Main Entrance (Design): Information on the main entrance at the Century City Constellation Station that was provided in the Contract Documents at the time of the RFP was based on a standard entrance configuration on the property at 1950 Avenue of the Stars in the location given in the Final EIS/EIR. The property owner was known to be planning a development, but hadn't informed Metro of its final configuration. Since then, the property owner has begun planning for its development and has been working with Metro to coordinate a station entrance that supports both the needs of the Project and the development. That coordination resulted in issuance of CN-3 in June 2017. Subsequently, the developer revised its plan necessitating changes to the proposed station entrance configuration for coordination purposes. In addition to reconfiguring the main entrance, the appendages associated with the east ancillary module that were located on 1950 Avenue of the Stars have also been reconfigured to better manage the special constraints of the development footprint of the site.	510-Owner Design Changes	8/16/2018	8/24/2018	\$1,369,735.00	\$1,258,310.30	
B. PROFESSIONAL SERVICES CONTRACT							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
C. OTHER AGREEMENTS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A) DESIGN BUILD CONTRACT No. C1120 -TUTOR PERINI-O & G (TPOG) A JV

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-14.0	Field Office Tenant Improvements at Former AAA Building (1950 Century Park East): The Project acquired a temporary construction easement on the	110 - Extra Work	Between \$1M and \$5M

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction - CONTRACT PS43502000 - WSP

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
MOD-0001	Continuation of Construction Management Services	110 - Extra Work	More than \$15M

C. OTHER AGREEMENTS

MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost

WESTSIDE PURPLE LINE EXTENSION - SECTION 3 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2018 - August 31, 2018)

MOD/CHANGE #	DESCRIPTION <small>(If the change is a unilateral, explain in BOLD fonts that is why this is unilateral and a</small>	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
A. AUR - CONTRACT NO. C1153 - STEVE BUBALO CONSTRUCTION COMPANY						
	Nothing to Report This Period					
A. DESIGN BUILD - CONTRACT NO. C1152 - TBD						
	Nothing to Report This Period					
A. DESIGN BUILD - CONTRACT NO. C1151 - TBD						
	Nothing to Report This Period					

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
B. PROFESSIONAL SERVICES CONTRACT						
	Nothing to Report This Period					

MOD/CHANGE #	DESCRIPTION	Change Type	Submission	Approval Date	Contractor's	Approved Amount
C. OTHER AGREEMENTS						
	Nothing to Report This Period					

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
A. AUR - CONTRACT NO. C1153 - STEVE BUBALO CONSTRUCTION COMPANY			
CN-3.1	Add Video Detection System & Traffic Control Plan: Video Detection System (VDS) was added to incorporate a CCTV fiber and complement/modify existing traffic signals in the area of construction of the New UCLA Metro Station per LADOT requirements. This contract Mod was approved by the Board on June	Outside Agency Request	Between \$500K - \$1M
A. DESIGN BUILD - CONTRACT NO. C1152 - TBD			
	Nothing to Report This Period		
A. DESIGN BUILD - CONTRACT NO. C1151 - TBD			
	Nothing to Report This Period		
MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
B. PROFESSIONAL SERVICES CONTRACTS - DESIGN SUPPORT SERVICES DURING CONSTRUCTION - CONTRACT NO. PS43502000 - WSP USA, Inc.			
	Nothing to Report This Period		
B. PROFESSIONAL SERVICES CONTRACTS - CONSTRUCTION MANAGEMENT SUPPORT SERVICES - CONTRACT NO. MC073 - MPPC PARTNERS, A JOINT VENTURE			
	Nothing to Report This Period		
MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
C. OTHER AGREEMENTS			
	Nothing to Report This Period		

WILLOWBROOK/ROSA PARKS STATION IMPROVEMENTS

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (July 1, 2018 - September 30, 2018)

A. DESIGN-BID-BUILD CONTRACT - Contract No. C1157 - ACCESS PACIFIC (Package E & F)							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
MOD 1 (CN 1.1)	Deletion of Elevator and Reduction of Period of Performance – Mod 1 deleted the requirement to renovate three elevators and reduced the Period of Performance from 600 Calendar days to 210 Calendar days.	DELETION OF WORK		6/21/2018		(-\$1,550,000.00)	
MOD 2 (CN 2)	Provisional Sums – Adds Schedule B (Provisional Sums) to the Contract in the amount of \$250K.	EXTRA WORK		6/25/2018	\$250K	Under \$500K	
B. PROFESSIONAL SERVICES CONTRACT							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
C. OTHER AGREEMENTS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
A. DESIGN-BID-BUILD CONTRACT - Contract No. C1161 - ICON WEST (Package A & C)							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
Contract Award	Contract awarded in June 2018						
MOD 1	Modification to Contract Term and Period of Performance – Modify Contract Article VI: Contract Term and Period of Performance to include: 1) 140 Calendar days duration to Phase 3include 2) 1-Year (365 calendar days) duration of elevator/escalator maintenance from the day of Metro Final Acceptance	EXTRA WORK		7/16/2018	No Cost	No Cost	
B. PROFESSIONAL SERVICES CONTRACT							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
C. OTHER AGREEMENTS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A) DESIGN-BID-BUILD CONTRACT - Contract No. C1157 - ACCESS PACIFIC (Package E & F)

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost

	N/A as contract is just being awarded June 2018		
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A) DESIGN BUILD CONTRACT - Contract No. C1081 - MASS ELECTRIC CONSTRUCTION COMPANY to be paid using Rosa Parks (CP 210151) funding

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN to be assigned	Systems at Willowbrook/Rosa Parks (name not yet official) -	EXTRA WORK	Between \$500K and \$1 M

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction - N/A

CHANGE	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	N/A		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
LTK Contract – PS8510-3001 Task Order (TO) 16	Construction Management Support Services (CMSS) – This Task Order is to provide Estimating, Design Support During Construction (DSDC) and other CMSS services	EXTRA WORK	Between \$5M and \$10M
Destination Enterprises Contract – PS26445 Task Order (TO) 16	CMSS – This Task Order is to provide an Office Engineer and Project Control services.	EXTRA WORK	Between \$5K and \$1M
KKCS Contract – AE35279 Task Order (TO) 19	CMSS – Task Order 19 is to provide Project Management Support CMSS Support – Cost of Task Order 19 is to be shared (or split) among Projects 205108, 205115, and 210151	EXTRA WORK	Between \$5K and \$1M

METRO BLUE LINE SIGNAL SYSTEM REHABILITATION

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (July 1, 2018 - September 30, 2018)

A. DESIGN BUILD CONTRACT - Contract No. C1081 - MASS ELECTRIC CONSTRUCTION COMPANY							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
B. PROFESSIONAL SERVICES CONTRACT							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	No approved Mods in July						
C. OTHER AGREEMENTS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	No approved Mods in July						

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A) DESIGN BUILD CONTRACT - Contract No. C1081 - MASS ELECTRIC CONSTRUCTION COMPANY

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN002	<u>Non-Vital Relays Replacements and Implementations of the Aspect Configurations -</u> This CN is for modifications on the Train Control scope to include the replacement of the existing non-vital relays for the existing interlockings and to complete the aspect configurations modifications for the entire Blue Line. Contract Documents Affected: Scope Modifications to Section 01 11 00 Scope of Work Drawings Nos. TC-100 thru TC-1 20 and TC-122 thru TC-140	EXTRA WORK	Between \$1M and \$5M
CN3.1 (Replaces CN 3 and lowers value)	<u>OCS Work Scope in Los Angeles Central Business District –</u> This CN is for Modifications on the Overhead Catenary System (OCS) scope to include: 1) The replacement of the contact wire(s) for the MBL/Expo Junction 2) Lowering of the conductor wire at Flower Venice crossing 3) Replace existing OCS under the 1-10 structure to Overhead Contact Rail (OCR) The Los Angeles Central Business District (CBD) from intersection of Flower and Venice to the intersection of Flower/18th Street and the MBL/Expo Junction.	EXTRA WORK	Under \$500K
CN004 (Cancelled and to be removed from next report)	<u>Fire Suppression in the New Train Control Bungalows –</u> This CN is for Modifications on the Train Control Scope to include the installation of the clean agent fire suppression system in the new train control bungalows. Documents affected: Scope Modifications to Section 01 11 00 of the Scope of Work, Subsection 1.03.A.3	EXTRA WORK	Between \$500K and \$1M
CN005 (CN number not yet formally assigned)	<u>Solution to Discrepancies between Service Drawings and As-Builts -</u> This CN is in response to RFI 16. At new Slauson interlocking, Mass Electric noticed Florence interlocking has discrepancies between the as-in service drawings located in the TC&C bungalow, and the as-built Control lines. Scope Modifications to Section 01 11 00 Scope of Work	EXTRA WORK	Between \$1M and \$5M
CN006 (Replaces CN 4 which was cancelled - there is no CN 5)	<u>Train Control at Florence C&S Bungalow –</u> This CN is for Modifications on the Train Control Scope to include the installation of the clean agent fire suppression system in the new train control bungalows. Documents affected: Scope Modifications to Section 01 11 00 of the Scope of Work, Subsection 1.03.A.3	EXTRA WORK	Between \$1M and \$5M

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction - N/A			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	N/A		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
LTK Contract – PS8510-3001 Task Order (TO) 16	CMSS Support – This Task Order is to provide Estimating, Design Support Suring Construction (DSDC) and other CMSS services LTK Task Order 16 will split costs with Project 205115		
Destination Enterprises Contract – PS26445 Task Order (TO) 16	CMSS Support – This Task Order is to provide an Office Engineer and Project Control services.		
KKCS Contract – AE35279 Task Order (TO) 19	CMSS Support – Task Order 19 is to provide Project Management Support CMSS Support – Cost of Task Order 19 is to be shared (or split) among Projects 205108, 205115, and 210151		

METRO BLUE LINE TRACK AND SYSTEM REFURBISHMENT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (July 1, 2018 - September 30, 2018)

A. DESIGN BUILD CONTRACT - Contract No. C1168 - Rail Works Track Services, Inc							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
N/A	Contract Award for \$67,953,655	N/A				\$67,953,655.00	
B. PROFESSIONAL SERVICES CONTRACT							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						
C. OTHER AGREEMENTS							
MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount	
	None						

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A) DESIGN BUILD CONTRACT - Contract No. C1168 - Rail Works Track Services, Inc.

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN002	Order Quantities for Summary of Work Spec Section 1.02E, 1.02F, 1.02G, 1.02 I.2 , 1.02 I.3, 1.02 I.4, and 1.02N -	EXTRA WORK	Between \$10M and \$15M
CN003	Addition of Six (6) Manholes to New Duct Bank Alignment – This CN is to add six existing manholes to Blue Line Train control :	EXTRA WORK	Under \$500K

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction - N/A

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	N/A		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
LTK Contract – PS8510-3001 Task Order (TO) 16	CMSS Support – This Task Order is to provide Estimating, Design Support Suring Construction (DSDC) and other CMSS services. The cost of this Task Order will be shared with Project 205108.	EXTRA WORK	Under \$500K
Destination Enterprises Contract – PS26445 Task Order (TO) TBD	CMSS Support – This Task Order is to provide an Office Engineer and Project Control services.	EXTRA WORK	Under \$500K
KKCS Contract – AE35279 Task Order (TO) TBD	CMSS Support – This Task Order is to provide Project Management Support and Configuration Management/Document Control	EXTRA WORK	Under \$500K



Board Report

File #: 2018-0583, File Type: Informational Report

Agenda Number: 30.

CONSTRUCTION COMMITTEE OCTOBER 18, 2018

**SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER/MODIFICATION
CONSTRUCTION SPOT CHECKS**

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE Office of the Inspector General change order/modification construction spot checks report.

ISSUE

On January 25, 2018, the Metro Board directed the Office of Inspector General (“OIG”) to conduct random spot checks on the projects listed in the quarterly program management report to ensure that the delegation of authority to approve construction change orders policy is performing in the manner desired by the Board of Directors.

BACKGROUND

I. SUMMARY

The OIG has developed a spot check program (“Spot Checks”) that primarily focuses on approved change orders and modifications that exceed \$1 million. The change orders in this report were selected from the October Program Management Major Project Status Report (File # 2018-0623), covering June, July, and August 2018. The information for the Spot Checks was collected from the Program Management Department’s database PMIS system. Also, in-person and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff for each individual project office.

The OIG has reviewed five change orders for the period of June 1, 2018, to August 31, 2018; one processed from Crenshaw/LAX, three from Westside Purple Line Extension Section 1, and one from Westside Purple Line Extension Section 2. This quarter the Regional Connector did not have any change orders above \$500 thousand.

We found that all five change orders were negotiated/approved/executed on average faster than the former Board approval process would have taken. In addition, the negotiated cost for one Change

Order was lower than the independent cost estimate (ICE) and four were higher than the Metro's ICE, but were lower than the contractor's proposed price. For the change orders/modifications the OIG reviewed, some of the Spot Checks have shown that the delegation of authority has, in certain cases, resulted

in:

- Minimizing/reducing delay costs,
- A negotiated amount that was reasonable for the work to be done; and
- Minimizing construction delays.

Each Spot Check summarizes the following areas:

- Introduction of change order/modification
- Facts of Change Order (charts and pictures shown on Attachment A)
- Scope of Work
- Budget
- Time to Execute Change Order
- Recommendations

Metro's Program Control department agreed to work with individual Project Management field offices to obtain responses to the recommendations in this report. They agreed to put responses to the OIG Spot Checks in a matrix and provide to the OIG within 30 days after the Board report is issued.

DISCUSSION

II. Spot Checks Performed in this Quarter

A. Spot Check #1 - Crenshaw/LAX Transit Project

This OIG Spot Check report concerns the Crenshaw/LAX Transit Corridor Project (Contract C988 MOD-00347.2).

Facts of Change Order

See Attachment A Spot Check #1 chart and pictures.

Summary #1

Scope of Work - This modification is to add lighted handrails to the center walkway in the two underground sections (UG1), which will facilitate emergency evacuation of the train. This change came about when the Metro Fire and Life Safety Group reviewed the preliminary designs. The Safety group was concerned about impaired visibility from smoke for exiting patrons during a fire in the tunnel and requested calculations to show the environment would be tenable. The contractor's designer performed the calculations and determined there would be visibility issues for passengers exiting the tunnel during an emergency. Lighted handrails and 4-inch wide thermoplastic edge striping were the solutions for emergency exiting situations. In addition to the lighted handrails, multiple power circuits, redundant circuits, routing on either side of the walkway, and adjustment to overhead lighting were added to the electrical design and construction.

Budget - The modification was awarded for \$1,600,000. The contractor's proposal was \$1,669,709 and the ICE was \$1,480,224. The award was 8.1% more than the Metro ICE but was lower than the contractor's proposal. See Attachment A Spot Check #1 chart.

Schedule -The initial review of preliminary plans by the Metro Fire and Life Safety Group was in February 2017. Calculations, decisions and the agreed upon scope of work occurred on August 16, 2018. The modification was executed on August 31, 2018, twelve work-days later. If this modification were to go to the Board it would be on the October agenda which would be 51 work-days later. From the final scope of work to the October Board meeting there would be a time savings of 39 work-days.

Recommendation

This is a unique situation with the UG1 not being a full continuous tunnel section and therefore has less light. It took over 18 months (February 2017) to evaluate options and come to an agreed upon solution. Management should note the steps and procedures in Lessons Learned and follow up during management group discussions, on ways to expedite and coordinate future situations involving evaluation of numerous options to quickly reach a best alternative.

B. Spot Check#2 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00060).

Facts of Change Order

See attachment A Spot Check #2 chart.

Summary #2

Scope of Work - This modification is the result of additional requirements identified in the Memorandum of Agreement (MOA) between City of Beverly Hills (COBH) and Metro. The contractor was awarded the Purple Line Extension Section 1 contract prior to the MOA being completed. The MOA included many additional requirements that have a significant financial impact.

Budget - The award amount for this modification is \$18,993,374. The contractor's proposal was \$20,828,391 and the ICE was \$17,015,066. The award was \$1,835,017 below the contractor's proposal or 8.8% less than the contractor's price to complete the work. The negotiated amount was 10.4% higher than the ICE. See attachment A Spot Check #2 chart.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on June 19, 2018, and the modification was executed on August 07, 2018, which was done in 36 work-days. If this modification were to go to the Board it would be on the September agenda which would be 73 work-days later. From the final scope of work to the September Board meeting there would be a time savings of 37 work-days. See attachment A Spot Check #2 chart.

Recommendation

This was a large dollar amount modification, but the contract administrator kept the award both close to the ICE and the contractor's proposal. The negotiation of the MOA with COBH took from October

2014 to February 2017 (over 28 months) to negotiate and therefore was not included with the award of the Purple Line Extension Section 1 Transit Project contract.

The OIG recommends to start future MOA processes with cities during the planning stages of the Environmental Assessment and identify the concerns/matters relating to the MOA in the Risk Registry.

C. Spot Check#3 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00061).

Facts of Change Order

See attachment A Spot Check #3 chart.

Summary #3

Scope of Work - This modification is to provide additional calculations and reports to reflect the changes pursuant to a Deviation Request (DR) and design-builders bonding expense. Metro Design Criteria states Building Settlement Criteria limits specifies acceptable building settlement of 0.5-inch, which included both Support of Excavation (SOE) and dewatering settlement. In the field, dewatering was significant and needed to be verified. Three separate contractors verified that there was significant dewatering settlement as much as 1.5-inches. Therefore the Metro Design Criteria needed to be updated. The dewatering settlement plus the SOE now allows up to 2 inches (0.5-inch SOE + 1.5-inch dewatering) for total settlement. The DR change requests three alert levels to be calculated at each stage of the excavation for movement. The contractor had to reconcile multiple comments and recalculate predicted alert values. Multiple submittals of Geotechnical reports and Instrumentation drawings were prepared to address the excess building settlement stated in the Metro DR.

Budget - The award amount for this modification is \$1,078,680. The contractor's proposal was \$1,277,305 and the ICE was \$1,208,883. The award amount was \$198,625 below the contractor's proposal or 15.5% less than the contractor's price to complete the work. In this situation, the ICE, the proposal, and the negotiated amount were all within close proximity of each other. See attachment A Spot Check #3 chart.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on July 5, 2018 and the modification was executed on August 1, 2018, which was done in 20 work-days. If this modification were to go to the Board it would be on the September agenda which would be 61 work-days later. From the final scope of work to the September Board meeting there would be a time savings of 41 work-days. See attachment A Spot Check #3 chart.

Recommendation

The OIG recommends this matter concerning dewatering and SOE be added to the Lessons Learned files and the separation of dewatering and SOE be updated in the Metro Design Criteria as a special case.

D. Spot Check# 4 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00058).

Facts of Change Order

See attachment A Spot Check #4 chart and pictures.

Summary #4

Scope of Work - This modification is to purchase and install additional instrumentation that detects settlement. As discussed in Spot Check #3, building settlement comes from both SOE and dewatering settlement. As the earth at La Brea station is excavated, settlement of the adjacent structures and roadway must be monitored. Settlement due to dewatering at the La Brea station was found to be in excess of the Metro design criteria, original design, and calculations (Mod 00061 justifies the supplemental instrumentation). Instrumentation shall be purchased, installed, monitored and removed. The contractor is responsible for weekly monitoring for 99 weeks. Then quarterly reading will begin for 16 quarters. There will also be an additional 20 readings as requested by Metro. Instrumentation for monitoring and settlement points are to be set up on buildings, streets, sidewalks, and utilities. The instrumentation will electronically measure and record elevation changes. See attachment A Spot Check #4 pictures.

Budget - This modification was negotiated and award is \$1,386,678. The contractor's proposal was \$5,877,106 and the ICE was \$513,577. The award amount was \$4,490,428 below the contractor's proposal or 76% less than the contractor's price to complete the work. In this situation, the ICE did not accurately capture the work to be performed, therefore the independent estimate was not representative of work stated in the agreed upon scope of work. See attachment A Spot Check #4 chart.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on April 16, 2018 and the modification was executed on June 14, 2018, which was done in 44 work-days. If this modification were to go to the Board it would be on the June agenda which would be 54 work-days later. From the final scope of work to the June Board meeting there would be a time savings of 10 work-days. See attachment A Spot Check #4 chart.

Recommendation

The Independent Cost Estimate was not an accurate representation of work stated in the agreed upon scope of work. The OIG recommends that the project manager or knowledgeable person from the project team, establishes a coordination meeting both in the field and office for the estimator to see and hear each detail of new scope of work. Hearing and visualization of the scope changes will assist the estimator in preparing a more accurate Independent Cost Estimate.

E. Spot Check #5 - Purple Line Extension Section 2 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 2 Transit Project (Contract C1120 MOD-00015).

Facts of Change Order

See attachment A Spot Check #5 chart and picture.

Summary #5

Scope of Work - This modification is to pay for professional services, furnish management, coordination, labor, equipment, materials and other services to perform the final design of the main station entrance for Century City Constellation Metro station.

Since late 2015, Metro management has been proactively coordinating with the developer of the property on the corner of Constellation Boulevard and Avenue of the Stars in an effort to facilitate a negotiated real estate acquisition. During preparation of the RFP, Metro management directed its engineering consultant to separate the drawings for the station entrance and the plaza from the rest of the station, and to put them at the back of the package so that they could be easily replaced as an amendment during the procurement, or as a contract modification early in the final design phase of the design/build contract. This was done to allow time for the Avenue of Stars developer to complete their design plans for the plaza area, incorporating Metro's entrance. The owner has recently shared their final architectural plans with Metro and is ready to move forward. Construction of the owner's shoring work is scheduled to begin in Fall 2018, and Metro is continuing with utility relocation in the adjacent streets. See attachment A Spot Check #5 picture.

Budget - The award amount for this modification is \$1,258,310. The contractor's proposal was \$1,369,735 and the ICE was \$1,228,893. The award amount was \$111,425 below the contractor's proposal or 8.1% less than the contractor's price to complete the work. For this modification the negotiated amount was 2.4% above the ICE. Contractor's proposal, the ICE and the final negotiated amount were very close in price. See attachment A Spot Check #5 chart.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on August 16, 2018 and the modification was executed on August 24, 2018, which was done in 7 work-days. If this modification were to go to the Board it would be on the October agenda which would be 51 work-days later. From the final scope of work to the October Board meeting there would be a time savings of 44 work-days. See attachment A Spot Check #5 chart.

Recommendation

The OIG understands the real estate transaction between the developer and Metro is not a signed agreement as of the time of this report. We recommend that Metro management and Metro real estate staff work expeditiously with the developer to finalize cost estimates and complete the real estate transaction to minimize the likelihood of additional costs associated with further modifications to the design of the station entrance.

FINANCIAL IMPACT

There is no financial impact to the agency.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendations that the Office of Inspector General has put forward support the Strategic Plan Goal #5: Provide responsive, accountable, and trustworthy governance within the Metro organization. The OIG focuses on fraud, waste, and abuse. For each selected change order/modification reviewed, the OIG is evaluating if fraud, waste, or abuse is taking place. We report the details of why the change order is 'out of scope' and support the information with our construction best practices recommendations, more particularly focusing on lessons learned, improving efficiencies, and prudent spending. Our goal is to provide accountable, trustworthy information to the Board and through our recommendations provide governance to Metro.

NEXT STEPS

The Office of Inspector General will continue reporting to the Board the results of Construction Change Order Spot Checks selected from the Program Management Major Project Status Quarterly Report. The next OIG Construction Spot Check report will be in January.

Program Control and Program Management agreed to respond to the recommendations of the OIG found in this report within 30 days. We are working with Management for the responses to the prior OIG Construction Spot Check reports. Responses to our recommendations will be set forth in the January OIG Construction Change Order Spot Check Quarterly Report.

ATTACHMENTS

Attachment A - [Chart and Pictures for Spot Checks]

Prepared by: Prepared by: Suzanna Sterling, Construction Specialist Investigator, (213) 244-7368
Reviewed by: Karen Gorman, Inspector General, (213) 244-7337


Karen Gorman
Inspector General

Spot Check #1 - Crenshaw/LAX Transit Project - Contract C0988

Facts of Change Order

<u>Description of Modification -MOD-000347.2:</u> Underground section 1(UG1) Center Walkway Lighted Handrail (supersedes MOD-000347 and 347.1)	
<u>Change Order Dates:</u>	
Scope of Work approved	August 16, 2018
Modification Executed	August 31, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	12 work days
Estimate using former Board approval process	51 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$1,480,224
Contractor's proposed cost	\$1,669,709
Negotiated amount	\$1,600,000
Negotiated amount over ICE	\$119,776
Percentage of negotiated amount over ICE	8.1%



UG-1 - Tunnel section without the cover



Center walkway at UG-1
Area for lighted handrail, 4-inch wide thermoplastic edge striping, overhead lighting adjustments, power circuits, and redundant circuits



Spot Check #2 - Purple Line Section 1 Transit Project - Contract C1045**Facts of Change Order**

<u>Description of Modification -MOD-00060</u> Accommodate City of Beverly Hills Memorandum of Agreement (MOA)	
<u>Change Order Dates:</u>	
Scope of Work approved	June 19, 2018
Modification Executed	August 07, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	36 work days
Estimate using former Board approval process	75 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$17,015,066
Contractor's proposed cost	\$20,828,391
Negotiated amount	\$18,993,374
Negotiated amount over ICE	\$1,978,308
Amount negotiated under Contractors proposal	\$1,835,017

Spot Check #3 - Purple Line Section 1 Transit Project - Contract C1045**Facts of Change Order**

<u>Description of Modification -MOD-00061</u> Additional SOE Design work for La Brea Station due to deviation request for building settlement	
<u>Change Order Dates:</u>	
Scope of Work approved	July 05, 2018
Modification Executed	August 01, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	20 work days
Estimate using former Board approval process	61 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$1,208,883
Contractor's proposed cost	\$1,277,305
Negotiated amount	\$1,078,680
Negotiated amount under ICE	\$130,203
Amount negotiated under Contractors proposal	\$198,625

Spot Check# 4 - Purple Line Section 1 Transit Project - Contract C1045

Facts of Change Order

<u>Description of Modification -MOD-00058</u> La Brea Additional Instrumentation	
<u>Change Order Dates:</u>	
Scope of Work approved	April 16, 2018
Modification Executed	June 14, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	44 work days
Estimate using former Board approval process	54 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$513,577
Contractor's proposed cost	\$5,877,106
Negotiated amount	\$1,386,678
Negotiated amount over ICE	\$873,101
Amount negotiated under Contractors proposal	\$4,490,428



Survey camera shoots signal and reads current elevation of street target



Street instrumentation target similar to lane marker but has an initial recorded elevation camera shoots signal to reflective prism



Solar powered instrumentation

Spot Check #5 - Purple Line Section 2 Transit Project – Contract 1120

Facts of Change Order

<u>Description of Modification -MOD-0015</u> Century City Constellation Station – Main Entrance Final Design	
<u>Change Order Dates:</u>	
Scope of Work approved	August 16, 2018
Modification Executed	August 24, 2018
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	7 work days
Estimate using former Board approval process	51 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$1,228,893
Contractor's proposed cost	\$1,369,735
Negotiated amount	\$1,258,310
Negotiated amount over ICE	\$29,417
Amount negotiated under Contractors proposal	\$111,425



Spot Check #5 - Purple Line Section 2 Transit Project
 Century City Constellation Station – Main Entrance Final Design

Office Of Inspector General Construction Change Order Spot Check Report

Presented By

Karen Gorman

Inspector General

October 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Construction Spot Check Program

OIG Program Description

The OIG Spot Check program focuses on approved change orders that exceed \$1 million. The program includes:

- Review sampling of Change Orders from PMIS
- Review of Program Management's Project Status Report
- Interview Project Managers, Program Controllers, and Procurement Officers
- Review project budget, specifications, any related documentation

OIG Spot Checks focus on:

- Scope of Work
- Budget
- Schedule Comparison
- Making Recommendations

Summary of Spot Checks

Five OIG spot checks of change orders show:

- Negotiated amounts appear reasonable
- All change orders have a reduced processing time
- Staff time is saved

Construction Spot Check Costs

Summary of Selected Change Order Costs

Five OIG spot checks of change orders / modifications reported

1 change order for Crenshaw/LAX project

- ❖ Underground Section Center Walkway Lighted Handrail = \$1,600,000

3 change orders for Purple Line Section 1 project

- ❖ Accommodate City of Beverly Hills Memorandum of Agreement = \$18,993,347
- ❖ Additional support of excavation design work for La Brea Station due to deviation request for building settlement = \$1,078,680
- ❖ La Brea Additional Instrumentation = \$1,386,678

1 change orders for Purple Line Section 2 project

- ❖ Century City Constellation Station Main Entrance Final Design = \$1,258,310

Construction Spot Check Schedule Comparison

Schedule Comparison: New Delegated process vs. Former Board approval process

PROJECT	Title of Change Order	Time Saved Executed date to Board Mtg. (workdays)	NEW Delegated Process final SOW to Executed date (workdays)	Former Board Approval Process (workdays)
CRENSHAW/LAX	Underground Section Center Walkway Lighted Handrail	39	12	51
WESTSIDE PURPLE LINE SECT 1	Accommodate City of Beverly Hills Memorandum of Agreement	37	36	73
WESTSIDE PURPLE LINE SECT 1	Additional Support of Excavation Design Work for La Brea Station due to Deviation Request for Building Settlement	41	20	61
WESTSIDE PURPLE LINE SECT 1	La Brea Additional Instrumentation	10	44	54
WESTSIDE PURPLE LINE SECT 2	Century City Constellation Station Main Entrance Final Design	44	7	51



UG-1 - Tunnel section without the cover



Center walkway at UG-1. Area for lighted handrail, 4-inch wide thermoplastic edge striping, overhead lighting adjustments, power circuits, and redundant circuits



\$1,600,000

Purple Line Extension - Section 1 Transit Project

La Brea Additional Instrumentation

Spot Check #4



Survey camera shoots signal and reads current elevation of street target

Street instrumentation target similar to lane marker but has an initial recorded elevation camera shoots signal to reflective prism



Survey instruments measure settlement at La Brea Ave. & Wilshire Blvd.

Solar powered instrumentation



\$1,386,678

October 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority

Purple Line Extension - Section 2:

Century City Constellation Station – Main Entrance Final Design

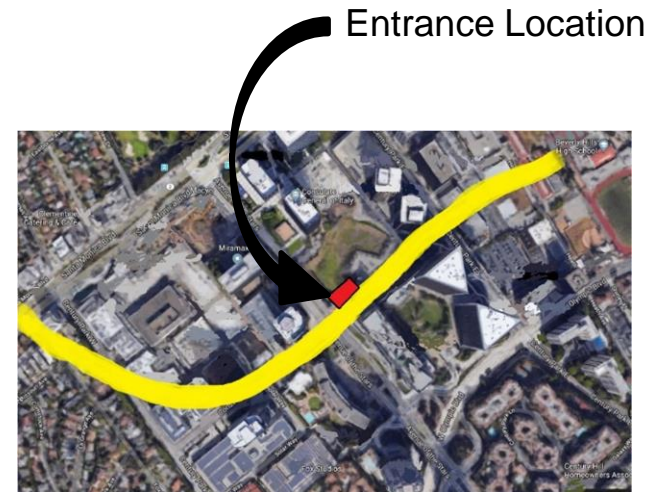
Spot Check #5

Agenda

xx



Entrance on the corner of Constellation Blvd. & Avenue of the Stars. Rendering from developers Architect.



Main Entrance to Metro Station

\$1,258,310

October 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority



**Board Report**

File #: 2018-0531, **File Type:** Contract**Agenda Number:** 31.

**CONSTRUCTION COMMITTEE
OCTOBER 18, 2018****SUBJECT: RAIL OPERATIONS CENTER TRANSIT PASSENGER INFORMATION SYSTEM****ACTION: APPROVE CONTRACT AWARD****RECOMMENDATION**

CONSIDER:

- A. AUTHORIZING the Chief Executive Officer to award Contract No. OP111922000 for the Crenshaw/LAX Rail Operations Center (ROC) Transit Passenger Information System (TPIS) to B&C Transit, Inc. for an amount of \$719,950 for the Base Work; an amount of \$378,774 for the Regional Connector Option 1; an amount of \$378,774 for the Westside Purple Line Extension (WPLE) Segment-1 Option 2; an amount of \$100,274 for the WPLE Segment-2 Option-3; and an amount of \$100,274 for the WPLE Segment-3 Option-4, for a total firm fixed price contract amount of \$1,678,046, subject to resolution of any properly submitted protest, if any; and
- B. APPROVING Contract Modification Authority in the amount of \$500,000 and authorize the CEO to execute individual Contract Modifications within the Board approved Contract Modification Authority for potential change orders and cost increase associated with the contract extended period.

ISSUE

The various public address and variable messaging systems introduced with the commissioning of past rail projects over the years are not consistent and are obsolete in terms of meeting the demands of Metro's expanding service network. One exception to this is the recent implementation of the Nucleus system implemented with Expo Phase II and Foothill Extension over two years ago that has proven quite successful coupled with its capacity for expansion and upgrade.

Approval of this action will expand on the current Nucleus system to provide public address and variable message sign capabilities for the new stations of Crenshaw\LAX, Regional Connector and WPLE Sections 1, 2 and 3 Projects.

BACKGROUND

The Measure R projects including Crenshaw/LAX, Regional Connector and WPLE Sections 1, 2 and 3 Projects requires expansion and upgrades to the existing ROC facility and systems that include the TPIS system. This work at central control is managed by Metro under the ROC Reconfiguration Project that is separate from the mainline work with the Projects' design/build contractor work as it involves coordination and integration with active operations and systems coupled with extensive support from contract and non-contract staff from several departments. In general, the ROC upgrades and expansions are completed respective to the central control needs of the sponsor projects for system integration and testing with the mainline systems before the new rail projects are commissioned into revenue service.

DISCUSSION

Operations and technical staff identified the Nucleus System as the desired standard to carry forward for the future rail projects for consistency and maintainability in lieu of the other three public address systems currently in use. Staff highly recommends the Nucleus system as it is user friendly with reliable performance and is backed by responsive vendor support when needed.

A proof of concept was successfully demonstrated at Willowbrook Station over the course of a year to show that the Nucleus system is capable of supporting Metro's public address and variable message signage needs in a unified platform.

DETERMINATION OF SAFETY IMPACT

The award of this contract will result in a positive impact on safety. The Nucleus TPIS system provides a vital interface between central control operations staff of Metro in sharing useful operational and safety information to the patrons at the rail stations.

FINANCIAL IMPACT

The base contract value of \$719,950 is included in the FY19 budget in Cost Center 8510, under Crenshaw/LAX Project 865512. Options 1 through 4 will be exercised in future fiscal years using respective project budget. Since this is a multi-year contract, the Chief Program Management Officer and the respective Project Managers will be responsible for budgeting the costs in future fiscal years.

Impact to Budget

The sources of the funds parallel the respective direct charged projects' funding and budgets. This procurement is within each projects' LOP budget.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Recommendation supports Strategic Goal 2: Deliver outstanding trip experience for all users of the transportation system. Expansion of the existing Nucleus public address installation at ROC to accommodate the new stations for Crenshaw/LAX and the optional future projects of Regional Connector and WPLE Sections 1, 2 and 3 Projects will improve information shared with the patrons

with increased efficiency and quality that is built upon a scalable architecture allowing for expansion as the rail system grows. The expanded Nucleus system will provide automated, scheduled\prerecorded, and live message broadcasts with capability to manage voice and visual messages at the stations.

ALTERNATIVES CONSIDERED

The Board may choose not to authorize this action. However, it is not recommended as the alternative would require re-solicitation for any type of TPIS system available. This alternative would include other systems besides Nucleus, and will present training and maintenance difficulties that will negatively affect the overall safe, effective and efficient operations. Additionally, awarding to a new contractor will present significant schedule and cost risks to the Crenshaw/LAX Project.

NEXT STEPS

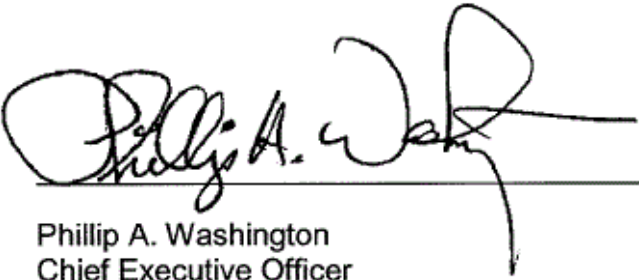
Upon approval by the Board, staff will execute Contract No. OP111922000 with B&C Transit, Inc. to ensure the delivery of the expanded Nucleus TPIS System to support the Crenshaw/LAX, Regional Connector and WPLE Sections 1, 2 and 3 Projects.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

Prepared by:
Rupert Bicarme, Sr. Director, (213) 418.3396
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Reviewed by:
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Richard F. Clarke, Chief Program Management Officer, (213) 922.7557



Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

RAIL OPERATIONS CENTER PASSENGER INFORMATION SYSTEM/OP111922000

1.	Contract Number: OP111922000	
2.	Recommended Vendor: B&C Transit Inc.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: 6/20/2018	
	B. Advertised/Publicized: 6/20/2018	
	C. Pre-Bid Conference: N/A	
	D. Proposals/Bids Due: 7/20/2018	
	E. Pre-Qualification Completed: 9/19/2018	
	F. Conflict of Interest Form Submitted to Ethics: 08/02/2018	
	G. Protest Period End Date: 10/19/2018	
5.	Solicitations Picked Up/Downloaded: 19	Bids Received: 2
6.	Contract Administrator: Edmund Gonzales	Telephone Number: 213/418-3073
7.	Project Manager: Rupert Bicarme	Telephone Number: 213/418-3396

A. Procurement Background

This Board Action is to approve Contract No. OP111922000 in support of Metro's Rail Operations Center (ROC) to procure and upgrade the Transit Passenger Information System (TPIS) to support the Crenshaw/LAX Line and Purple Line expansions. The system upgrade will provide greater capability to display real-time information regarding rail line arrivals and departures at stations and allow enhanced ability to provide passenger information. Board approval of contract award is subject to resolution of any properly submitted protest, if any.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is a Firm Fixed Price.

One amendment was issued during the solicitation phase of the RFP:

- Amendment No. 1, issued on July 10, 2018; provided planholders list to potential proposers.

A total of two proposals were received on July 20, 2018.

B. Evaluation of Proposals

This procurement was conducted in accordance with, and complies with LACMTA's Acquisition Policy for a competitive RFP using evaluation criteria and factors. Respondents were evaluated based on the following evaluation criteria and weights:

Degree of the Prime's Skills and Experience	30%
Experience and Capabilities of the Firms on the Contractor's Team	20%
Effectiveness of Management Plan & Ability to Meet Schedule	25%
Price	<u>25%</u>

Total 100%

The firms that submitted proposals are listed below in alphabetical order:

1. B&C Transit, Incorporated
2. JM Fiber Optics

The firms were deemed responsive to the RFP requirements.

The Source Selection Committee (SSC) conducted a technical evaluation of proposals received from B&C Transit, Inc. and JM Fiber Optics, Inc. The SSC found B&C Transit's proposal to be technically responsive and responsible to the RFP Statement of Work (SOW) requirements. B&C Transit's technical proposal satisfactorily responded to all the TPIS system requirements defined in the RFP.

The SSC determined that B&C Transit has a sound history of providing support to Metro's end users and maintenance staff by responding to any questions or resolving all issues.

The SSC found that JM Fiber Optics' TPIS system was entirely different than the TPIS system defined in Metro's RFP. The TPIS System defined in the RFP is a sequel database driven by a state of the art product available in the open market. The TPIS defined in the RFP has proven to be successful in the most recent TPIS installation at ROC for Expo II and Foothill Extension 2A.

The SSC also found that JM Fiber Optics' proposed TPIS system was more prone to failures as has been experienced on Metro's Red, Blue, Green, and Pasadena\Gold Lines. The following is a summary of the SSC's ranking/scores for this procurement:

	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
	B&C Transit, Inc.				
	Degree of Prime's Skills and Experience	80.00	30.00%	24.00	
	Experience & Capabilities of the Firms	76.66	20.00%	15.33	
	Effectiveness of Mgmt. Plan & Ability to Meet Schedule	80.00	25.00%	20.00	
	Price	51.42	25.00%	12.86	
	Total		100.00%	72.19	1
	JM Fiber Optics				
	Degree of Prime's Skills and Experience	47.22	30.00%	14.17	
	Experience & Capabilities of the Firms	40.00	20.00%	8.00	

	Effectiveness of Mgmt. Plan & Ability to Meet Schedule	46.66	25.00%	11.67	
	Price	100.00	25.00%	25.00	
	Total		100.00%	58.84	2

The firm recommended for award, B&C Transit, Inc. was found to be in full compliance with the RFP, technical requirements and received the highest ranking.

C. Cost/Price Analysis

The recommended total price has been determined to be fair and reasonable based on adequate price competition, cost analysis, technical evaluation and negotiation. Staff conducted a cost analysis of B&C's transit's price proposal, as the price offer from JM Fiber Optics was not comparable. The recommended price is 1.4% lower than Metro's Independent Cost Estimate.

Proposer Name	Proposed Price	Negotiated Price	Metro ICE
B&C Transit, Inc.	\$1,712,150	\$1,678,046	\$1,701,820
JM Fiber Optics	\$862,783	\$862,783	

D. Background on Recommended Contractor:

B&C Transit, Inc., located in Oakland, CA, has been in business for 19 years. They serve the public transit sector in automated train control design, technical engineering, system installations, network control, and station communications. B&C Transit has provided similar products to other transit agencies including Miami-Dade Transit, Phoenix Valley Metro Rail and Hampton Roads Transit (HRT) Norfolk. B&C has also provided satisfactory products and services to Metro on previous awarded goods and services.

DEOD SUMMARY

RAIL OPERATIONS CENTER PASSENGER INFORMATION SYSTEM/OP111922000

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 21% Disadvantaged Business Enterprise (DBE) goal for this solicitation. B&C Transit Inc. met the goal by making a 21% DBE commitment.

Small Business Goal	DBE 21%	Small Business Commitment	DBE 21%
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	DBE/SBE Subcontractors	Ethnicity	DBE Committed %
1.	KPA Constructors	African American	21%
	Total Commitment		21%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA).

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy (PLA/CCP) is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.



Board Report

File #: 2018-0588, File Type: Contract

Agenda Number: 32.

CONSTRUCTION COMMITTEE OCTOBER 18, 2018

SUBJECT: DIVISION 20 PORTAL WIDENING AND TURNBACK FACILITY

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

CONSIDER:

- A. CERTIFYING the Final Environmental Impact Report (FEIR);
- B. AUTHORIZING the Chief Executive Officer (CEO) to file a Notice of Determination with the Los Angeles County Clerk and State of California Clearinghouse;
- C. ADOPTING the:
 1. Findings of Fact and Statement of Overriding Considerations (FF/SOC) in accordance with the California Environmental Quality Act (CEQA); and
 2. Mitigation Monitoring and Reporting Plan (MMRP).

ISSUE

Division 20 is located at 300 S. Santa Fe Ave near 4th Street in downtown Los Angeles. Metro committed to the Federal Transit Administration (FTA), as part of the Full Funding Grant Agreement for the Westside Purple Line Extension (WPLE) Section 1, to make appropriate infrastructure modifications to allow the Purple Line system to operate at reduced headways. The Full Funding Grant Agreement states that reduced headways must be achievable by late 2024.

To achieve the required headways for the Red and Purple Lines, the existing portal between Union Station and Metro Rail Division 20 must be widened, and existing tracks must be modified where Purple and Red Line trains transition from the existing twin bored tunnels to the current rail yard facilities at Metro Rail Division 20. In addition to the portal widening, a turnback facility must be constructed to maximize and optimize the ability of trains to change directions to and from Union Station. The portal widening and turnback facility are herein referred to as the Proposed Project.

After considerable technical study and internal and external stakeholder outreach, staff is

recommending that the Board: certify the FEIR; adopt the FF/SOC (Attachment A) and the MMRP (Attachment B); and authorize the CEO to file a Notice of Determination (Attachment C). The Proposed Project and the environmental process are described in the FF/SOC. The FEIR, FF/SOC, and MMRP are available at <https://www.metro.net/projects/division-20/>.

BACKGROUND

On March 23, 2017, the Metro Board of Directors certified the Final Initial Study/Mitigated Negative Declaration (IS/MND) and approved the award of a design contract for the Division 20 Portal Widening Turnback Project (original project). The scope of the project was to construct a turnback facility on the west side of the Red and Purple Line yard (Division 20) with the turnback facility terminating east of the One Santa Fe residence and within Metro property located between 1st and 3rd Streets. It also included widening the existing tunnel portal to accommodate the additional tracks. The adopted IS/MND environmental analysis prepared for this original project included full acquisition of the Viertel's Tow Yard property (just northwest of the portal opening).

On April 27, 2017, the Board received an update (File #2017-0130) on Metro's long-term needs at Division 20 in the Downtown Los Angeles Arts District and the accommodations necessary for a potential future Arts District passenger rail station (the majority of public comments on the certified IS/MND showed a strong preference for a station to be located in the Arts District near 6th Street). The report also addressed the increased need for additional storage capacity for Metro's growing rail fleet including accommodations for storage of WPLE trains at Division 20.

Subsequently, the Division 20 Portal Widening Turnback Project has been revised to include storage tracks for WPLE as well as a modified turnback facility that not only meets operational requirements and flexibility, but minimizes significant future infrastructure modifications and interruptions to service if the 6th Street Station is approved and funded. The combination of portal widening and turnback tracks to support two-minute headways, additional storage tracks and accommodation for a future station at 6th Street - all within a constrained footprint of an active rail maintenance and storage site - have significantly increased the size and complexity of this project.

Due to these changes in scope, an EIR has been prepared for the modified project (the Proposed Project), incorporating relevant analysis from the IS/MND.

Staff is recommending approval of this Board action to certify the FEIR. Certifying the FEIR establishes that the FEIR complies with CEQA; the FEIR was presented to the Board and that the Board reviewed and considered the information contained in the Final EIR prior to approving the Proposed Project; and the Final EIR reflects Metro's independent judgment and analysis.

Staff also recommends authorizing the CEO to file a Notice of Determination with the Los Angeles County Clerk and State of California Clearinghouse. In addition, staff is recommending the adoption of the FF/SOC and the MMRP.

DISCUSSION

The Proposed Project will widen the existing portal for the Metro Red and Purple Lines Maintenance Yard (Division 20), develop a high-capacity turnback facility, increase train storage capacity, and reconfigure the existing internal tracks and access roads at Division 20 (Attachment D, Project Map) so as not to preclude a future Arts District/6th St. Station. In April 2016, the Board approved a budget of \$3.5M to initiate design of the project.

The elements of the Proposed Project described in the EIR include:

- Widening the tunnel portal that currently connects the Metro Red and Purple Lines to Division 20, including construction of a column in the portal area and a new ventilation shaft building;
- Constructing new storage tracks;
- Reconfiguring existing tracks and access roads to accommodate a turnback facility;
- Installing a new Traction Power Substation (TPSS) and emergency backup power generator;
- Expanding the rail yard west, into areas currently occupied by the Citizens Warehouse/Lysle Storage Company building, the LAPD Viertel's Central Division Police Garage, and the National Cold Storage facility;
- Repurposing an existing building at 100-120 North Santa Fe Avenue for MOW activities (however, Metro does not intend to acquire this property as it's no longer needed for the Project);
- Modifying the 1st Street Bridge piers and superstructure; and
- Vacating portions of three City streets (i.e., Jackson, Banning, and Ducommun Streets east of Center Street).

Project Goals and Objectives

Given the ongoing Metro Purple Line Extension Project, storage constraints that inhibit fleet expansion, and the absence of a turnback facility, the goal of the Proposed Project is to accommodate the expansion and associated increased ridership of the Metro Red and Purple Lines while reducing existing headways. The two objectives of the Proposed Project are:

- Objective #1: Provide core capacity improvements needed to accommodate increased service levels on Metro Red and Purple Lines.

Objective #2: Provide new tracks and switches that will allow trains to provide faster service times than the current turnback at Union Station.

Environmental Analysis

The Project was analyzed through an Environmental Impact Report (EIR) under CEQA.

The EIR Notice of Preparation was published on October 18, 2017 (with a 30-day public comment period) and the Notice of Availability of the DEIR was published on March 16, 2018 (and circulated for a 45-day public comment period). The Proposed Project was analyzed under all CEQA issue areas and was found to have no impacts or less than significant impacts in 16 issue areas, less than significant impacts with mitigation measures in two issue areas (Aesthetics and Tribal Cultural Resources), and significant and unavoidable impacts related to Cultural Resources (due to the partial demolition of a historic building, complete demolition of a historically significant facility, and

modification to the 1st Street Bridge), and Noise and Vibration during construction (due to potential exceedance of FTA noise standards near One Santa Fe residential buildings and potential generation of excessive groundborne vibration).

Mitigation Measures

The FEIR includes a total of fifteen mitigation measures for impacts related to Aesthetics (two mitigation measures), Cultural Resources (nine mitigation measures), Noise and Vibration (three mitigation measures), and Tribal Cultural Resources (one mitigation measure). Metro is responsible for administering and implementing the mitigation measures during construction and operation of the Proposed Project. A full description of the mitigation measures is included in the MMRP (Attachment B).

Significant and Unavoidable Impacts

Cultural Resources (Historical Resources). The Citizens Warehouse/Lysle Storage Company building (formerly known as the Pickle Works building) is considered a historical resource under CEQA. Demolition of approximately 30,000 square feet of the eastern portion of the Citizens Warehouse/Lysle Storage Company building would result in a significant and unavoidable impact. The MMRP includes mitigation measures to preserve and protect approximately 24,000 square feet of floor area on three floors (including a basement) of the extant portion of the building, including the Art Dock and the frontage facing Center Street. In addition, as required by Mitigation Measure CR-3, Metro will preserve the opportunity to expand the extant portion of the historical resource to the south to provide an additional 2,700 square feet of floor area on three floors (including a basement). This would amount to a maximum total floor area of approximately 26,700 square feet for potential future reuse and historic rehabilitation. However, even with mitigation, the impact to this historic resource would still be significant and unavoidable.

Another historic resource to which the Proposed Project would create significant and unavoidable impacts is the 1st Street Bridge, designated by the City as a Historic-Cultural Monument. The Proposed Project would remove two bents from the Bridge and widen two bents and one pylon to accommodate new tracks. Modifications to the Bridge would result in a significant and unavoidable impact. The MMRP includes mitigation measures to retain the original decorative brackets, reflect the original board-form appearance on new concrete, and use an infill treatment similar to the treatment used when the Bridge was first widened to accommodate the Metro Gold Line. However, even with mitigation, the remaining impact would be significant and unavoidable.

Demolition of the National Ice and Cold Storage facility, which is listed as historically significant on SurveyLA, the City of Los Angeles' official historical resources survey, would result in a significant and unavoidable impact. The MMRP includes mitigation measures to document the historic nature of the building. However, even with mitigation, the impact would still be significant and unavoidable.

Noise and Vibration (Construction Noise and Vibration). The Proposed Project would include construction activities involving heavy-duty equipment directly adjacent to One Santa Fe. In addition, nighttime construction may be required to limit operational impacts to the existing Rail Yard. Noise levels would potentially exceed FTA standards near One Santa Fe residential buildings. Additionally,

the Proposed Project may generate excessive groundborne vibration. The MMRP includes the preparation of a Noise Control and Monitoring Plan and a Vibration Monitoring Plan as mitigation measures. However, no feasible mitigation measures were identified that would reduce the significant impact to a less-than-significant level. Therefore, even with mitigation, the impact would still be significant and unavoidable.

Alternatives

CEQA requires an analysis of alternatives to the Proposed Project to reduce or eliminate significant impacts associated with project development. An EIR must briefly describe the rationale for selection and rejection of alternatives. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects. This section describes potential alternatives to the Proposed Project that have been carried forward for comparative analysis with respect to the significant environmental impacts.

Three alternatives were evaluated:

- Alternative 1, “no project” alternative, (required by CEQA) will leave the current conditions in place;
- Track Design Alternative 2 would include many of the same project elements as the Proposed Project, which includes widening the tunnel portal, construction of a new ventilation building, constructing new storage tracks, installing a new TPSS and backup generator, vacating portions of City streets, and accommodating a turnback facility. This alternative would reduce impacts to cultural resources by not requiring modification of the 1st Street Bridge. However, the track configuration for the new storage yards would create a single point of failure for connections to the new storage tracks; and
- Track Design Alternative 3 would have the same project elements as Track Design Alternative 2 and would include two points of failure. Because this alternative would only modify two, rather than four, of the 1st Street Bridge’s bents, it would reduce impacts to cultural resources as compared to the Proposed Project. However, this alternative would only allow four-car train lengths, which would be inadequate for projected passenger loads.

Alternative 1, “no project” alternative, would avoid the Proposed Project’s significant impacts. However, in pursuing the No Project Alternative, Metro would not be able to meet the Proposed Project’s objectives of providing core capacity improvements to accommodate increased service levels on the Metro Red and Purple Lines and providing new tracks and turnouts to allow trains to provide faster service times at Union Station, and makes Alternative 1 infeasible. Track Design Alternatives 2 and 3 would each result in lesser impacts to cultural resources. However, Track Design Alternative 2 does not provide operational redundancy in its single point of failure. Failures at the double slip switch to the storage yard access points would render the storage facility unusable until the issue is addressed, creating inefficiency and poor reliability in operations. This deficiency would conflict with the Proposed Project Objective #2, which is to provide new tracks and switches that will allow trains to provide faster service times than the current turnback at Union Station, and makes Track Design Alternative 2 infeasible. Track Design Alternative 3 does not provide the six-car train lengths that would satisfy the capacity requirements of the Westside Purple Line Extension. This deficiency would conflict with the Proposed Project Objective #1, which is to provide core capacity improvements needed to accommodate increased service levels on Metro Red and Purple Lines, and

makes Track Design Alternative 3 infeasible.

Outreach

Staff led a robust outreach program during the preparation of the EIR, and continued engagement with stakeholders beyond the requirements of CEQA leading up to the release of the FEIR. The initial Scoping public comment period lasted forty-five days from October 18 to November 17, 2017, during which time two public scoping meetings were hosted on October 25, 2017 and November 8, 2017 to receive public input. The Proposed Project's scope was later revised to include additional property, which initiated a revised Scoping public comment period, lasting from January 3 to February 2, 2018. During this process, several briefings and meetings took place with local community groups, community members, elected officials, public agencies, and other stakeholders. Similar briefings were held upon the release of the DEIR and in advance of Metro's public hearing at Metro Headquarters on April 12, 2018 with 11 members of the public present and 15 members of the public viewing via a live webcast. In total, over 20 briefings were held with stakeholders; Attachment E includes a summary of the stakeholder engagement during the environmental process.

During the DEIR public comment period, a total of 50 distinct public comments were received, and 4 commenters spoke during the April 12 public hearing. Broadly, the comments focused on the following topics:

- Cultural Resources
- Transportation/Traffic
- Air Quality
- Noise
- Land Use and Planning
- Aesthetics

Responses were prepared for all comments received and, where applicable, changes (as indicated below) were incorporated into the FEIR. The comments and responses are presented in Chapter 3 of the FEIR.

Of note, the most prevalent public comment concerned the partial demolition of the Citizens Warehouse/Lysle Storage Company building and public requests for preservation, if feasible, or utilization of the space for a community use.

In response, Metro has revised Mitigation Measure CR-3 to provide more details related to preserving and rehabilitating the Citizens Warehouse/Lysle Storage Company building for future reoccupancy. These include:

- Metro will retain and stabilize approximately 24,000 square feet of floor area for potential future reuse.
- Metro shall consult with the Arts District community to identify an appropriate future use for the Citizens Warehouse/Lysle Storage Company building.

- Upon identification of an appropriate future use for the Citizens Warehouse/Lysle Storage Company building, Metro shall develop an adaptive reuse plan in consultation with the Los Angeles Conservancy and the City of Los Angeles Office of Historic Resources.
 - The identified use shall preserve the building's character-defining features and not preclude its eligibility to be designated as a Los Angeles Historic-Cultural Monument.
- Metro shall preserve the opportunity to expand the Citizens Warehouse/Lysle Storage Company building towards the 1st Street Bridge to provide up to approximately 2,700 square feet of additional floor area.
- Metro shall apply to nominate the Citizens Warehouse/Lysle Storage Company building as a Los Angeles Historic-Cultural Monument.
- A certificate of occupancy shall be recorded on the property for its future reuse within five years of Metro's purchase of the property from the City.

Other stakeholders' comments focused on design considerations, construction impacts, and operational concerns, and were addressed with stakeholders during the design process. These include:

- Addition of a column structure to accommodate high-speed rail service and avoid potential long-term closure of the Metro Purple and Red lines during future high-speed rail construction activities;
- Clarification regarding the study of a potential future revenue station in the Arts District, undertaken as a separate effort per Board direction in June 2018;
- Incorporation of additional historic features such as notation of the original boundaries of old Chinatown;
- Inclusion of analysis regarding total volatile organic compound (VOC) operational emissions.
- Clarification of Metro's policy for construction engine specifications, as described in the Metro Green Construction Policy.
- Reconsideration of purchase of additional property.
- Reassurance that a robust outreach process will be in place during construction.
- Confirmation that Construction of the Proposed Project would not involve road closures or impacts to neighboring businesses.

FEIR Recommendations

Staff recommends that the Board certify the FEIR with the Proposed Project. Although Track Design Alternative 2 would result in lesser impacts to cultural resources than the Proposed Project, the Proposed Project better achieves the desired project benefits and project objectives.

Statement of Overriding Considerations and Findings of Fact

CEQA Guidelines Section 15091(a) states that if the specific economic, legal, social, technological or other benefits of the project outweigh the unavoidable adverse effects, those effects may be considered acceptable. The Board must find that notwithstanding the disclosure of these significant and unavoidable impacts, there are specific overriding reasons for approving the Proposed Project and that these reasons override and outweigh the Proposed Project's significant unavoidable effects. CEQA requires Metro to support, in writing, the specific reasons for considering a project acceptable

when significant impacts cannot be avoided or substantially lessened. The findings are described below and in the necessary Statement of Overriding Considerations.

Though the Proposed Project would result in significant and unavoidable impacts related to cultural resources and noise and vibration, the Proposed Project would create regional environmental and social benefits. The main benefits of the Proposed Project are described below and in greater detail in the Statement of Overriding Considerations.

- *Regional Transit Capacity.* The Proposed Project will substantially improve capacity of the Metro Red and Purple Lines. In November 2016, over 70 percent of Los Angeles County's voters approved Metro's Measure M ballot measure to raise sales taxes to pay for critical transportation improvements, including the acceleration of the Purple Line Extension. The improvements to the Division 20 Rail Yard will provide core capacity improvements to accommodate increased service levels previously approved for the Metro Red and Purple Lines and allow trains to provide faster service times at Union Station. Metro Red and Purple Line ridership is expected to increase by approximately 49,000 following the Purple Line Extension to the U.S. Department of Veterans Affairs West Los Angeles Medical Center. In order to effectively serve the additional patronage during weekday peak hours, planned service improvements include operating trains every four minutes on each line - which is every two minutes in the trunk portion of the system - and expanding the fleet. Currently, eastbound trains in the trunk portion of the system use special trackwork at Union Station to reverse directions (i.e., 'turnback'). However, the capability of turning back trains is capped at 7.5 minutes on each line, or 3.75 minutes combined due to the original design of Union Station. In addition to improving Metro Red Line service, the Proposed Project would provide quicker turnaround times and capacity for storing trains for the full build-out of the Purple Line Extension.
- *Reduced Vehicle Miles Traveled (VMT) and Associated Emissions.* The Proposed Project would allow for the increase in service and expansion of the geographical reach of the Metro Red and Purple Lines. This would increase the appeal and viability of heavy rail transit as a mode of transportation in Los Angeles County. Such improvements to alternative modes of transportation would provide the opportunity for reductions in regional single-occupancy vehicle VMT and associated air pollutant and greenhouse gas emissions. In combination with the Purple Line Extension, the Proposed Project would result in an annual net reduction of approximately 19,960 metric tons of carbon dioxide equivalent. The entirety of the Purple Line Extension was incorporated into the Southern California Association of Governments Regional Transportation Plan. Enhancing and expanding the public transit network is at the crux of reducing regional VMT and associated GHG emissions, which is the top priority of the regional and local transportation and sustainability plans, as well as the California Air Resources Board Scoping Plan. The Proposed Project would contribute to regional efforts to improve sustainability and reduce VMT.

Notwithstanding the significant and unavoidable Project impacts, changes or alterations have been required in, or incorporated into, the Proposed Project which avoid or substantially lessen the significant environmental effects as identified in the EIR.

DETERMINATION OF SAFETY IMPACT

Approval of this item will have no impact on safety.

FINANCIAL IMPACT

There is no impact to the FY19 budget for the proposed recommendations. Funding for the environmental services was included in the FY18 budget in Project 865119 Division 20 Portal Widening and Turnback Facility, cost center 8510, account number 50316 Professional and Technical Services. This is a multi-year project requiring expenditure authorizations in fiscal year increments until a Board Authorized Life of Project Budget is adopted. It is the responsibility of the Project Manager and Chief Program Management Officer to budget for this project in the future fiscal years.

Impact to Budget

There is no change to the FY19 approved budget. The current funding for the project is CTC approved Transit and Intercity Rail Capital Program (TIRCP) funds and Measure R 35% funds.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

Approval of this recommendation supports the following Metro Strategic Plan Goals:

1. Provide high-quality mobility options that enable people to spend less time travelling;
2. Deliver outstanding trip experience for all users of the transportation system; and
3. Enhance communities and lives through mobility and access to opportunity.

ALTERNATIVES CONSIDERED

The Board could delay action to certify the FEIR, adopt the Findings of Fact and Statement of Overriding Considerations, as well as the MMRP. Deferral of these actions is not recommended as they would delay the Proposed Project's overall schedule to be complete before opening of the WPLE Section 1 in 2023 as well as delay the achievement of the FFGA reduced headway capabilities by late 2024.

The Board could decide to certify the FEIR but reject the staff recommendation to approve the Proposed Project and instead advance Track Design Alternative 2 or 3 as the Preferred Alternative. This is not recommended. The Proposed Project and Track Design Alternatives 2 and 3 are similar in overall design but have key operational differences to the Proposed Project. Track Design Alternative 2 does not provide operational redundancy in its points of failure, which would prevent continuing rail service in the case of a trackwork failure. Track Design Alternative 3 does not provide for the six-car train lengths that would satisfy the capacity requirements of the Westside Purple Line Extension. The selection of Track Design Alternative 2 or 3 would thus conflict with the Proposed Project's objectives. As a result, Track Design Alternatives 2 or 3 are infeasible.

The Board could decide to select Alternative 1, "no project." This is not recommended as it would maintain existing conditions, would be contrary to the overall vision for future revenue service, and

would not fulfill Metro's commitment through the WPLE FFGA to provide reduced headway capabilities by late 2024. The selection of Alternative 1, "no project," would thus conflict with the Proposed Project's objectives. Additionally, Metro has secured State grant funding to advance this project. As a result, the No Project Alternative is not feasible.

NEXT STEPS

Upon Board certification of the FEIR, staff will file a Notice of Determination with the State of California and Los Angeles County, and advance key project contracts for Early Demolition and Construction.

The project is advancing to complete final design by the end of the calendar year with construction bid documents to be released in early 2019. Once construction bids are received and the lowest bidder is identified, staff will establish a LOP budget and will return to the Board for adoption.

Staff will also return to the Board for approval of any final property required for the project.

ATTACHMENTS

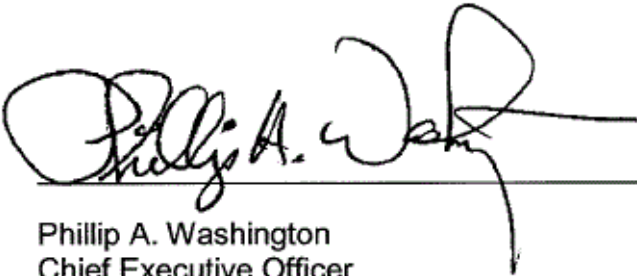
- Attachment A - Findings of Fact and Statement of Overriding Considerations
- Attachment B - Mitigation Monitoring and Reporting Plan
- Attachment C - Notice of Determination
- Attachment D - Project Map
- Attachment E - Summary of Outreach

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Los Angeles County
Metropolitan Transportation Authority

Division 20 Portal Widening and Turnback Facility Project

FINDINGS OF FACT AND STATEMENT
OF OVERRIDING CONSIDERATIONS

State Clearinghouse No. 2017101034
September 2018



Metro®

**Findings of Fact and
Statement of Overriding Considerations**

**Pursuant to CEQA Guidelines Section 15091 and
Public Resources Code Section 21081**

**Division 20 Portal Widening/
Turnback Facility Project**

October 2018



In Association with:

**Terry A. Hayes Associates Inc.
ICF
ATS Consulting**

**GlobalASR
Paleo Solutions, Inc.
Arellano Associates**

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ABBREVIATIONS/ACRONYMS

AQMP	Air Quality Management Plan
CEQA	California Environmental Quality Act
CRHR	.....	California Register of Historical Resources
CRMMP	.....	Cultural Resources Monitoring and Mitigation Plan
DTSC	.....	Department of Toxic Substances Control
EIR	.....	Environmental Impact Report
ESA	.....	Environmentally Sensitive Area
GHG	.....	Greenhouse Gases
Metro	.....	Los Angeles County Metropolitan Transportation Authority
MLD	.....	Most Likely Descendent
MMRP	.....	Mitigation Monitoring and Reporting Program
NAHC	.....	Native American Heritage Commission
OSF	.....	One Santa Fe
PRC	.....	Public Resources Code
PMMP	.....	Paleontological Monitoring and Mitigation Plan
RTP/SCS	.....	Regional Transportation Plan/Sustainable Communities Strategy
SCI-Arc	.....	Southern California Institute of Architecture
SCAQMD	.....	South Coast Air Quality Management District
SOI	.....	Secretary of the Interior
SWPPP	.....	Stormwater Pollution Prevention Plan

1. INTRODUCTION

The Los Angeles County Metropolitan Transportation Authority (Metro) followed a prescribed process, in accordance with California Environmental Quality Act (CEQA) regulations, to identify the issues to be analyzed, including the solicitation of input from the public, stakeholders, elected officials, and other affected parties. Implementation of the Division 20 Portal Widening/Turnback Facility Project (Proposed Project) would result in significant unavoidable impacts related to cultural resources and temporary construction noise and vibration, even with the incorporation of certain mitigation measures as part of the Proposed Project's approval. In accordance with CEQA, Metro, in adopting these Findings of Fact, also adopts a Mitigation Monitoring and Reporting Program (MMRP). Metro finds that the MMRP, which is included in Chapter 4 of the Final EIR and is provided as a part of these findings as Attachment B to the October Metro Board Report, meets the requirements of Public Resources Code (PRC) Section 21081.6 by providing for the implementation and monitoring of measures to mitigate potentially significant effects of the Proposed Project.

In accordance with the CEQA Guidelines, Metro adopts these findings as part of the approval of the Proposed Project. Pursuant to PRC Section 21082.1(c)(3) and CEQA Guidelines Section 15090, Metro certifies that the Final Environmental Impact Report (EIR):

1. Has been completed in compliance with the CEQA;
2. The FEIR was presented to the Board of Directors and that the Board reviewed and considered the information contained in the Final EIR prior to approving the Proposed Project; and
3. The Final EIR reflects Metro's independent judgment and analysis.

2. ORGANIZATION

The Findings of Fact and Statement of Overriding Considerations is comprised of the following sections:

Section 3. A brief description of the Proposed Project and its objectives;

Section 4. Statutory requirements of the findings and a record of proceedings;

Section 5. Significant impacts of the Proposed Project that cannot be mitigated to a less-than-significant level even with the identification and incorporation of all feasible mitigation measures;

Section 6. Potentially significant impacts of the Proposed Project that can be mitigated to a less-than-significant level;

Section 7. Potentially significant impacts of the Proposed Project that are not significant with implementation of regulatory compliance measures;

Section 8. Environmental impacts that are less than significant;

Section 9. Environmental resources to which the Proposed Project would have no impact;

Section 10. Potential cumulative impacts;

Section 11. Alternatives analyzed in the evaluation of the Proposed Project and findings on mitigation measures; and

Section 12. Statement of Overriding Considerations.

3. PROJECT DESCRIPTION AND OBJECTIVES

Metro is proposing a widening of the existing portal for the Metro Red and Purple Lines Maintenance Yard (Division 20 Rail Yard), development of a high-capacity turnback facility, an increase of train storage capacity, and a reconfiguration of existing internal tracks and access roads.

The improvements to the Division 20 Rail Yard will provide core capacity improvements to accommodate increased service levels previously approved for the Metro Red and Purple Lines and allow trains to provide faster service times at Union Station. Collectively, the Metro Red and Purple Lines carry over 140,000 passengers daily, with ridership expected to increase by 49,000 following the extension of the Metro Purple Line to the Veterans Affairs West Los Angeles Medical Center. To effectively serve the additional patronage during weekday peak hours, Metro plans to operate trains every four minutes on each line – which is every two minutes in the trunk portion of the system – and expand the fleet. Currently, eastbound trains in the trunk portion of the system use special trackwork at Union Station to reverse directions (i.e., ‘turnback’). However, the capability of turning back trains is capped at 7.5 minutes on each line, or 3.75 minutes combined due to the original design of Union Station. The Proposed Project aims to address the service and capacity limitations with three core improvements, which include:

- Widening the heavy rail tunnel portal south of the U.S. Highway 101 (US-101) freeway to accommodate additional special trackwork and high-speed train movements;
- Developing a new, surface-level turnback facility in the existing Division 20 Rail Yard; and
- Reconfiguring and expanding the surface-level rail storage tracks.

The Proposed Project is more fully described in the Draft EIR, pages 2-6 to 2-12 and the Final EIR, page 2-4. Given the ongoing Metro Purple Line Extension Project, storage constraints that inhibit fleet expansion, and the absence of a turnback facility, the goal of the Proposed Project is to accommodate the expansion and associated increased ridership of the Metro Red and Purple Lines. The two objectives of the Proposed Project are:

Objective #1: Provide core capacity improvements needed to accommodate increased service levels on Metro Red and Purple Lines.

Objective #2: Provide new tracks and turnouts that will allow trains to provide faster service times at Union Station.

4. STATUTORY REQUIREMENTS

CEQA (PRC Section 21081), and particularly the CEQA Guidelines (Title 14 California Code Regulations Section 15091) require that:

- (a) No public agency shall approve or carry out a project for which a certified EIR identifies one or more significant environmental effects of the Proposed Project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 1. Changes or alterations have been required in, or incorporated into, the Proposed Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR. (**CEQA Finding 1**)
 2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency. (**CEQA Finding 2**)
 3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR. (**CEQA Finding 3**)
- (b) The findings required by subdivision (a) shall be supported by substantial evidence in the record.
- (c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subdivision (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.

- (d) When making the findings required in subdivision (a) (1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.
- (e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.
- (f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to avoid or mitigate significant environmental impacts that would otherwise occur with implementation of the Proposed Project. However, mitigation or alternatives are not required if they are infeasible or if the responsibility for modifying the Proposed Project lies with another agency.¹

For those significant impacts that cannot be mitigated to less-than-significant levels, the lead agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the Proposed Project outweigh the significant impacts on the environment.² CEQA Guidelines Section 15093 (a) states that, "If the specific economic, legal, social, technological, or other benefits of a Proposed Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'" If the adverse environmental effects are considered acceptable, as is the case with the Proposed Project, the lead agency is required to prepare a Statement of Overriding Considerations.

4.1 RECORD OF PROCEEDINGS

For purposes of CEQA and the findings set forth herein, the record of proceedings for Metro's decision on the Proposed Project consists of: (a) matters of common knowledge to Metro, including, but not limited to, federal, State, and local laws and regulations; and (b) the following documents which are in the custody of Metro, One Gateway Plaza, Records Management, MS 99-PL-5, Los Angeles, CA 90012:

- Preparation (NOP) and other public notices issued by Metro in conjunction with the Proposed Project;

¹ CEQA Guidelines Section 15091 (a) and (b).

² Public Resources Code Section 21081 (b).

- The Draft EIR dated March 2018, including all associated appendices and documents that were incorporated by reference;
- All testimony, documentary evidence, and all correspondence submitted in response to the Proposed Project during the scoping meeting or by agencies or members of the public during the public comment period on the Draft EIR, and responses to those comments (Chapter 3 Response to Comments of the Final EIR);
- The Final EIR dated September 2018, including all associated appendices and documents that were incorporated by reference;
- The MMRP (Chapter 4 Mitigation Monitoring and Reporting Program of the Final EIR);
- All findings and resolutions adopted by Metro in connection with the Proposed Project, and all documents cited or referred to therein;
- All final technical reports and addenda, studies, memoranda, maps, correspondence, and all planning documents prepared by Metro or the consultants relating to the Proposed Project;
- All documents submitted to Metro by agencies or members of the public in connection with development of the Proposed Project;
- All actions of Metro with respect to the Proposed Project; and
- Any other materials required by PRC Section 21167.6(e) to be in the record of proceedings.

5. ENVIRONMENTAL IMPACTS FOUND TO BE SIGNIFICANT WITH MITIGATION

Metro finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the Proposed Project would be significant or have the potential to be significant despite the implementation of all feasible mitigation measures.

5.1 CULTURAL RESOURCES

The Proposed Project would create a significant impact related to cultural resources if it were to:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

The Proposed Project would cause a substantial adverse change in the significance of three historical resources. The Proposed Project would remove two of the 1st Street Bridge's bents and widen two bents and one pylon. The removal of these character-defining features is not consistent with the Secretary of the Interior's Standards (SOI) for the Treatment of Historic Properties. The Proposed Project would also demolish the eastern portion of the remnants of the Citizens Warehouse/Lysle Storage Company building (in the location of the former Pickle Works building listed on the California Register of Historical Resources [CRHR]). Lastly, the Proposed Project would demolish the National Cold Storage facility, which is listed as historically significant on SurveyLA, the City of Los Angeles' official historic resources survey.

Reference. Section 3.3 Cultural Resources of the Draft EIR, pages 3.3-17 through 3.3-28, and pages 2-7 through 2-10 of the Final EIR.

Mitigation Measures

- CR-1** Design measures shall be developed by the Project Architect and Engineer and implemented by the Project Contractor to minimize harm due to alterations to the 1st Street Bridge. Design measures shall include surface treatment of new concrete to reflect but be distinguishable from the original board-form appearance, retention of the decorative brackets, and an infill treatment of the incising arches in a manner similar to the treatment used when the Bridge was first widened to accommodate the Eastside Light-Rail Extension of the Metro Gold Line Project.
- CR-2** Metro shall conduct further historical research and analysis to document, in an exhibit, report, or website, the historic association and significance of the Citizens Warehouse/Lysle Storage Company building. The documentation shall include a discussion of who lived and worked in the building and its role in the early settlement history of the Arts District. A description of the construction history of the complex from 1888 until the present time shall also be included in the documentation. Copies of the report or exhibit shall be provided to the City of Los Angeles Public Library for public education purposes. The documentation shall be completed prior to commencement of any Project construction activities that could adversely affect the Citizens Warehouse/Lysle Storage Company building.
- CR-3** Metro shall do the following to minimize impacts to the Citizens Warehouse/Lysle Storage Company building:
- A.** Metro shall retain and stabilize approximately 24,000 square feet of floor area of the extant portion of the Citizens Warehouse/Lysle Storage Company building along Center Street (8,000 square feet per story on the basement, the ground floor, and the second floor), including the former location of the Art Dock, for potential future reuse.
 - 1. Stabilization of the remaining portions of the building to remain shall be designed and conducted in a manner consistent with the applicable SOI's Standards. The stabilization design shall be prepared prior to commencement of any of the Proposed Project's construction activities that could adversely affect the Citizens Warehouse/Lysle Storage Company building.
 - 2. In order to preserve the maximum amount of historic materials comprising the floors and ceiling joists, Metro shall saw-cut through the first floor, second floor, and roof along the eastern side to be stabilized.
 - 3. Demolition of the eastern portion of the building may not occur until after the stabilization (item A.1) and saw-cut (item A.2) are complete.
 - 4. Brick exterior cladding material, windows, and other character-defining materials and features obtained from the demolition of the eastern wall of the Citizens Warehouse/Lysle Storage Company building shall be salvaged and

stored so that those original materials can be re-used to clad the southern façade of the existing building or to clad any proposed Pickle Works replication addition to the south.

- B.** Metro shall consult with the Arts District community to identify an appropriate future use for the Citizens Warehouse/Lysle Storage Company building. Renovations to accommodate the new use shall not preclude the building's eligibility to be considered as a City of Los Angeles Historic-Cultural Monument.
- C.** Upon identification of an appropriate future use for the Citizens Warehouse/Lysle Storage Company building, Metro shall develop an adaptive reuse plan in consultation with the Los Angeles Conservancy and the City of Los Angeles Office of Historic Resources. The adaptive reuse plan shall:
 - 1. Develop an adaptive reuse design for historic rehabilitation consistent with the SOI's Standards for Rehabilitation to a total of up to approximately 26,700 square feet of floor area.
 - a. The adaptive reuse design shall include replication of the original southern façade of the former Pickle Works building to the maximum extent possible.
 - b. The adaptive reuse plan shall be developed by Metro in consultation with the Los Angeles Conservancy and the City of Los Angeles Office of Historic Resources to ensure that adequate guidance is in place for historic rehabilitation principles to be incorporated into the needs of potential future reuse.
 - c. Metro shall obtain the services of a firm specializing in historic preservation rehabilitation projects to provide guidance for development of the plan.
- D.** Metro shall do the following to enable the Cultural Heritage Commission's consideration of the Citizens Warehouse/Lysle Storage Company as a City of Los Angeles Historic-Cultural Monument:
 - 1. Ensure the following character-defining features are preserved in the adaptive reuse design along the north and west elevations to convey the building's association with the Los Angeles Arts District during the 1970s and 1980s:
 - a. Common-bond brick work
 - b. Patterned but irregular spacing of fenestration and openings
 - c. Segmentally arched windows of variegated dimensions
 - d. Four-part corbelling at west and north elevation rooflines
 - e. Ceramic insulators affixed to west elevation
 - f. Sawtooth element at roof
 - g. Recessed wood-frame multi-light windows
 - h. Faux shutters and planters

- i. The Art Dock bay, located at 112 Center Street (west elevation, second dock from north)
 - j. Elevated single-bay loading docks
 - k. Basement windows
 - l. Stucco-capped stepped parapets at the roofline
2. Apply to the City of Los Angeles Office of Historic Resources and Cultural Heritage Commission for their consideration of the Citizens Warehouse/Lysle Storage Company to be designated as a City of Los Angeles Historic-Cultural Monument.
- a. The application shall base the statement of significance on the building's association with the Los Angeles Arts District during the 1970s and 1980s under Criterion 1: Is identified with important events of national, state, or local history, or exemplifies significant contributions to the broad cultural, economic or social history of the nation, state, city or community.
 - b. The nomination for Historic-Cultural Monument status would be prepared after the stabilization is complete.
- E.** Metro shall preserve the opportunity to expand the Citizens Warehouse/Lysle Storage Company building towards the 1st Street Bridge to provide up to approximately 2,700 square feet of floor area (900 square feet per story on the basement, the ground floor, and the second floor). The determination whether to expand the building towards the 1st Street Bridge shall be made by Metro in consultation with the Arts District community, the Los Angeles Conservancy, and the City of Los Angeles Office of Historic Resources.
1. Any expansion of the building towards the 1st Street Bridge area shall be conducive to replicating the appearance of the no-longer extant portion of the former Pickle Works building built in 1888, which was demolished by a different entity for a previous project – the widening of the 1st Street Bridge.
- F.** A certificate of occupancy shall be recorded on the property for the future reuse within five years of Metro's purchase of the property from the City.
- CR-4** Metro shall prepare a report that documents, in-depth, the history and context of ice making and cold storage facilities in Los Angeles and the role played by National Ice and Cold Storage during its most significant years. Copies of the report shall be provided to the City of Los Angeles Public Library for public education purposes. The report shall be prepared prior to any demolition activities that would affect the National Ice and Cold Storage facility.

Finding. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measures **CR-1** through **CR-4**, this impact to cultural resources would be significant.

Mitigation Measures **CR-1** through **CR-4** would reduce impacts to historic resources. However, physical constraints due to track geometry and location necessitate the demolition of historic resources. Adoption of the alternatives in the Draft EIR or otherwise changing the Proposed

Project to avoid impacts related to historic resources would not be feasible as it would not meet the underlying purpose of the Proposed Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measures **CR-1** through **CR-4**, these historic resources impacts would be significant. **Metro adopts CEQA Findings 1 and 3, as identified in Section 4 above and in Section 15091(a) of the CEQA Guidelines.**

5.2 NOISE AND VIBRATION

The Proposed Project would create a significant impact related to noise and vibration if it were to result in:

- 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;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; and/or
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

This section of the Findings of Fact focuses on construction noise and vibration. The Proposed Project would generate noise levels in excess of Federal Transit Administration (FTA) standards as well as substantial temporary increases in ambient noise levels compared to levels existing without the Proposed Project. During construction, daytime noise levels would exceed the 90 A-weighted decibel FTA criteria at the One Santa Fe (OSF) apartment complex during all analyzed phases of construction activity. Similarly, nighttime noise levels would exceed the limits at the OSF building. The FTA has identified a 100 A-weighted decibel threshold for commercial and industrial land uses. This noise level would be exceeded for land uses located within approximately 20 feet of heavy-duty equipment.

The Proposed Project would expose persons to excessive groundborne vibration. Construction activities occurring adjacent to the OSF building include the demolition of existing structures and facilities and the construction of storage tracks. These activities require the use of heavy-duty equipment that cannot be avoided based on applicable construction methods. The results predict that the vibration levels would exceed the FTA standards when equipment operates very close to the receiver, as is the case near the OSF during the building and concrete demolition operations.

Reference. Section 3.7 Noise and Vibration of the Draft EIR, pages 3.7-13 through 3.7-23, and page 2-10 of the Final EIR.

Mitigation Measures

NV-1 The Contractor shall submit a Noise Control and Monitoring Plan to Metro that is prepared, stamped, and administered by the Contractor's Acoustical Engineer. This plan shall state that:

- Equipment shall include enclosed engines, acoustically attenuating shields, and/or high-performance mufflers;

- Equipment and staging areas shall be located away from noise-sensitive receivers;
- Idling of construction equipment shall be restricted to a maximum of five minutes in accordance with Title 13, Section 2485 of the California Code of Regulations, except as provided in the exceptions to the applicable California Air Resources Board regulations regarding idling;
- Temporary noise barriers and/or noise control curtains shall be installed;
- Construction-related truck traffic shall be routed away from local residential streets and/or sensitive receivers;
- Impact pile driving shall be prohibited.
- The use of impact devices such as jackhammers and hoe rams shall be minimized, using concrete crushers and pavement saws instead;
- The Noise Control and Monitoring Plan shall include a site drawing, an inventory of equipment, calculations of the one-hour L_{eq} noise levels at sensitive receptors (i.e., OSF), and compliance with FTA noise criteria. An updated Noise Control and Monitoring Plan shall be completed and submitted within ten days of the start of each quarterly period, or whenever there is a major change in work schedule, construction methods, or equipment operations.

NV-2 Metro shall install low-impact frogs at locations with special trackwork. This applies to the OSF-adjacent storage yard and yard tracks within a 200-foot radius of the northern portion of the northern OSF building. This also applies to existing yard tracks leading to the Maintenance Facility, as well as new yard tracks within a 200-foot radius of the northern portion of the southern OSF building.

NV-3 The Contractor shall submit a Vibration Monitoring Plan to Metro that is prepared, stamped, and administered by the Contractor's Acoustical Engineer. This plan shall include:

- A survey of OSF building foundations with photographs of existing conditions limited to buildings within 25 feet of high-vibration-generating construction activities. Another survey shall be completed at the end of construction activities to assess potential damage. Damaged structures shall be returned to the preconstruction state by the Contractor.
- A requirement to monitor vibration at any building where vibratory rollers or similar high-vibration-generating equipment would be operated within 25 feet of buildings and at any location where complaints about vibration are received from building occupants. Construction activities shall be stopped and alternative methods introduced if vibration levels exceed 0.2 inches per second at OSF. Examples of high-vibration construction activities include the use of vibratory compaction or hoe rams next to sensitive buildings. Alternative procedures include use of non-vibratory compaction in limited areas and a concrete saw in place of a hoe ram to break up pavement.

- Nighttime construction activities near OSF shall not include equipment operations within the minimum distances shown in Table 3.7.9 of the Draft EIR.

Finding. Mitigation Measures **NV-1** through **NV-3** would reduce construction noise and vibration levels at noise-sensitive receptors during construction activities. Construction activity would be short-term and temporary at each location; however, noise levels from various mechanized construction equipment would exceed the relevant standards. No additional mitigation measures were identified to reduce significant impacts related to construction noise and vibration. Adoption of the alternatives in the Draft EIR or otherwise changing the Proposed Project to avoid impacts related to construction noise and vibration would not be feasible as it would not meet the underlying purpose of the Proposed Project. For the reasons stated above, Metro finds that despite the implementation of Mitigation Measures **NV-1** through **NV-3**, these noise and vibration impacts would be significant. **Metro adopts CEQA Findings 1 and 3, as identified in Section 4 above and in Section 15091(a) of the CEQA Guidelines.**

6. ENVIRONMENTAL IMPACTS FOUND TO BE LESS THAN SIGNIFICANT WITH MITIGATION

Metro finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the Proposed Project are significant, but can be reduced to less-than-significant levels through the proposed mitigation measures listed below and in the MMRP. Therefore, as identified in the EIR, changes or alterations which avoid or substantially lessen the significant environmental effects have been required in, or incorporated into, the Proposed Project.

6.1 AESTHETICS

The Proposed Project would create a significant impact related to aesthetics if it were to:

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Impact. Construction activities would occur during daytime and nighttime hours, and construction-related illumination would be temporary and limited to safety and security purposes. Due to the reconfiguration of the yard, this would involve the removal of some existing Division 20 Rail Yard lighting fixtures. Temporary construction-related lighting poles and fixtures would be installed in their place to provide comparable illuminance levels. Notwithstanding this action, pursuant to Occupational Safety and Health Administration Standard 1926.56(a), all new construction-related lighting would be lit to an illuminance level of at least five foot-candles. This construction-related lighting would be in addition to existing Division 20 Rail Yard operations-related lighting, since Metro Red and Purple Lines operations would continue during construction of the Proposed Project. If not aimed at and positioned close to the area to be illuminated, the increased levels of ambient light due to construction-related lighting could potentially disturb residents at OSF.

During operation, the Proposed Project would be lit to provide adequate lighting for maintenance activities and ensure a safe environment. New light sources would include security lighting and point sources of lighting within the yard used for vehicle maintenance and cleaning. All new lighting fixtures to be installed in the areas closest to light-sensitive land uses on Santa Fe Avenue and Center Street (i.e., adjacent to OSF and in the location of the Citizens Warehouse/Lysle Storage Company building) would be mounted on 35-foot poles, which are shorter than the 40-foot poles used elsewhere in the yard. This would reduce the potential for spillover light. However, backlight and uplight from these new nearby lighting fixtures could potentially disturb residents at OSF and any other future light-sensitive uses that may occupy the Citizens Warehouse/Lysle Storage Company building.

Reference. Section 3.1 Aesthetics of the Draft EIR, pages 3.1-27 through 3.1-28.

Mitigation Measures

AES-1 Construction-related light fixtures shall be equipped with glare diffusers and feature directional shielding in order to avoid the spillover of light onto adjacent residences.

AES-2 Permanent operations-related light fixtures shall feature directional shielding in order to avoid the spillover of backlight and uplight onto adjacent residences.

Finding. Mitigation Measures **AES-1** and **AES-2** would ensure that Metro aim nighttime lighting away from adjacent residences during construction and operations and diffuse the glare associated with construction-related lighting. These mitigation measures would substantially reduce the amount of light from the Proposed Project that would spillover onto residences at OSF. For the reasons stated above and as set forth in the EIR, Metro finds that, through implementation Mitigation Measures **AES-1** and **AES-2**, this impact related to aesthetics would be reduced to a less-than-significant. **Metro adopts CEQA Finding 1, as identified in Section 4 above and in Section 15091(a) of the CEQA Guidelines.**

6.2 CULTURAL RESOURCES

As stated at the beginning of Section 6, the following significant impacts to cultural resources are differentiated from those listed in Section 5.1 by their ability to be reduced to less-than-significant levels with the incorporation of mitigation measures.

The Proposed Project would create a significant impact related to cultural resources if it were to:

- Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- Disturb human remains, including those interred outside of formal cemeteries.

Impact. The Project Site lies on two sites that were previously recorded as containing archaeological resources. The first of these sites is the historic-era alignment of railroad

tracks. A 2017 archaeological survey confirmed that this portion of the railroad no longer contains sufficient historical integrity to reflect its original historical association.

The second site that was previously recorded as containing archaeological resources was a subsurface refuse deposit identified in 1997. This subsurface refuse deposit contained historic-age refuse such as glass and stoneware bottles, cans, ceramics, smoking pipe fragments, railroad spikes, bricks, metal fragments, horseshoes, butchered bone, shells, and some Chinese artifacts. However, a 2017 archaeological survey found that this area has been developed and paved with a modern building situated on top of it, and that the soils in the area contain large amounts of imported fill material that diminish the integrity of the site. Therefore, neither of the two sites qualify as historical resources under the CEQA Guidelines.

In addition to these two sites, eight historic-age sites were identified within a quarter-mile of the Project Site, where archaeological deposits may be buried. In this area, Native American burials and prehistoric materials may exist below existing buildings, tracks and pavement, with a higher likelihood to be under the Citizens Warehouse/Lysle Storage Company building, the National Cold Storage facility, and the fill material south of Commercial Street where grading will be required.

There are no documented paleontological localities on the surface of the Project Site. However, geotechnical logs indicate that paleontologically sensitive Older Surficial Sediments will be present at least 20 feet below the ground surface, and possibly at shallower depths within the Project Site. There is potential to penetrate older Pleistocene alluvium below the surface as the excavation activities would generally extend approximately 25 feet below the ground surface for most of the Project Site, and 80 to 100 feet below the ground surface near the portal.

Native American burials have been recorded within a quarter-mile of the Project Site. Consultation with Native American tribes has indicated that the Project Site is likely to contain human remains. Since planned excavations for the Proposed Project extend approximately 25 feet below the ground surface, construction activities have the potential to encounter human remains.

Reference. Section 3.3 Cultural Resources of the Draft EIR, pages 3.3-28 through 3.3-33 and Section 3.8 Tribal Cultural Resources of the Draft EIR, page 3.8-5.

Mitigation Measures

CR-5 A qualified archaeologist who meets the standards of the Secretary of the Interior for Archaeology (Project Archaeologist) shall be retained to provide and supervise archaeological monitoring of all project-related, ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) that occur after existing pavement and buildings are removed. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be developed prior to the start of ground-disturbing activities outlining qualifications and roles of the Project Archaeologist and archaeological monitor, monitoring procedures, reporting requirements, and procedures to follow if cultural resources are encountered during construction. The Project Archaeologist

shall prepare monthly cultural resources monitoring progress reports to be filed with Metro. In the event that cultural resources are exposed during construction, the archaeological monitor shall temporarily halt construction within 50 feet (15 meters) of the discovery (if safe) while the potential resource is evaluated for significance (i.e., eligible for listing in the CRHR per PRC Section 5024.1(c), or in a local register of historical resources as defined in PRC Section 5020.1(k)). Construction activities could continue in other areas that are a distance of at least 50 feet from the discovered resource. If the discovery proves to be significant, representatives of Metro and the Project Archaeologist shall meet to determine the appropriate avoidance or minimization measures. In considering suggested mitigation, Metro shall determine whether avoidance and preservation in place is feasible in light of such factors as the nature of the find, the Proposed Project design, costs, and other considerations. Under CEQA Guidelines Section 15126.6(b)(3), preservation in place is the preferred method of mitigation and, if feasible, shall be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of the impacts. If avoidance and preservation in place is infeasible, other appropriate measures, such as data recovery excavation, shall be instituted. If data recovery is deemed appropriate, a Treatment or Data Recovery Plan (Plan) outlining the field and laboratory methods to be used shall be prepared by the Project Archaeologist in accordance with CEQA Guidelines Section 15064.5(f) and approved by Metro prior to initiation of data recovery work. The Plan shall specify the appropriate treatment and/or curation of collected materials.

- CR-6** A qualified paleontological monitor shall be retained to monitor project-related excavation activities on a full-time basis in previously undisturbed Pleistocene deposits, if encountered. Project-related excavation activities of less than ten feet in depth shall be monitored on a part-time basis to ensure that underlying paleontologically sensitive sediments are not being affected. In addition, the monitor shall ensure the proper differentiation between paleontological and archaeological resources.
- CR-7** A Paleontological Monitoring and Mitigation Plan (PMMP) shall be developed by a qualified professional paleontologist prior to the start of ground disturbing activities. A qualified professional paleontologist shall be retained to supervise the monitoring of construction. Paleontological resource monitoring shall include inspection of exposed geologic units during active excavations within sensitive geologic sediments, as defined by the PMMP and as needed. The monitor shall have authority to temporarily divert grading away from exposed fossils in order to efficiently recover the fossil specimens and collect associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with Metro. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Matrix sampling shall be conducted to test for the presence of microfossils.

- CR-8** Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility. The most likely repository would be the Natural History Museum of Los Angeles County.
- CR-9** In the event that human remains, as defined above, are encountered at the Project Site, procedures specified in the Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the CEQA Guidelines Section 15064.5(e) shall be followed. In this event, all work within 100 feet (30 meters) of the burial shall cease, and any necessary steps to ensure the integrity of the immediate area shall be taken. This shall include establishment of a temporary Environmentally Sensitive Area (ESA) marked with stakes and flagging tape around the find and 100-foot buffer. The Los Angeles County Coroner shall be immediately notified. The Coroner must then determine whether the remains are Native American. Work shall continue to be diverted while the Coroner determines whether the remains are Native American. Should the Coroner determine that the remains are Native American, the Coroner has 24 hours to notify the NAHC, who shall in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions shall be determined in consultation with the MLD. Upon being granted access to the site, the MLD has 48 hours to make recommendations regarding the treatment or disposition of the remains of the discovery. If requested by the MLD, measures shall be taken to the extent feasible to preserve and protect the remains in situ. If preservation in place is not feasible in light of such factors as the nature of the find, the Proposed Project design, costs, and other considerations, the appropriate treatment, reburial, or repatriation of the remains shall be determined in consultation with the MLD. If the MLD does not make recommendations within 48 hours of being granted access to the site, Metro shall, with appropriate dignity, re-inter the remains in an area of the property secure from further disturbance. Alternatively, if Metro does not accept the MLD's recommendations, Metro or the MLD may request mediation by the NAHC. The location of the remains shall be kept confidential and secured from disturbances and looting until the appropriate treatment has been identified and implemented. No information regarding the discovery of human remains shall be publicized.

Finding. Mitigation Measures **CR-5** through **CR-9** would mitigate inadvertent impacts to potential subsurface archaeological deposits, paleontological resources, and potential human remains. Metro finds that, through implementation of Mitigation Measures **CR-5** through **CR-9**, this impact related to cultural resources would be reduced to a less-than-significant level. **Metro adopts CEQA Finding 1, as identified in Section 4 above and in Section 15091(a) of the CEQA Guidelines.**

6.3 NOISE AND VIBRATION

As stated at the beginning of Section 6, the following significant noise impact is differentiated from those listed in Section 5.2 by its ability to be reduced to a less-than-significant level with the incorporation of mitigation measures.

This section of the Findings of Fact focuses on operational noise. The Proposed Project would create a significant impact related to noise if it were to result in:

- 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/or
- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Train movements on curved tracks and special trackwork of the Proposed Project would cause significant noise impacts on exterior portions of the OSF building during operations. Impacted areas include two sections of the north building and the north section of the south building.

Reference. Section 3.7 Noise and Vibration of the Draft EIR, page 3.7-16.

Mitigation Measures

NV-2 Metro shall install low-impact frogs at locations with special trackwork. This applies to the OSF-adjacent storage yard and yard tracks within a 200-foot radius of the northern portion of the northern OSF building. This also applies to existing yard tracks leading to the Maintenance Facility, as well as new yard tracks within a 200-foot radius of the northern portion of the southeastern OSF building.

Finding. Mitigation Measure **NV-2** would ensure that Metro install low-impact frogs at locations with special trackwork to reduce noise associated with train movements near sensitive receivers that would otherwise be significantly impacted. For the reasons stated above and as set forth in the EIR, Metro finds that, through implementation of Mitigation Measure **NV-2**, this impact related to operational noise would be reduced to a less-than-significant level. **Metro adopts CEQA Finding 1, as identified in Section 4 above and in Section 15091(a) of the CEQA Guidelines.**

6.4 TRIBAL CULTURAL RESOURCES

The Proposed Project would create a significant impact related to tribal cultural resources if it were to:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k); and/or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision(c) of PRC Section 5024.1?

A tribal cultural resource can be classified as a site, feature, place, cultural landscape, sacred place, or object per the CEQA Guidelines. The specific classification type would be determined based on the nature of the find and the significance of the find to the Native American tribe.

Impact. Metro consulted with Native American tribes pursuant to Assembly Bill 52. Although no resources eligible for listing in the CRHR or local register, or tribal cultural resources as defined in PRC Section 21074 have been identified on the Project Site, ground-disturbing activities have the potential to reveal, damage, and/or disturb additional, unidentified Native American burials and subsurface deposits of prehistoric and historic tribal cultural resources.

Reference. Section 3.8 Tribal Cultural Resources of the Draft EIR, pages 3.8-5 through 3.8-6.

Mitigation Measures

Mitigation Measures **CR-5** and **CR-9** would mitigate or reduce potential impacts to archaeological resources and human remains, respectively, to a level that is less than significant. Mitigation Measure **TCR-1**, provided below, addresses potential impacts to tribal cultural resources that do not include human remains.

TCR-1 Because of the potential for tribal cultural resources, a Native American monitor shall be retained to monitor all project-related, ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) that occur after existing pavement and buildings are removed. The appropriate Native American monitor shall be selected based on ongoing consultation under AB 52 and shall be identified in the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as described in Mitigation Measure CR-5. Monitoring procedures and the role and responsibilities of the Native American monitor shall be outlined in the project CRMMP. In the event the Native American monitor identifies cultural or archeological resources, the monitor shall be given the authority to temporarily halt construction (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the Project Archaeologist and Metro. The Native American monitor and consulting tribe(s) shall be provided an opportunity to participate in the documentation and evaluation of the find. If a Treatment Plan or Data Recovery Plan is prepared, the consulting tribe(s) shall be provided an opportunity to review and provide input on the Plan.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that, through implementation of Mitigation Measures **CR-5**, **CR-9**, and **TCR-1**, this impact related to tribal cultural resources would be reduced to a less-than-significant level. **Metro adopts CEQA Finding 1.**

7. ENVIRONMENTAL IMPACTS FOUND TO BE LESS THAN SIGNIFICANT WITH REGULATORY COMPLIANCE

The following impacts of the Proposed Project would be less than significant with the incorporation of applicable laws and regulations.

7.1 BIOLOGICAL RESOURCES

The Proposed Project would create a significant impact related to biological resources if it were to:

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Impact. The Proposed Project has the potential to interfere with native wildlife. Ten species that are native to the area have been identified within a one- to five-mile radius of the Project Site. Six species were identified as still inhabiting the area, one species was determined to have been eradicated or displaced from the area, and three species were identified as possibly having been eradicated or displaced from the area. However, no native species or migratory birds have been observed on the Project Site itself. Nonetheless, as standard Metro practice, a survey of potential bird nesting sites would be conducted if construction were to commence during the nesting season of March through August to determine if any nesting birds are present that could be adversely affected by construction activities. Any identified nests would be protected in place to ensure compliance with all applicable laws and regulations, including the Migratory Bird Treaty Act, Sections 3503 and 3503.5 of the California Fish and Wildlife Code, and Section 3513 of the Taking Migratory Bird Treaty Act.

Reference. Chapter 4 Other Environmental Considerations of the Draft EIR, page 4-4.

Mitigation Measures. This impact would be less than significant with the incorporation of applicable laws and regulations and does not require mitigation measures.

Finding. For the reasons stated above, Metro finds that this impact related to biological resources would be less than significant with regulatory compliance.

7.2 GEOLOGY AND SOILS

The Proposed Project would create a significant impact related to geology and soils if it were to:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - Strong seismic ground shaking; and/or

- Seismic-related ground failure, including liquefaction;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; and/or
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impact. The Project Site is not situated within an Alquist-Priolo Fault Zone and there is no substantial evidence of another fault that could create surface rupture hazards. However, the Project Site is approximately a mile away from its closest fault (Upper Elysian Park Fault). It also has the potential to be affected by seismic activities associated with the Hollywood, Raymond, Newport, Sierra Madre, San Andreas, Puente Hills, and Compton faults. Moreover, the northern portion of the Project Site is located within an earthquake-induced liquefaction zone, which may lose its ability to support some of the Proposed Project's features. To reduce the risk of exposure of people or structures to potential substantial adverse effects involving rupture of faults, seismic ground shaking, or seismic-related ground failure, Metro would comply with the California Department of Conservation, Division of Mines and Geology Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California; the International Building Code; the California Building Code; and the Los Angeles Building Code.

Construction of the Proposed Project would result in ground surface disturbance during site clearance, excavation, and grading, which could create opportunities for soil erosion. However, it is not expected that there is substantial topsoil present on the Project Site. Furthermore, construction activities would be performed in accordance with the Los Angeles Building Code and the Los Angeles Regional Water Quality Control Board through the City's Stormwater Management Division. Metro would implement Best Management Practices so as to reduce soil erosion due to grading and excavation activities. In addition, Metro would comply with the Clean Water Act and prepare a Stormwater Pollution Prevention Plan (SWPPP), which would include the implementation of an erosion control plan to reduce the potential for wind or waterborne erosion during construction activities.

The Project Site is on top of subsurface Hanford soil, which is considered a stable soil for industrial purposes. However, it is partially located on ground that could be subject to liquefaction. Metro would comply with Section 1613 of the California Building Code and assess the area's liquefaction potential. The recommendations (including structural and foundation design features) recommended as part of this assessment would be incorporated into grading and construction plans to address the risk of liquefaction.

The Hanford soil under the Project Site may be considered expansive due to their clay content, giving them the potential to shrink and swell with changes in moisture. However, the Proposed Project would comply with the International Building Code, the Los Angeles Building Code, and other applicable building codes to reduce impacts related to expansive soils.

Reference. Chapter 4 Other Environmental Considerations of the Draft EIR, pages 4-5 through 4-8.

Mitigation Measures. These impacts would be less than significant with the incorporation of applicable laws and regulations and do not require mitigation measures.

Finding. For the reasons stated above, Metro finds that impacts related to geology and soils would be less than significant with regulatory compliance.

7.3 HAZARDS AND HAZARDOUS MATERIALS

The Proposed Project would create a significant impact related to hazards and hazardous materials if it were to:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; and/or
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

Impact. The demolition, renovation, and excavation associated with the Proposed Project would require the transport and disposal of hazardous waste, which could create a significant hazard to the public or environment. Some of the higher-risk hazardous waste (e.g., asbestos-containing materials and lead-based paint) can pose a significant hazard to the public or environment. However, the use and transport of hazardous materials is strictly regulated by local, State, and federal agencies, including, but not limited to, the California Division of Occupational Safety and Health, the City of Los Angeles Fire Code, and the South Coast Air Quality Management District (SCAQMD). Metro would be required to comply with all their applicable rules and regulations, including the 1994 Federal Occupational Exposure to Asbestos Standards; SCAQMD Rules 1403 (Asbestos Emissions from Demolition/Renovation Activities), 1166 (Volatile Organic Compound Emissions from Decontamination of Soil), and 1466 (Control of Particulate Emissions from Soils with Toxic Air Contaminants); Title 22 of the California Code of Regulations Division 4.5 (Hazardous Waste); the U.S. Department of Housing and Urban Development Lead-Based Paint Guidelines; and Title 40 of the Code of Federal Regulations Part 761.

There are foreseeable upset and accident conditions associated with the Proposed Project that may involve the release of hazardous materials into the environment. The risks would primarily be related to the disturbance of subterranean utilities and the Project Site's situation within the City of Los Angeles' methane and methane buffer zones. However, prior to

construction, demolition, and excavation activities, Metro would conduct a utility conflict relocation study and comply with the City of Los Angeles Methane Code to avoid explosions.

The Project Site is located within a quarter-mile of the Felicitas & Gonzalo Mendez High School, Utah Street Elementary School, and SCI-Arc. Only SCI-Arc is along the haul route and near construction activities. Students and personnel at SCI-Arc could be exposed to hazardous construction materials. However, Metro would comply with all relevant rules and regulations, many of which are listed above, to reduce the exposure of SCI-Arc students and personnel to these hazardous materials.

The Project Site is also located on several sites identified by the Department of Toxic Substances Control (DTSC) as being contaminated. These include Blocks K, N, Q, and R of Sector C of the former Aliso Street Manufactured Gas Plant. The construction, demolition, and excavation activities on these DTSC sites would be conducted in conformance with all applicable local, State, and federal regulations, including those listed above.

Reference. Section 3.6 Hazards and Hazardous Materials of the Draft EIR, pages 3.6-8 through 3.6-13.

Mitigation Measures. These impacts would be less than significant with the incorporation of applicable laws and regulations and do not require mitigation measures.

Finding. For the reasons stated above, Metro finds that these impacts related to hazards and hazardous materials would be less than significant with regulatory compliance.

7.4 HYDROLOGY AND WATER QUALITY

The Proposed Project would create a significant impact related to hydrology and water quality if it were to:

- Violate any water quality standards of waste discharge requirements;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of a course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of a course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; and/or;
- Otherwise substantially degrade water quality.

Impact. Construction of the Proposed Project may contribute to pollution of stormwater runoff during earth moving, maintenance/operation of construction equipment, and the use, storage, and disposal of materials. However, it is Metro's standard practice to require contractors to control water runoff quality in accordance with the guidance of the California

Stormwater Quality Association's Industrial & Commercial and Construction Best Management Practice Handbooks. Moreover, Metro would comply with the Clean Water Act and other federal regulations (namely, Title 40 of the Code of Federal Regulations 123.25 and 111.26) which require nearly all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more land to obtain coverage under a National Pollutant Discharge Elimination System permit for their stormwater discharges. The Proposed Project's SWPPP would be consistent with the requirements of the National Pollutant Discharge Elimination System permit and would specify source and treatment control to prevent pollutants from entering stormwater discharges. Metro would also prepare a Standard Urban Stormwater Mitigation Plan in accordance with the requirements of the Los Angeles Regional Water Quality Control.

The introduction of the two proposed storage yards would slightly increase the permeable land surface area, and the Proposed Project would maintain the existing drainage patterns on the Project Site. These factors would allow the Proposed Project to be implemented without altering the course of the Los Angeles River, and allow urban runoff to be collected by the existing stormwater drainage system. The SWPPP mentioned above would control and minimize erosion and siltation.

During operations of the Proposed Project, stormwater and any irrigation runoff water would be directed into existing storm drains. The SWPPP would control and minimize the potential for flooding, and Metro would finalize a drainage plan that is consistent with the SWPPP.

As mentioned above, the SWPPP would ensure that surface runoff water would continue to flow to the City's storm drain system. However, the Proposed Project would neither create or contribute runoff water that would exacerbate any existing deficiencies in the storm drain system nor provide substantial additional sources of polluted runoff. Water applied during construction (e.g., for dust control) would be minimal and easily accommodated by the storm drain system. Water runoff after development would not exceed the capacity of the existing or planned drainage systems.

The source and treatment control required of the Proposed Project's SWPPP would minimize any pollutant discharges into storm drains, thus avoiding substantial degradations in water quality.

Reference. Chapter 4 Other Environmental Considerations of the Draft EIR, pages 4-4 to 4-11.

Mitigation Measures. This impact would be less than significant with the incorporation of applicable laws and regulations and does not require mitigation measures.

Finding. For the reasons stated above, Metro finds that these impacts related to hydrology and water quality would be less than significant with regulatory compliance.

8. ENVIRONMENTAL IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

Metro finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the Proposed Project are less than significant, and no mitigation is required.

8.1 AESTHETICS

The Proposed Project would create a significant impact related to aesthetics if it were to:

- Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact. The temporary materials staging, equipment use, and signage during construction of the Proposed Project would be consistent with the Project Site's surrounding industrial character. Also, the Proposed Project's physical perimeter along Center Street would be similar in character to other improvements to be provided by Metro for other projects along Center Street. Furthermore, modifications to the 1st Street Bridge and the Citizens Warehouse/Lysle Storage Company building would mainly be visible from moving trains for a short duration.

The proposed ventilation shaft building would be 42 feet long, 70 feet wide, and 32 feet tall, and be located on the southeastern end of Commercial Street. The minimum height required for exhaust is 32 feet. The ventilation shaft building would still be shorter than some of its surrounding buildings. Furthermore, its industrial character would be consistent its surroundings. Hence, even though it would be visible from the US-101 freeway, the ventilation shaft building would not degrade the quality of the Project Site and its surroundings.

The proposed high-speed rail column would extend approximately 15 to 17 feet above the bottom of the portal but only approximately five feet above the top of the portal wall. The column would be lower than the second floor of the future four-story ESOC building. Because it would be shorter than all surrounding buildings, the column would only be visible from Commercial Street and Center Street, where views are not currently sensitive. Thus, the introduction of the column would not substantially degrade the existing visual character or quality of the Project Site and its surroundings.

Reference. Section 3.1 Aesthetics of the Draft EIR, pages 3.1-22 through 3.1-27.

Mitigation Measures. This impact would be less than significant and does not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that this impact related to aesthetics would be less than significant.

8.2 AIR QUALITY

The Proposed Project would create a significant impact related to air quality if it were to:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

Impact. The Air Quality Management Plan (AQMP) is the applicable air quality plan, and the emissions forecasting is based on projected population and employment growth. The Proposed Project does not contain a residential component and would not introduce population growth to the region. Operation of the Proposed Project would result in an estimated increase in employment of 107 workers. The Proposed Project was included in the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and would be consistent with the assumptions upon which the AQMP was devised. The Proposed Project would facilitate the reduction of headways on the Metro Red and Purple Lines, which would increase their appeal as an alternative mode of transportation to automobiles. The potential conversion of automobile trips to transit trips would be consistent with regional and local emissions reduction goals. The Proposed Project would be required to comply with all applicable SCAQMD rules and regulations that are in effect at the time of development and would not conflict with or obstruct implementation of the AQMP.

Construction emissions would be generated by equipment, trucks, and worker vehicles. Emissions of air pollutants that would result from construction of the Proposed Project were quantified using the California Emission Estimator Model. The analysis showed that regional and localized construction emissions would not exceed the SCAQMD significance thresholds. In addition, Metro has a Green Construction Policy, which includes Tier 4 emission standards for off-road diesel-powered construction equipment greater than 50 horsepower and restricting idling to a maximum of five minutes. The project contractor would be required to comply with the Green Construction Policy.

Reference. Section 3.2 Air Quality of the Draft EIR, pages 3.2-19 through 3.2-28.

Mitigation Measures. These impacts would be less than significant and do not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that impacts related to air quality would be less than significant.

8.3 ENERGY

The Proposed Project would create a significant impact related to energy if it were to:

- Conflict with adopted energy conservation plans;
- Use non-renewable resources in a wasteful or inefficient manner; and/or
- Result in a need for energy supplies and distribution infrastructure or capacity enhancing alterations to existing power or natural gas facilities, the construction of which could cause significant environmental effects.

Impact. Construction of the Proposed Project would primarily use energy from petroleum-based fuels for vehicles and equipment), electricity for water conveyance, and any energy used in the production of construction materials.

The use of petroleum-based fuels would be temporary and cease upon the completion of construction. Moreover, the Proposed Project would adhere to Metro's Green Construction Policy and use less polluting construction equipment and vehicles, which would translate to greater fuel efficiency and lower energy consumption. The Proposed Project would also comply with the California Air Resources Board's limitation of the idling of diesel-powered commercial vehicles weighing over 10,000 pounds to five minutes at any location during construction.

Electricity for water conveyance would only be used for fugitive dust control during site preparation, excavation, and grading. It is estimated that this would amount to 24,969 kilowatt-hours of electricity. Additional electricity would be used for lighting as well as appliances and equipment associated with temporary construction trailers. Some of this temporary electricity use would be offset by the temporary discontinuation of certain on-site operations (e.g., those occurring at the Maintenance of Way building to be demolished).

Although it is difficult to measure the energy used in the production of construction materials, it is assumed that the production of construction materials would employ all reasonable energy conservation practices in the interest of minimizing costs.

Most operational energy would be associated with illumination on the Project Site and the powering of rail cars. The Proposed Project would use approximately 107 megawatt-hours per day of electricity, which is less than 0.2 percent of the Los Angeles Department of Water and Power total daily electricity consumption. Operational activities would also use approximately 26,519 British thermal units of natural gas (including the negligible commute-related vehicle fuel for the 107 employees), which would account for 0.2 percent or less of available natural gas based on estimates by the Southern California Gas Company for the year 2024.

The Proposed Project would be designed and constructed in accordance with State and local green building standards and design criteria that would reduce its energy demand. These would include, among others, Metro Rail Design Criteria and California Code of Regulations Title 24.

The Proposed Project would not result in the wasteful, inefficient, or unnecessary use of energy resources, create energy utility system capacity problems, create problems with the provision of energy services, or result in a significant impact associated with the construction of new or expanded energy facilities.

On a final note, the Proposed Project is a necessary precursor for the full implementation of the Metro Purple Line Extension Project, which would encourage public transit as a viable alternative to driving. Hence, the Proposed Project would assist in reductions of regional vehicle miles traveled and their associated energy consumption in the long run.

Reference. Section 3.4 Energy Resources of the Draft EIR, pages 3.4-9 through 3.4-13.

Mitigation Measures. These impacts would be less than significant and do not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that impacts related to energy would be less than significant.

8.4 GREENHOUSE GAS EMISSIONS

The Proposed Project would create a significant impact related to greenhouse gas (GHG) emissions if it were to:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact. Sources of temporary GHG emissions associated with construction include off-road heavy-duty equipment and on-road motor vehicle travel to and from the Project Site. Operational GHG emissions associated with the Proposed Project would be generated through electricity demand and utilities of the new facilities, as well as additional vehicle miles traveled resulting from the addition 107 employees. The analysis showed that the Proposed Project would not significantly increase GHG emissions when compared to the CEQA baseline condition.

Reference. Section 3.5 Greenhouse Gas Emissions of the Draft EIR, pages 3.5-14 through 3.5-19.

Mitigation Measures. These impacts would be less than significant and do not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that impacts related to GHG emissions would be less than significant.

8.5 HAZARDS AND HAZARDOUS MATERIALS

The Proposed Project would create a significant impact related to hazards and hazardous materials if it were to:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment; and/or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact. Operation of the Proposed Project would involve the occasional use, storage, and disposal of limited quantities of hazardous materials such as vehicle fuels, oils, transmission fluids, paints, solvents, cleaners, and pesticides. The Proposed Project would not generate significant amounts of hazardous materials that would require routine transport, use, or disposal. Hence, there would be a limited extent of exposure to the public and environment. Metro staff is available 24 hours a day through the Quality Assurance Department to respond to hazardous materials releases, and Metro sites frequently undergo emergency response drills. Moreover, since operations would occur on the Division 20 Rail Yard itself, exposure to and contamination from hazardous materials associated with the Proposed Project would be minimal at existing or proposed schools nearby. The Proposed Project would not include the use or storage of chemicals that have the potential to result in off-site upset or accident conditions.

The hazardous site conditions for the Proposed Project related to Government Code Section 65962.5 are associated with contaminated soils and demolition debris, which would cease after construction activities.

The Proposed Project would not require the permanent closure of any of the County's designated emergency/disaster routes near the Project Site (i.e., 4th Street, Alameda Street, Soto Street, Cesar Chavez, and the US-101 freeway) and would not impede emergency vehicle access to the Project Site or its surrounding area. The Proposed Project would comply with State and local regulations and maintain emergency vehicle access. Furthermore, the Proposed Project would provide an additional emergency access road along the western border of the Project Site.

Reference. Section 3.6 Hazards and Hazardous Materials of the Draft EIR, pages 3.6-8 through 3.6-14.

Mitigation Measures. These impacts would be less than significant and do not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that impacts related to hazards and hazardous materials would be less than significant.

8.6 NOISE

This section of the Findings of Fact focuses on operational vibration. The Proposed Project would create a significant impact related to vibration if it were to:

- Expose persons to or generation of excessive groundborne vibration or groundborne noise levels

Impact. Vibration levels associated with operational activities were estimated using FTA guidance. Vibration-sensitive land uses along the corridor were identified using the same procedure as that which was used in the noise analysis. The vibration levels at specific buildings were estimated by reading values from an FTA reference curve and applying adjustments to account for factors such as track support system, vehicle speed, type of building, and track and wheel condition. Prediction models were used to predict vibration levels from train operations at all sensitive receivers in the vicinity of the Project Site. The predictions were compared to the applicable FTA impact thresholds to identify potential vibration impacts. As shown in the EIR, using FTA methods and limits, no groundborne vibration or noise impacts are predicted to occur at any sensitive receivers. Therefore, the Proposed Project would result in a less-than-significant impact related to operational groundborne vibration or noise.

Reference. Section 3.7 Noise and Vibration of the Draft EIR, page 3.7-20.

Mitigation Measures. These impacts would be less than significant and do not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that impacts related to operational groundborne vibration or noise would be less than significant.

8.7 TRANSPORTATION AND TRAFFIC

The Proposed Project would create a significant impact related to transportation and traffic if it were to:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections); and/or
- Result in inadequate emergency access.

Impact. Construction activities would temporarily add trucks and worker vehicles to the roadway network. Trucks would likely travel between the US-101 freeway and the Project Site via Commercial and Center Streets. It is anticipated that there would be a maximum of 50 truck trips per day (i.e., 50 inbound and 50 outbound) during portal widening activities and an average of three truck trips per day throughout the first year of construction, followed by a gradual reduction to 25 to 30 truck trips per day. This truck volume spread throughout the day is not expected to significantly affect operating conditions along Commercial and Center Streets. Regarding workers, the actual peak-hour trip generation would vary depending on work hours, but typical construction worker shifts start and end before the AM and PM peak hours. Assuming 60 percent of construction worker trips occur outside of the peak hours, there would be approximately 16 peak-hour worker trips. The peak-hour trips would be spread throughout the hour resulting in an average of approximately one trip every four minutes, or less than one trip per light cycle. This level of trip activity is not expected to significantly affect the operating conditions along local roadways.

Construction laydown and staging areas would be located on the Project Site or the existing soils remediation site adjacent to the LAPD Viertel's Central Division Police Garage, which would eliminate on-street queuing that could interfere with existing businesses and associated traffic along Commercial Street north of the Project Site, Center Street, and local streets west of Center Street. Construction trucks would access the Project Site from Center Street and not from Commercial Street. Furthermore, street closures are not anticipated on Center Street and commercial access to existing businesses, east and west of Center Street, would not be impacted by truck activities. The Project Site and existing Division 20 Rail Yard have ample room for construction parking and standard Metro practices prohibit construction workers from parking on public streets when space is available. It is standard Metro practice to coordinate oversized transport vehicles, if necessary, with the California Department of Transportation. In addition, the Proposed Project would not adversely affect US-101 ramp queues based on the 16 peak-hour worker trips discussed above and the standard Metro practice to prohibit hauling during peak hours when roadways are most congested.

Impacts on the roadway system due to construction activities would be less than significant based on the above analysis.

Construction activities have the potential to affect emergency access by adding construction traffic to the street network. Some temporary and minor impacts due to encroachment may occur on Center and Commercial Streets, although full lane closures are not anticipated as part of the Proposed Project. Emergency access to the Project Site would be maintained during construction, these impacts would be negligible and temporary, and the Proposed Project would be required to prepare a Construction Staging and Traffic Management Plan that would address traffic and access control during construction. Regarding operations, the Proposed Project would comply with standard engineering practices and design standards and would not include design elements that would increase roadway hazards or impede emergency access. In addition, the Proposed Project would not create a substantial increase in demand for emergency services. Therefore, impacts would be less than significant.

Reference. Subsection 4.1.10 Transportation and Traffic of the Draft EIR, page 4-19.

Mitigation Measures. These impacts would be less than significant and do not require mitigation measures.

Finding. For the reasons stated above and as set forth in the EIR, Metro finds that impacts related to transportation and traffic would be less than significant.

9. ENVIRONMENTAL RESOURCES FOUND TO NOT BE IMPACTED

One or more aspects of the following environmental resources would not be impacted by the Proposed Project: Agriculture and Forestry Resources, Biological Resources, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation and Traffic, Utilities and Service Systems, and Growth-Inducing Impacts. The Draft EIR also explained that there would be no potential for certain impacts associated with Aesthetics (effects on scenic vistas and scenic resources within a State scenic highway), Hazards and Hazardous Materials (proximity to private airstrips, public-use airports, or wildlands), and Noise and Vibration (exposure of persons to noise from private airstrips or public-use airports).

Impact. No impacts would occur.

Reference. Section 3.1 Aesthetics, pages 3.1-21 through 3.1-22; Section 3.6 Hazards and Hazardous Materials, pages 3.6-13 through 3.6-14; Section 3.7 Noise and Vibration, pages 3.7-23 through 3.7-24; and Chapter 4 Other Environmental Considerations of the Draft EIR, pages 4-1 through 4-27.

Mitigation Measures. No impact would occur and mitigation measures are not required.

Findings. Metro finds that the Proposed Project would not result in impacts to:

- Agriculture and Forestry Resources
- Biological Resources
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services, Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Growth-Inducing Impacts

10. CUMULATIVE IMPACTS

The cumulative impact analysis in the Draft EIR considers the combined effect of the Proposed Project and “Related Projects” in the vicinity, including, but not limited to, Metro’s Emergency Security Operations Center (ESOC), Location 64 Maintenance of Way building, West Santa Ana Branch Transit Corridor, Link Union Station (Link US), and Eastside Access Improvements: 1st & Central projects. Refer to Chapter 5 Cumulative Impacts of the Draft EIR for a comprehensive list of projects considered in the cumulative analysis.

As stated in CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from a proposed project. Metro finds that for there is no potential for a cumulative impact related to Agricultural and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, or Utilities and Service Systems.

10.1 AESTHETICS

Scenic Vistas. The Project Site and its surroundings are not within a scenic vista. Views of these sites are limited to those from adjacent buildings, and the sites themselves do not offer panoramic views. For these reasons, Metro finds that there is no potential for the Proposed Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to scenic vistas.

Scenic Resources within State Scenic Highway Corridors. The Project Site and its surroundings are not within the viewshed of the closest scenic highway (State Route 110). For this reason, Metro finds that there is no potential for the Proposed Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to scenic resources within State scenic highway corridors.

Visual Character or Quality. The Proposed Project’s demolition of buildings along Center Street and introduction of streetscape improvements would alter the area’s appearance. Related Projects in the area, namely the ESOC Project, the Santa Fe – Alpine Spine Project, and the Link US Project, would also modify the appearance of the area. However, these modifications would be consistent with the industrial rail yard aesthetic. For this reason, Metro finds that the Proposed Project combined with other past, present, and reasonably foreseeable future projects would not create a significant cumulative impact related to visual character or quality.

Light and Glare. The Proposed Project would introduce street lighting along Center Street and additional rail yard lighting. However, there is already a moderate level of ambient nighttime light in these areas, and yard lighting would be directed away from the only light-sensitive use in the vicinity (OSF). For this reason, Metro finds that there is no potential for the Proposed Project to combine with past, present, and reasonably foreseeable future projects to create a cumulative impact related to light and glare.

10.2 AIR QUALITY

Consistency with Plans. SCAQMD's 2016 AQMP applies to projects, including the Proposed Project, within the South Coast Air Basin. Projects that are consistent with the AQMP would not interfere with the attainment of federal and State air quality standards because growth associated with these projects is considered in the Plan's formulation through the projects' inclusion in the 2016-2040 RTP/SCS. Since the Proposed Project is included in the 2016-2040 RTP/SCS as Project 1TL0703 and CEQA Guidelines Section 15130(d) states that no additional analysis is required for projects included in an approved regional plan that adequately addresses the affected resource area, Metro finds that the impact related to the Proposed Project's consistency with the AQMP would not be cumulatively considerable.

Air Quality Standards Violations, Exposure of Sensitive Receptors to Substantial Pollutant Concentrations, and Nonattainment Pollutant Emissions. The South Coast Air Basin is currently designated nonattainment for ozone and particulate matter. Emissions generated by the Proposed Project combined with past, present, and reasonably probable future projects could impede attainment efforts or result in locally significant pollutant concentrations. Therefore, the Proposed Project combined with past, present, and reasonably probable future projects could result in a cumulative impact. Project emissions would not exceed significance thresholds and, therefore, would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. For the reasons stated above, Metro finds that the Proposed Project's incremental contribution to the significant cumulative impact associated with violations of air quality standards and substantial pollutant concentrations is not cumulatively considerable.

Objectionable Odors. Neither the Project Site's vicinity nor the Proposed Project includes land uses identified by the SCAQMD as commonly associated with odor complaints. Metro is not aware of existing noxious odors and did not observe any during site visits. Hence, Metro finds that the Proposed Project combined with other past, present, and reasonably foreseeable future projects would not create a significant cumulative impact related to objectionable odors.

10.3 CULTURAL RESOURCES

Historical Resources. The Proposed Project would create significant impacts to the 1st Street Bridge, the National Cold Storage facility, and the Citizens Warehouse/Lysle Storage Company building. Metro finds that since these impacts are significant and unavoidable, that the Proposed Project would result in a cumulatively considerable significant impact to those individual historical resources. Furthermore, since the Proposed Project's impact on these three resources adds to the Related Projects' overall substantial alteration of the setting of the Arts District with respect to historical resources, Metro finds that the Proposed Project's contribution to the potentially significant cumulative impact to historical resources would be cumulatively considerable.

Archaeological Resources. A records search identified eight historic-age sites within a quarter-mile of the Project Site, many of which contained buried archaeological deposits. Native

American burials and subsurface prehistoric artifacts have also been recorded in this search distance. Therefore, it is possible that additional buried deposits exist beneath the surface of the Project Site. These unidentified buried deposits could be damaged by the Proposed Project's ground-disturbing activities such as grading and excavation. However, Mitigation Measures **CR-6** and **CR-9** would temporarily halt all nearby construction work upon the encounter of possible archaeological resources or human remains, including funerary objects, until a qualified expert verifies the find and determines the appropriate treatment. These would reduce impacts to less-than-significant levels. Hence, with mitigation incorporated into the Proposed Project, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to archaeological resources would not be cumulatively considerable.

Paleontological Resources. There are no documented paleontological localities within the boundaries of the Project Site. Furthermore, the Project Site is underlain with low-paleontological sensitivity surficial alluvium and previously disturbed sediments. However, the Proposed Project includes excavation to 25 feet below the ground surface, and 80 to 100 feet below the ground surface near the portal opening, where paleontological resources may be encountered. Implementation of Mitigation Measures **CR-6**, **CR-7**, and **CR-8** would avoid inadvertent impacts to such subsurface paleontological resources and reduce impacts to less-than-significant levels. Hence, with mitigation incorporated into the Proposed Project, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to paleontological resources would not be cumulatively considerable.

10.4 ENERGY RESOURCES

The Proposed Project would be designed and constructed in accordance with State, City, and Metro green building standards that would serve to reduce the Proposed Project's energy demand. The Proposed Project does not conflict with Metro design criteria or California Code of Regulations Title 24 (including Part 1 - California Building Standards Administrative Code, Part 2 - California Building Code, Part 6 - California Energy Code, Part 11 - California Green Building Standards Code (CAL Green Code), and Part 12 - California Reference Standards Code). In addition, energy demand would be within the existing and planned electricity and natural gas capacities. Therefore, the Proposed Project's incremental contribution to the potentially significant cumulative impact is not cumulatively considerable.

10.5 GREENHOUSE GAS EMISSIONS

Implementation of the Proposed Project and the Purple Line Extension would reduce regional GHG emissions by approximately 19,959.9 metric tons of emissions. The Proposed Project combined with Related Projects would improve Metro Red and Purple Lines service thereby promoting decreased vehicles miles traveled. There is no potential for the Proposed Project to interfere with State and regional GHG reduction targets. Therefore, the Proposed Project's incremental contribution to the potentially significant cumulative impact is not cumulatively considerable.

10.6 HAZARDS AND HAZARDOUS MATERIALS

Significant Hazard to the Public or Environment. The Project Site is known to contain contaminated soils and to encompass several sites that the DTSC has identified as being contaminated. However, through regulatory compliance, construction activities associated with the Proposed Project would include certain procedures that would reduce impacts to less-than-significant levels as well as minimize the Proposed Project's potential to contribute to the cumulative impact. For this reason, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to significant hazards to the public or environment during construction activities would not be cumulatively considerable.

Operations associated with the Proposed Project and the Related Projects within 500 feet of the Project Site would most likely involve the occasional use, storage, and disposal of hazardous materials such as vehicle fuels, oils, transmission fluids, paints, solvents, cleaners, and pesticides. Therefore, the Proposed Project combined with past, present, and reasonably foreseeable future projects could result in a potentially significant cumulative impact. However, all hazardous materials from the Proposed Project's operations would be contained, stored, and used in accordance with manufacturers' instructions and handled by staff members who have had safety training. It is thus not expected that the Proposed Project's operations would result in the release of hazardous materials that could combine with off-site operations. For this reason, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to significant hazards to the public or environment during operations would not be cumulatively considerable.

Release of Hazardous Materials from Upset or Accident Conditions. The potential for a cumulative impact would be limited to the combined effect of the Proposed Projects and Related Projects within 500 feet of the Project Site, as upset and accident conditions are site-specific effects. During construction, the Proposed Project would involve ground disturbance and utility relocation within designated methane and methane buffer zones, which may present risk of fire or explosion. Most modifications and relocations of utilities would occur prior to construction. Moreover, regulatory compliance would ensure that the Proposed Project would not create significant upset or accidental hazardous conditions during construction. For these reasons, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to the release of hazardous materials from upset or accident conditions during construction activities would not be cumulatively considerable.

Operations associated with the Proposed Project and the Related Projects within 500 feet of the Project Site would most likely involve the occasional use, storage, and disposal of hazardous materials such as vehicle fuels, oils, transmission fluids, paints, solvents, cleaners, and pesticides. These hazardous materials could be released during upset or accident conditions. However, all projects would be required to comply with all laws, rules and regulations that control hazardous materials and mitigate impacts to less-than-significant levels. For this reason, Metro finds that the Proposed Project's incremental contribution to

the potentially significant cumulative impact related to the release of hazardous materials from upset or accident conditions during operations would not be cumulatively considerable.

Hazardous Conditions at Schools. There are three schools located within a quarter-mile of the Project Site. However, the Proposed Project and Related Projects would comply with strict regulations administered by local, State, and federal agencies, ensuring that their impacts to schools would be less than significant. For this reason, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to hazardous materials at schools would not be cumulatively considerable.

Safety Hazard Near Public Airports or Private Airstrips. The Project Site and its surroundings are not located near public airports or private airstrips. For this reason, Metro finds that the Proposed Project combined with past, present, and reasonably probable future projects would have no impact related to safety hazards near public airports or private airstrips.

Exposure of People or Structures to Risk Involving Wildland Fires. Neither the Project Site nor its surroundings are susceptible to wildland fires. For this reason, Metro finds that the Proposed Project combined with past, present, and reasonably probable future projects would have no impact related to wildland fires.

Physical Interference of Emergency Plans and Emergency Evacuation Plans. The Proposed Project and the Related Projects would not require the permanent closure of emergency/disaster routes or impede emergency vehicle access to the Project Site and its surrounding area. Per state and local regulations, emergency vehicle access would be maintained at all times during construction and operation of the Proposed Project and Related Projects. For the reasons stated above, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to adopted emergency response plans or emergency evacuation plans would not be cumulatively considerable.

10.7 NOISE AND VIBRATION

Exposure to Excessive Noise Levels. The Proposed Project's construction activities would create a significant and unavoidable noise impact due to demolition and construction planned for areas adjacent to sensitive receptors at OSF. Therefore, Metro finds that the Proposed Project's contribution to the potentially significant cumulative construction noise impact would be cumulatively considerable.

Operational noise of the Proposed Project and Related Projects (namely, through-tracks associated with the Link US Project) are primarily related to slow-moving trains and their associated wheel squeal, horns, traction power substation, and maintenance. Because of the Metro Red and Purple Lines trains' low speeds within the Division 20 Rail Yard and their separation from OSF, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative operational noise impact would not be cumulatively considerable.

Exposure to Excessive Groundborne Vibration. The theoretical worst-case maximum vibration level for the purposes of determining potential construction vibration impacts is observed 75 feet away from construction equipment. Therefore, a cumulative groundborne vibration impact would result only if construction of the Proposed Project and Related Projects would occur simultaneously within 75 feet of the same sensitive receptors. It is not anticipated that this would be the case due to the locations and anticipated schedules of the Related Projects. For this reason, Metro finds that the Proposed Project combined with past, present, and reasonably probable future projects would not create a cumulative impact related to exposing sensitive receptors to excessive groundborne vibration.

Exposure to Excessive Noise Levels Associated with Public Airports. The Proposed Project and Related Projects are not within the proximity of a public airport. For this reason, Metro finds that the Proposed Project combined with past, present, and reasonably probable future projects would not create a cumulative impact related to excessive noise associated with public airports.

Exposure to Excessive Noise Levels Associated with Private Airstrips. The Proposed Project and Related Projects are not within the proximity of a private airstrip. For this reason, Metro finds that the Proposed Project combined with past, present, and reasonably probable future projects would not create a cumulative impact related to excessive noise associated with private airstrips.

10.8 TRIBAL CULTURAL RESOURCES

Archaeological Deposits and Tribal Cultural Resources. As stated in Section 10.3 of these Findings of Fact, cumulative growth and development in the Arts District and the rest of downtown Los Angeles could have impacts on significant archaeological resources. The Proposed Project combined with past, present, and reasonably probable future projects could contribute to a cumulative impact of this kind. However, in accordance with Assembly Bill 52, Metro consulted with Native American tribes affiliated with the Project Site's surrounding area to determine the appropriate mitigation measures, including tribal monitoring during construction activities and the appropriate disposition of any human remains encountered, that would reduce inadvertent impacts to potential subsurface archaeological deposits or tribal cultural resources to less-than-significant levels. All Related Projects would have to undergo the same process to comply with Assembly Bill 52. For this reason, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to tribal cultural resources is not cumulatively considerable.

10.9 TRAFFIC AND TRANSPORTATION

Traffic Congestion. During construction, the Proposed Project and Related Projects would add vehicle trips, primarily from haul trucks and worker vehicles, to the roadway network. Haul trucks would likely travel between the US-101 freeway and the areas prone to cumulative impact (generally within 500 feet of the Project Site) via Commercial and Center Streets. It is acknowledged that the Arts District has congested roadways, especially during peak traffic hours. The Related Projects, especially the Santa Fe – Alpine Spine Project, are likely to

necessitate road closures that have the potential for a cumulative traffic impact during construction. However, it is anticipated that the Proposed Project's construction-related trip generation would be minimal. It is unlikely that the Proposed Project would add more than 12 truck trips or 16 passenger vehicle trips to the roadway network. During peak hours, it should generate one trip every four minutes, or less than one trip per light cycle. For this reason, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to traffic congestion is not cumulatively considerable during construction.

During operations, the Proposed Project would add vehicle trips associated with its approximately 107 employees' commutes. These employees may arrive via single-occupancy vehicles, carpools, and public transit. Many of these employees operate trains during the day. Since peak road traffic hours coincide with peak train activities, it is not expected that the Proposed Project's operations-related workers would add to peak-period traffic. Additionally, the Proposed Project, in combination with Related Projects such as the Santa Fe – Alpine Spine Project, would promote active transportation such as walking and cycling that may offset some of the added vehicle trips. For this reason, Metro finds that the Proposed Project's incremental contribution to the potentially significant cumulative impact related to traffic congestion is not cumulatively considerable during operations.

11. ALTERNATIVES AND MITIGATION MEASURES

11.1 ALTERNATIVES

Pursuant to CEQA Guidelines Section 15126.6(a), the Draft EIR described and evaluated the relative merits of a range of reasonable alternatives to the Proposed Project that would avoid or create substantially lesser impacts than the significant impacts of the Proposed Project.

During the preparation of the Draft EIR, it was determined that, inclusive of the implementation of mitigation measures, the Proposed Project would have significant unavoidable impacts related to Cultural Resources and Noise and Vibration. As indicated in Section 5 Environmental Impacts Found to be Significant with Mitigation of these Findings of Fact, the Proposed Project's significant unavoidable impacts to cultural resources would be related to a substantial adverse change in the significance of these historical resources: (1) the 1st Street Bridge, (2) the Citizens Warehouse/Lysle Storage Company building, and (3) the National Cold Storage facility. Although these impacts would be reduced by Mitigation Measures **CR-1** through **CR-4** of the MMRP, they would remain significant. A total avoidance of these impacts would necessitate an alternative Project Site. However, due to the location of the existing tunnel portal and Division 20 Rail Yard facilities that the Proposed Project seeks to alter, there is no reasonable alternative Project Site.

Regarding alternatives to the Proposed Project that would create lesser impacts, two alternative track layouts (Alternative 2 and Alternative 3) that would create lesser impacts to cultural resources were analyzed in the Draft EIR. These two alternative track layouts have similar designs as one another and result in similar environmental effects. They would create lesser impacts to the 1st Street Bridge than the Proposed Project would because they would

necessitate fewer modifications to the bridge by allowing trains to travel under the bridge's existing arches. Alternative 2 would preserve all the 1st Street Bridge's existing bents, and Alternative 3 would modify two bents (two fewer than the Proposed Project would modify). There were no alternatives that would avoid or minimize impacts to the National Cold Storage facility or the Citizens Warehouse/Lysle Storage Company building. Therefore, both alternative track layouts would still create a significant impact to cultural resources. Although the alternative track layouts would result in lesser impacts to cultural resources, both alternatives have deficiencies that would result in Metro not achieving the Proposed Project objectives. Alternative 2 does not provide operational redundancy in its points of failure. Failures at the double slip switch to the storage yard access points would render the facility unusable until the issue is addressed. This deficiency would conflict with the Proposed Project Objective #2, which is to provide new tracks and switches that will allow trains to provide faster service times at Union Station. Alternative 3 does not provide for the six-car train lengths that would satisfy the capacity requirements of the Westside Purple Line Extension. This deficiency would conflict with the Proposed Project Objective #1, which is to provide core capacity improvements needed to accommodate increased service levels on Metro Red and Purple Lines. Therefore Alternatives 2 and 3 are infeasible.

11.2 NO PROJECT ALTERNATIVE

The No Project Alternative is required by Section 15126.6 of the CEQA Guidelines and would forgo development related to the Proposed Project. The Project Site would persist as the existing Division 20 Rail Yard and its MOW facility and trackwork, the LAPD Viertel's Central Division Police Garage, the vacant National Cold Storage facility, and the unoccupied Citizens Warehouse/Lysle Storage Company building. No existing structures would be altered or demolished. Metro would not purchase the Citizens Warehouse/Lysle Storage Company building or perform any of the preservation and potential reconstruction on the building associated with the Proposed Project's mitigation measures. Metro would not be able to operate the Westside Purple Line Extension at optimal headways or support a fleet consisting of only six-car trains. The No Project Alternative would also forgo streetscape improvements on Center Street that would otherwise add to community cohesion and create a more pedestrian and bike-friendly environment.

11.3 FINDINGS FOR THE NO PROJECT ALTERNATIVE

Although pursuing the No Project Alternative would avoid the Proposed Project's significant impacts, Metro finds that specific economic, legal, social, technological, and other considerations render the No Project Alternative identified in the Draft EIR infeasible (CEQA Guidelines Section 15091(a)(3)). By pursuing the No Project Alternative, Metro would forgo the removal of soil that could potentially be contaminated by hazardous materials. In pursuing the No Project Alternative, Metro would also forgo the benefits of operating the Westside Purple Line Extension at six-car lengths such as reductions in regional vehicle miles traveled and their associated energy use and air pollutant and greenhouse gas emissions. Most importantly, Metro would not be able to meet the Proposed Project's objectives of providing core capacity improvements to accommodate increased service levels on the Metro Red and Purple Lines and providing new tracks and turnouts to allow trains to provide faster

service times at Union Station. For these reasons, Metro finds that the No Project Alternative is not feasible.

11.4 FINDINGS FOR ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 requires that an “environmentally superior” alternative be selected among the alternatives that are evaluated in the EIR. As described in the Draft EIR, the No Project Alternative has been found to have the least amount of environmental impacts and is the environmentally superior alternative. If the No Project Alternative is identified as the environmentally superior alternative, the next-best environmentally superior alternative must be identified. In the case of the Proposed Project, Alternative 2 was identified in the Draft EIR as being the environmentally superior alternative because it would avoid the cultural resources impact to the 1st Street Bridge. Nevertheless, Alternative 2 would create significant unavoidable construction noise and vibration impacts comparable to those of the Proposed Project.

CEQA Guidelines requires alternatives to be analyzed with respect to their ability to satisfy the objectives of a proposed project. As referenced above, Alternative 2 does not provide operational redundancy in its points of failure. Failures at the double slip switch to the storage yard access points would render the facility unusable until the issue is addressed. This deficiency would conflict with the Proposed Project Objective #2, which is to provide new tracks and switches that will allow trains to provide faster service times at Union Station. For this reason, Metro finds that the environmentally superior alternative, Alternative 2, does not adequately satisfy the objectives of the Proposed Project and is therefore infeasible.

11.5 FINDINGS FOR MITIGATION MEASURES

Metro has considered every mitigation measure recommended in the EIR. To the extent that these Findings conclude that the mitigation measures outlined in the EIR are feasible and have not been modified, superseded or withdrawn, Metro hereby binds itself to implement or, as appropriate, require implementation of these measures. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when Metro adopts a resolution approving the Proposed Project. The mitigation measures are referenced in the MMRP adopted concurrently with these Findings and will be effectuated through the process of constructing and implementing the Proposed Project.

12. STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to CEQA Guidelines Section 15093, if a project’s EIR and administrative record substantiate that the project would result in significant and unavoidable impacts, then the lead agency is required to balance the project’s significant and unavoidable impacts against its economic, legal, social, technological, or other benefits. If these benefits outweigh the significant and unavoidable impacts, then the significant and unavoidable impacts may be deemed acceptable. In such a case, the lead agency must state, in writing, the specific reasons that support this conclusion. This section presents the Proposed Project potential significant

and unavoidable impacts followed by a demonstration of how they are outweighed by the Proposed Project's benefits.

12.1 SIGNIFICANT AND UNAVOIDABLE IMPACTS

The Proposed Project would result in the following localized significant and unavoidable impacts:

Adverse Change in the Significance of a Historical Resource. The Proposed Project would remove two of the 1st Street Bridge's bents and widen two bents and one pylon. The removal of these character-defining features is not consistent with the SOI Standards for the Treatment of Historic Properties. The Proposed Project would also demolish the eastern portion of the remnants of the Citizens Warehouse/Lysle Storage Company building (in the location of the former Pickle Works building listed on the CRHR). Lastly, the Proposed Project would demolish the National Cold Storage facility, which is listed as historically significant on SurveyLA, the City of Los Angeles' official historical resources survey. Mitigation measures have been added to the MMRP to reduce these impacts to the extent possible. However, these permanent alterations of "historical resources", as defined in Section 15064.5 of the CEQA Guidelines, would still constitute significant and unavoidable impacts.

Demolition and Construction Noise and Vibration. The Proposed Project would generate noise levels in excess of FTA standards during demolition and construction. This would adversely affect sensitive receptors at the OSF. Furthermore, all commercial and industrial uses within 20 feet of the Proposed Project's heavy-duty equipment would also be subject to adverse effects.

The Proposed Project would also expose persons to excessive groundborne vibration during demolition and excavation. These activities require the use of heavy-duty equipment that cannot be avoided based on applicable construction methods. Mitigation measures have been added to the MMRP to reduce these impacts to the extent possible. However, due to standard demolition and construction procedures and the proximity of sensitive receptors to the area of demolition and construction work, these adverse effects would constitute significant and unavoidable impacts.

12.2 DETERMINATION

Given the following reasons, Metro concludes that the overall benefits of the Proposed Project outweigh the significant and unavoidable impacts discussed in Section 1.1 Significant and Unavoidable Impacts, and that the significant and unavoidable impacts are thus considered acceptable.

Regional Transit Capacity. The Proposed Project will substantially improve capacity of the Metro Red and Purple Lines. In November 2016, over 70 percent of Los Angeles County's voters voted in support for Metro's Measure M ballot measure to raise sales taxes to pay for critical transportation improvements. The improvements to the Division 20 Rail Yard will provide core capacity improvements to accommodate increased service levels previously approved for the Metro Red and Purple Lines and allow trains to provide faster service times

at Union Station. Metro Red and Purple Lines ridership is expected to increase by approximately 49,000 following the Purple Line Extension to the U.S. Department of Veterans Affairs West Los Angeles Medical Center. In order to effectively serve the additional patronage during weekday peak hours, planned service improvements include operating trains every four minutes on each line – which is every two minutes in the trunk portion of the system – and expanding the fleet. Currently, eastbound trains in the trunk portion of the system use special trackwork at Union Station to reverse directions (i.e., ‘turnback’). However, the capability of turning back trains is capped at 7.5 minutes on each line, or 3.75 minutes combined due to the original design of Union Station. In addition to improving Metro Red Line service, the Proposed Project would provide quicker turnaround times and capacity for storing trains for the full build-out of the Purple Line Extension Transit Project.

Reduced Vehicle Miles Traveled (VMT) and Associated Emissions. The Proposed Project would allow for the increase in service and expansion of the geographical reach of the Metro Red and Purple Lines. This would increase the appeal and viability of heavy-rail transit as a mode of transportation in Los Angeles County. Such improvements to alternative modes of transportation would provide the opportunity for reductions in regional single-occupancy vehicle VMT and their associated air pollutant and greenhouse gas emissions. In combination with the Purple Line Extension, the Proposed Project would result in an annual net reduction of approximately 19,960 metric tons of carbon dioxide equivalent. The entirety of the Purple Line Extension was incorporated into the Southern California Association of Governments Regional Transportation Plan. Enhancing and expanding the public transit network is at the crux of reducing regional VMT and associated GHG emissions, which is the top priority of the regional and local transportation and sustainability plans, as well as the California Air Resources Board Scoping Plan. The Proposed Project would contribute to regional efforts to improve sustainability and reduce VMT.

Though the Proposed Project’s would result in potential significant and unavoidable impacts related to cultural resources and noise and vibration, the Proposed Project would create regional economic and social benefit of providing more frequent transit service as well as the overall environmental and social benefit of cleaner air and reduced greenhouse gases. Thus, although the Proposed Project has the potential to create significant and unavoidable impacts, these impacts would be greatly outweighed by the benefits that it would bring to the region.

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4. MITIGATION MONITORING AND REPORTING PROGRAM

4.1. INTRODUCTION

Section 21081.6 of the PRC requires a lead agency to adopt a “reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment” (Section 15097 of the CEQA Guidelines provides additional direction on mitigation monitoring or reporting). As lead agency for the Proposed Project, Metro is responsible for administering and implementing the MMRP. The decisionmakers must define specific monitoring requirements to be enforced during project implementation prior to final approval of the Proposed Project. The primary purpose of the MMRP is to ensure that the mitigation measures identified in the Draft and Final EIR are implemented, effectively minimizing the identified environmental effects.

4.2. PURPOSE

Table 4.1 has been prepared to ensure compliance with all mitigation measures identified in the Draft EIR and this Final EIR which would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the Proposed Project. Each mitigation measure is identified in Table 4.1 and is categorized by environmental topic and corresponding number, with identification of:

- Monitoring Action – The criteria that would determine when the measure has been accomplished and/or the monitoring actions to be undertaken to ensure the measure is implemented.
- Party Responsible for Implementing Mitigation – The entity accountable for the action.
- Enforcement Agency, Monitoring Agency, and Monitoring Phase – The agencies responsible for overseeing the implementation of mitigation and when the implementation is verified.

Table 4.1 Mitigation Monitoring and Reporting Program

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Aesthetics	Light and Glare	AES-1 Construction-related light fixtures shall be equipped with glare diffusers and feature directional shielding in order to avoid the spillover of light onto adjacent residences.	Equip construction lighting with glare diffusers and directional shielding	Metro/ Contractor	1. Metro 2. Metro 3. Construction
		AES-2 Permanent operations-related light fixtures shall feature directional shielding in order to avoid the spillover of backlight and uplight onto adjacent residences.	Equip permanent operations-related lighting with directional shielding	Metro/ Contractor	1. Metro 2. Metro 3. Operations
Cultural Resources	Significance of a Historical Resource	CR-1 Design measures shall be developed by the Project Architect and Engineer and implemented by the Project Contractor to minimize harm due to alterations to the 1 st Street Bridge. Design measures shall include surface treatment of new concrete to reflect but be distinguishable from the original board-form appearance, retention of the decorative brackets, and an infill treatment of the incising arches in a manner similar to the treatment used when the Bridge was first widened to accommodate the Eastside Light-Rail Extension of the Metro Gold Line Project.	Develop and implement design measures to minimize harm resulting from alterations to the 1 st Street Bridge.	Metro/ Contractor	1. Metro/City of Los Angeles Office of Historic Resources 2. Metro 3. Pre-construction
		CR-2 Metro shall conduct further historical research and analysis to document, in an exhibit, report, or website, the historic association and significance of the Citizens Warehouse/Lysle Storage Company building. The documentation shall include a discussion of who lived	Document the historic association and significance of the Citizens Warehouse/Lysle Storage Company building, including a	Metro/Cultural Resources Consultant	1. Metro/City of Los Angeles Office of Historic Resources 2. Metro 3. Prior to demolition of the Citizens Warehouse/Lysle

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		and worked in the building and its role in the early settlement history of the Arts District. A description of the construction history of the complex from 1888 until the present time shall also be included in the documentation. Copies of the report or exhibit shall be provided to the City of Los Angeles Public Library for public education purposes. The documentation shall be completed prior to commencement of any Project construction activities that could adversely affect the Citizens Warehouse/Lysle Storage Company building.	discussion of its role in the early settlement history of the Arts District and its former occupants. Provide this research and analysis to the City of Los Angeles Public Library.		Storage Company building
Cultural Resources	Significance of a Historical Resource	CR-3 Metro shall do the following to minimize impacts to the Citizens Warehouse/Lysle Storage Company building: A. Metro shall retain and stabilize approximately 24,000 square feet of floor area of the extant portion of the Citizens Warehouse/Lysle Storage Company building along Center Street (8,000 square feet per story on the basement, the ground floor, and the second floor), including the former location of the Art Dock, for potential future reuse. 1. Stabilization of the remaining portions of the building to remain shall be designed and conducted in a manner consistent with the applicable SOI's Standards. The	Prepare and implement a plan to retain, stabilize, and preserve the opportunity to expand the Citizens Warehouse/Lysle Storage Company building for potential reuse and retain eligibility for designation as a City of Los Angeles Historic-Cultural Monument..	Metro/ Contractor	1. Metro/City of Los Angeles Office of Historic Resources 2. Metro 3. Pre-construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>stabilization design shall be prepared prior to commencement of any of the Proposed Project's construction activities that could adversely affect the Citizens Warehouse/Lysle Storage Company building.</p> <ol style="list-style-type: none"> 2. In order to preserve the maximum amount of historic materials comprising the floors and ceiling joists, Metro shall saw-cut through the first floor, second floor, and roof along the eastern side to be stabilized. 3. Demolition of the eastern portion of the building may not occur until after the stabilization (item A.1) and saw-cut (item A.2) are complete. 4. Brick exterior cladding material, windows, and other character-defining materials and features obtained from the demolition of the eastern wall of the Citizens Warehouse/Lysle Storage Company building shall be salvaged and stored so that those original materials can be re-used to clad the southern façade of the existing building or to clad any proposed Pickle Works replication addition to the south. 			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>B. Metro shall consult with the Arts District community to identify an appropriate future use for the Citizens Warehouse/Lysle Storage Company building. Renovations to accommodate the new use shall not preclude the building's eligibility to be considered as a City of Los Angeles Historic-Cultural Monument.</p> <p>C. Upon identification of an appropriate future use for the Citizens Warehouse/Lysle Storage Company building, Metro shall develop an adaptive reuse plan in consultation with the Los Angeles Conservancy and the City of Los Angeles Office of Historic Resources. The adaptive reuse plan shall:</p> <ol style="list-style-type: none"> 1. Develop an adaptive reuse design for historic rehabilitation consistent with the SOI's Standards for Rehabilitation to a total of up to approximately 26,700 square feet of floor area. <ol style="list-style-type: none"> a. The adaptive reuse design shall include replication of the original southern façade of the former Pickle Works building to the maximum extent possible. b. The adaptive reuse plan shall be developed by Metro 			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>in consultation with the Los Angeles Conservancy and the City of Los Angeles Office of Historic Resources to ensure that adequate guidance is in place for historic rehabilitation principles to be incorporated into the needs of potential future reuse.</p> <p>c. Metro shall obtain the services of a firm specializing in historic preservation rehabilitation projects to provide guidance for development of the plan.</p> <p>D. Metro shall do the following to enable the Cultural Heritage Commission's consideration of the Citizens Warehouse/Lysle Storage Company as a City of Los Angeles Historic-Cultural Monument:</p> <p>1. Ensure the following character-defining features are preserved in the adaptive reuse design along the north and west elevations to convey the building's association with the Los Angeles Arts District during the 1970s and 1980s:</p> <p>a. Common-bond brick work b. Patterned but irregular spacing of fenestration and</p>			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<ul style="list-style-type: none"> openings c. Segmentally arched windows of variegated dimensions d. Four-part corbelling at west and north elevation rooflines e. Ceramic insulators affixed to west elevation f. Sawtooth element at roof g. Recessed wood-frame multi-light windows h. Faux shutters and planters i. The Art Dock bay, located at 112 Center Street (west elevation, second dock from north) j. Elevated single-bay loading docks k. Basement windows l. Stucco-capped stepped parapets at the roofline <p>4. Apply to the City of Los Angeles Office of Historic Resources and Cultural Heritage Commission for their consideration of the Citizens Warehouse/Lysle Storage Company to be designated as a City of Los Angeles Historic-Cultural Monument.</p> <ul style="list-style-type: none"> a. The application shall base the statement of significance on the 			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>building's association with the Los Angeles Arts District during the 1970s and 1980s under Criterion 1: Is identified with important events of national, state, or local history, or exemplifies significant contributions to the broad cultural, economic or social history of the nation, state, city or community.</p> <p>b. The nomination for Historic-Cultural Monument status would be prepared after the stabilization is complete.</p> <p>E. Metro shall preserve the opportunity to expand the Citizens Warehouse/Lysle Storage Company building towards the 1st Street Bridge to provide up to approximately 2,700 square feet of floor area (900 square feet per story on the basement, the ground floor, and the second floor). The determination whether to expand the building towards the 1st Street Bridge shall be made by Metro in consultation with the Arts District community, the Los Angeles Conservancy, and the City of Los Angeles Office of Historic</p>			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>Resources.</p> <p>1. Any expansion of the building towards the 1st Street Bridge area shall be conducive to replicating the appearance of the no-longer extant portion of the former Pickle Works building built in 1888, which was demolished by a different entity for a previous project – the widening of the 1st Street Bridge.</p> <p>F. A certificate of occupancy shall be recorded on the property for the future reuse within five years of Metro’s purchase of the property from the City.</p>			
		<p>CR-4 Metro shall prepare a report that documents, in-depth, the history and context of ice making and cold storage facilities in Los Angeles and the role played by National Ice and Cold Storage during its most significant years. Copies of the report shall be provided to the City of Los Angeles Public Library for public education purposes. The report shall be prepared prior to any demolition activities that would affect the National Ice and Cold Storage facility.</p>	<p>Prepare report on the history and context of ice making and cold storage facilities in Los Angeles and the role played by National Ice and Cold Storage during its most significant years. Provide copies of the report to the City of Los Angeles Public Library.</p>	<p>Metro/Cultural Resources Consultant</p>	<p>1. Metro/City of Los Angeles Office of Historic Resources 2. Metro 3. Prior to demolition of National Ice and Cold Storage facility.</p>
<p>Cultural Resources</p>	<p>Significance of an Archaeological</p>	<p>CR-5 A qualified archaeologist who meets the standards of the Secretary of the Interior for Archaeology (Project Archaeologist)</p>	<p>1. Retain qualified archaeologist 2. Develop CRMMP</p>	<p>Metro/Project Archaeologist</p>	<p>1. Metro/California Office of Historic Preservation</p>

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
	Resource	<p>shall be retained to provide and supervise archaeological monitoring of all project-related, ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) that occur after existing pavement and buildings are removed. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be developed prior to the start of ground-disturbing activities outlining qualifications and roles of the Project Archaeologist and archaeological monitor, monitoring procedures, reporting requirements, and procedures to follow if cultural resources are encountered during construction.</p> <p>The Project Archaeologist shall prepare monthly cultural resources monitoring progress reports to be filed with Metro. In the event that cultural resources are exposed during construction, the archaeological monitor shall temporarily halt construction within 50 feet (15 meters) of the discovery (if safe) while the potential resource is evaluated for significance (i.e., eligible for listing in the CRHR per PRC Section 5024.1 (c), or in a local register of historical resources as defined in PRC Section 5020.1 (k)). Construction activities could continue in other areas that are a distance of at least 50 feet from the discovered resource. If the discovery proves to be significant, representatives of Metro and the Project Archaeologist shall meet to determine</p>	3. Monitor all ground-disturbing activities 4. Monthly Reports 5. Discovery Protocols 6. Data Recovery		2. Metro 3. Construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		the appropriate avoidance or minimization measures. In considering suggested mitigation, Metro shall determine whether avoidance and preservation in place is feasible in light of such factors as the nature of the find, the Proposed Project design, costs, and other considerations. Under CEQA Guidelines Section 15126.6(b)(3), preservation in place is the preferred method of mitigation and, if feasible, shall be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of the impacts. If avoidance and preservation in place is infeasible, other appropriate measures, such as data recovery excavation, shall be instituted. If data recovery is deemed appropriate, a Treatment or Data Recovery Plan (Plan) outlining the field and laboratory methods to be used shall be prepared by the Project Archaeologist in accordance with CEQA Guidelines Section 15064.5(f) and approved by Metro prior to initiation of data recovery work. The Plan shall specify the appropriate treatment and/or curation of collected materials.			
Cultural Resources	Destruction of a Paleontological Resource or	CR-6 A qualified paleontological monitor shall be retained to monitor project-related excavation activities on a full-time basis in previously undisturbed Pleistocene	1. Full-time monitoring in area of undisturbed Pleistocene	Metro/ Paleontological Monitor	1. Metro 2. Metro 3. Construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
	Site or Unique Geologic Feature	deposits, if encountered. Project-related excavation activities of less than ten feet in depth shall be monitored on a part-time basis to ensure that underlying paleontologically sensitive sediments are not being affected. In addition, the monitor shall ensure the proper differentiation between paleontological and archaeological resources.	deposits 2. Part-time monitoring when excavation is less than ten feet. 3. Review recovered resources to differentiate between paleontological and archaeological resources		

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>CR-7 A Paleontological Monitoring and Mitigation Plan (PMMP) shall be developed by a qualified professional paleontologist prior to the start of ground-disturbing activities. A qualified professional paleontologist shall be retained to supervise the monitoring of construction. Paleontological resource monitoring shall include inspection of exposed geologic units during active excavations within sensitive geologic sediments, as defined by the PMMP and as needed. The monitor shall have authority to temporarily divert grading away from exposed fossils in order to efficiently recover the fossil specimens and collect associated data. The qualified paleontologist shall prepare monthly progress reports to be filed with Metro. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Matrix sampling shall be conducted to test for the presence of microfossils.</p>	<ol style="list-style-type: none"> 1. PMMP development 2. Retain paleontologist 3. Monitoring 4. Monthly reporting 5. Matrix sampling 	Metro/ Paleontological Monitor	<ol style="list-style-type: none"> 1. Metro 2. Metro 3. Pre-construction/ Construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Cultural Resources	Destruction of a Paleontological Resource or Site or Unique Geologic Feature	CR-8 Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility. The most likely repository would be the Natural History Museum of Los Angeles County.	Curate recovered fossils and deposit in designated curation facility.	Metro/ Paleontological Monitor	1. Metro 2. Metro 3. Construction
	Disturbance of Human Remains	CR-9 In the event that human remains, as defined above, are encountered at the Project Site, procedures specified in the Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) shall be followed. In this event, all work within 100 feet (30 meters) of the burial shall cease, and any necessary steps to ensure the integrity of the immediate area shall be taken. This shall include establishment of a temporary Environmentally Sensitive Area (ESA) marked with stakes and flagging tape around the find and 100-foot buffer. The Los Angeles County Coroner shall be immediately notified. The Coroner must then determine whether the remains are Native American. Work shall continue to be diverted while the Coroner determines whether the remains are Native American. Should the Coroner determine that the remains are Native American, the Coroner has 24 hours to notify the NAHC, who shall in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions shall	1. Cease work within 100 feet of discovery. 2. Notify Los Angeles County Coroner 3. Preserve in place/reburial/repatriation of remains in consultation with MLD	Metro/ Archaeological Monitor	1. Los Angeles County Department of Medical Examiner-Coroner 2. Metro 3. Construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		be determined in consultation with the MLD. Upon being granted access to the site, the-MLD has 48 hours to make recommendations regarding the treatment or disposition of the remains of the discovery. If requested by the MLD, measures shall be taken to the extent feasible to preserve and protect the remains in situ. If preservation in place is not feasible in light of such factors as the nature of the find, the Proposed Project design, costs, and other considerations, the appropriate treatment, reburial, or repatriation of the remains shall be determined in consultation with the MLD. If the MLD does not make recommendations within 48, Metro shall, with appropriate dignity, re-inter the remains in an area of the property secure from further disturbance. Alternatively, if Metro does not accept the MLD's recommendations, Metro or the MLD may request mediation by the NAHC. The location of the remains shall be kept confidential and secured from disturbances and looting until the appropriate treatment has been identified and implemented. No information regarding the discovery of human remains shall be publicized.			
Noise and Vibration	Exceedance of Applicable Standards	NV-1 The Contractor shall submit a Noise Control and Monitoring Plan to Metro that is prepared, stamped, and administered by the Contractor's Acoustical Engineer. This plan shall state that:	Prepare Noise Control and Monitoring Plan and submit to Metro.	Metro/ Contractor	1. Metro 2. Metro 3. Pre-construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<ul style="list-style-type: none"> • Equipment shall include enclosed engines, acoustically attenuating shields, and/or high-performance mufflers; • Equipment and staging areas shall be located away from noise-sensitive receivers; • Idling of construction equipment shall be restricted to a maximum of five minutes, except as provided in the exceptions to the applicable California Air Resources Board regulations regarding idling; • Temporary noise barriers and/or noise control curtains shall be installed; • Construction-related truck traffic shall be routed away from local residential streets and/or sensitive receivers; • Impact pile driving shall be prohibited; • The use of impact devices such as jackhammers and hoe rams shall be minimized, using concrete crushers and pavement saws instead; • The Noise Control and Monitoring Plan shall include a site drawing, an inventory of equipment, calculations of the one-hour L_{eq} noise levels at sensitive receptors (i.e., OSF), and compliance with FTA noise criteria. <p>An updated Noise Control and Monitoring Plan shall be completed and submitted within ten days of the start of each quarterly period, or whenever there</p>			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		is a major change in work schedule, construction methods, or equipment operations.			
Noise and Vibration	Exceedance of Applicable Standards	NV-2 Metro shall install low-impact frogs at locations with special trackwork. This applies to the OSF-adjacent storage yard and yard tracks within a 200-foot radius of the northern portion of the northern OSF building. This also applies to existing yard tracks leading to the Maintenance Facility, as well as new yard tracks within a 200-foot radius of the northern portion of the southern OSF building.	Install low-impact frogs	Metro/ Contractor	1. Metro 2. Metro 3. Construction
	Exposure of Persons to or Generation of Excessive Groundborne Vibration or Noise	NV-3 The Contractor shall submit a Vibration Monitoring Plan to Metro that is prepared, stamped, and administered by the Contractor's Acoustical Engineer. This plan shall include: <ul style="list-style-type: none"> • A survey of OSF building foundations with photographs of existing conditions limited to buildings within 25 feet of high-vibration-generating construction activities. Another survey shall be completed at the end of construction activities to assess potential damage. Damaged structures shall be returned to the preconstruction state by the Contractor. • A requirement to monitor vibration at any building where vibratory rollers or similar high-vibration-generating 	Prepare Vibration Monitoring Plan and submit to Metro.	Metro/ Contractor	1. Metro 2. Metro 3. Pre-construction

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
		<p>equipment would be operated within 25 feet of buildings and at any location where complaints about vibration are received from building occupants. Construction activities shall be stopped and alternative methods introduced if vibration levels exceed 0.2 inches per second at OSF. Examples of high-vibration construction activities include the use of vibratory compaction or hoe rams next to sensitive buildings. Alternative procedures include use of non-vibratory compaction in limited areas and a concrete saw in place of a hoe ram to break up pavement.</p> <ul style="list-style-type: none"> Nighttime construction activities near OSF shall not include equipment operations within the minimum distances shown in Table 3.7.9. 			

Impact Area	Potential Effects	Mitigation Measures	Action	Responsible Party	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Tribal Cultural Resources		<p>TCR-1 Because of the potential for tribal cultural resources, a Native American monitor shall be retained to monitor all project-related, ground-disturbing construction activities (e.g., boring, grading, excavation, drilling, trenching) that occur after existing pavement and buildings are removed. The appropriate Native American monitor shall be selected based on ongoing consultation under AB 52 and shall be identified in the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as described in Mitigation Measure CR-5. Monitoring procedures and the role and responsibilities of the Native American monitor shall be outlined in the project CRMMP. In the event the Native American monitor identifies cultural or archeological resources, the monitor shall be given the authority to temporarily halt construction (if safe) within 50 feet (15 meters) of the discovery to investigate the find and contact the Project Archaeologist and Metro. The Native American monitor and consulting tribe(s) shall be provided an opportunity to participate in the documentation and evaluation of the find. If a Treatment Plan or Data Recovery Plan is prepared, the consulting tribe(s) shall be provided an opportunity to review and provide input on the Plan.</p>	Retain Native American Monitor	Native American Monitor/ Project Archaeologist	1. Metro 2. Metro 3. Construction

Notice of Determination**Appendix D****To:**

Office of Planning and Research
U.S. Mail: _____ *Street Address:* _____
 P.O. Box 3044 1400 Tenth St., Rm 113
 Sacramento, CA 95812-3044 Sacramento, CA 95814

County Clerk
 County of: _____
 Address: _____

From:

Public Agency: _____
 Address: _____

 Contact: _____
 Phone: _____

Lead Agency (if different from above): _____
 Address: _____

 Contact: _____
 Phone: _____

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): _____

Project Title: _____

Project Applicant: _____

Project Location (include county): _____

Project Description:

This is to advise that the _____ has approved the above
 (Lead Agency or Responsible Agency)

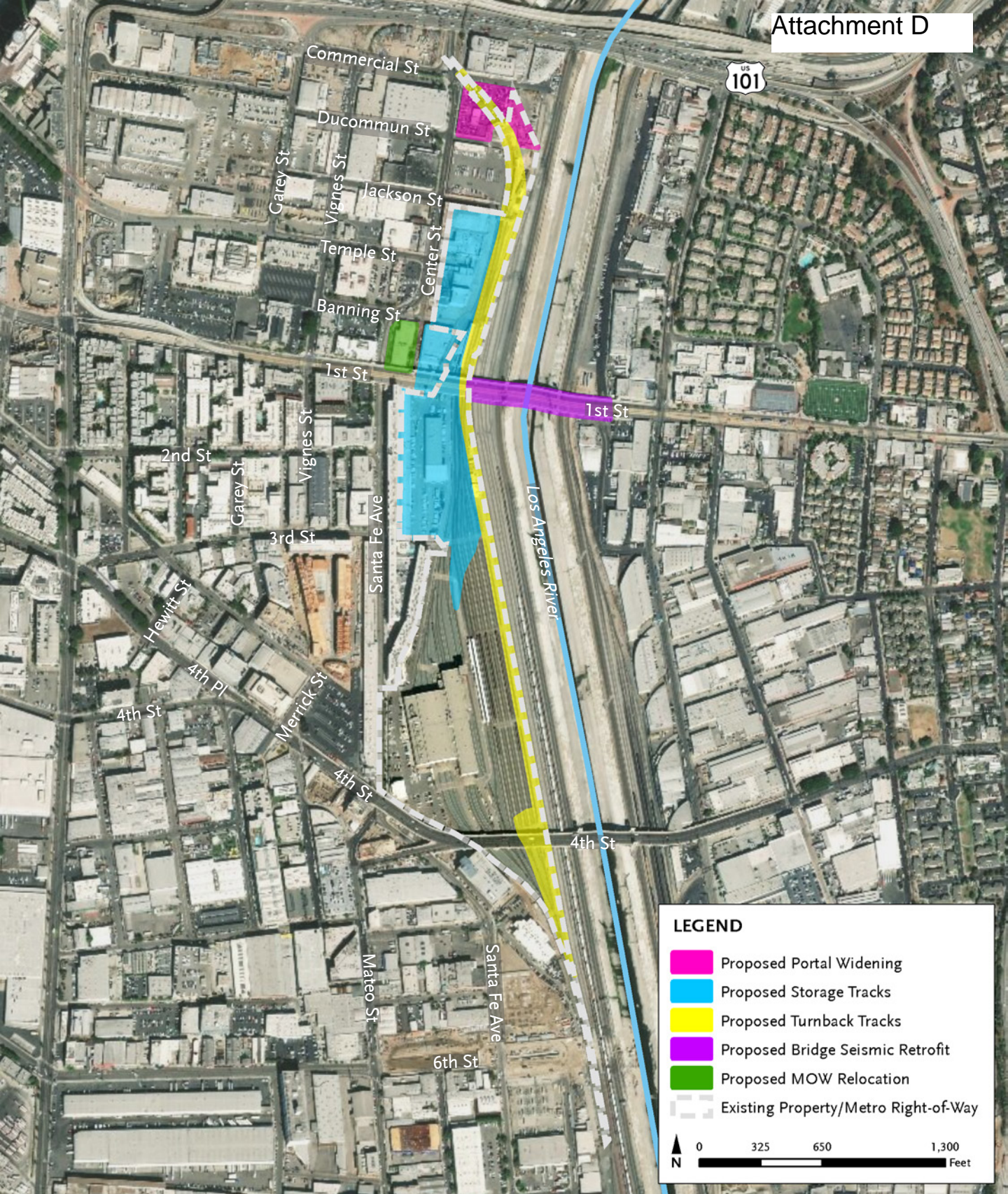
described project on _____ and has made the following determinations regarding the above
 (date)
 described project.

1. The project [will will not] have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [were were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [was was not] adopted for this project.
5. A statement of Overriding Considerations [was was not] adopted for this project.
6. Findings [were were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:

 Signature (Public Agency): _____ Title: _____

Date: _____ Date Received for filing at OPR: _____



NOTE: Exact location of storage tracks and turnback tracks to be determined.

Source: Terry A. Hayes Associates Inc., 2018.

Division 20 Portal Widening and Turnback Facility



Public Engagement Summary Report: Scoping through DEIR

October 2018

Submitted by



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1. Overview

The Los Angeles County Metropolitan Transportation Authority (Metro) is proposing service improvements for its Red and Purple Lines with the Division 20 Portal Widening and Turnback Facility project (Proposed Project). Collectively, the Red and Purple Lines carry over 140,000 passengers daily, with ridership expected to increase by 49,000 following the Purple Line Extension to the Veterans Affairs West Los Angeles Medical Center. Currently, these trains reverse at Union Station, which limits the frequency of service. The Proposed Project aims to address these service reliability and safety issues with three core improvements, which include:

- Widening the heavy rail tunnel south of U.S. Highway 101 freeway (Portal Widening) to accommodate additional special trackwork and high-speed train movements;
- Developing of a new, surface-level Turnback Facility in the existing Division 20 Rail Yard; and
- Reconfiguring and expanding the surface-level rail storage tracks.



Image 2: Project Area Map

In preparation for the Proposed Project’s environmental review process, an outreach engagement strategy was developed by Arellano Associates (AA) in agreement with and approved by Metro and the technical team, consisting of ICF International, Inc. and Terry Hayes and Associates, Inc. (TAHA), collectively known as the Project Team. This Public Participation Plan (PPP) provided the Project Team initial direction and guidance throughout the environmental phase, including:

- A general understanding of the project area’s demographics and languages;
- An initial list of key stakeholders and stakeholder groups;
- A plan to compile, develop and maintain a database of project stakeholders and other interested parties;
- Detail on additional management tools, which would be employed to direct and document outreach outcomes;
- Identify communication tools, such as branding and messaging, key messages, printed materials, and digital and web-based tools to facilitate public as well as agency awareness and inclusion in the environmental process; and
- Layout the types of meetings and notifications, which would be used to execute the Project Team’s objectives for public and agency inclusion and participation.

The PPP’s intended period of engagement was set to include all activities occurring between the start of the scoping process (October 18, 2017) and the close of the hearing process (April 30, 2018), which included the release of Draft Environmental Impact Report (DEIR). Subsequent to the end of this initial scoping period, the Proposed Project footprint was expanded to include an additional property that had been offered to Metro at 100-120 North Santa Fe Avenue. This change initiated a revised scoping (lasting from January 3, 2018 to February, 2, 2018), resulting in additional process notifications and comment feedback. Record of each process and the outreach conducted to involve, both, agency and public participation can be found in the Public Scoping Summary Report and in the DEIR Public Engagement Summary Report.

Table 1 provides a summary of executed project outreach initiatives.

Table 1: Executed Outreach Initiatives

Type	Executed Outreach
Project Database	✓
Project Communication Resources	✓
Branding and Languages Served (English, Spanish and Japanese)	✓
Key Messages	✓
Fact Sheet	✓
Frequently Asked Questions	✓
Project Website	✓
Webcast (or Webinar) Meeting	✓
Project Video	✓
Elected Official Briefings	✓
Stakeholder Briefings	✓
Meetings & Meeting Notifications	✓
Scoping	✓
Hearing	✓
Print Meeting Notices (Mail, Posted and Counter Drop)	✓
Electronic Mail Notifications (E-blasts)	✓
Newspaper Advertisements (or Press Releases)	✓
Facebook	✓
Twitter	✓
Blogs	✓

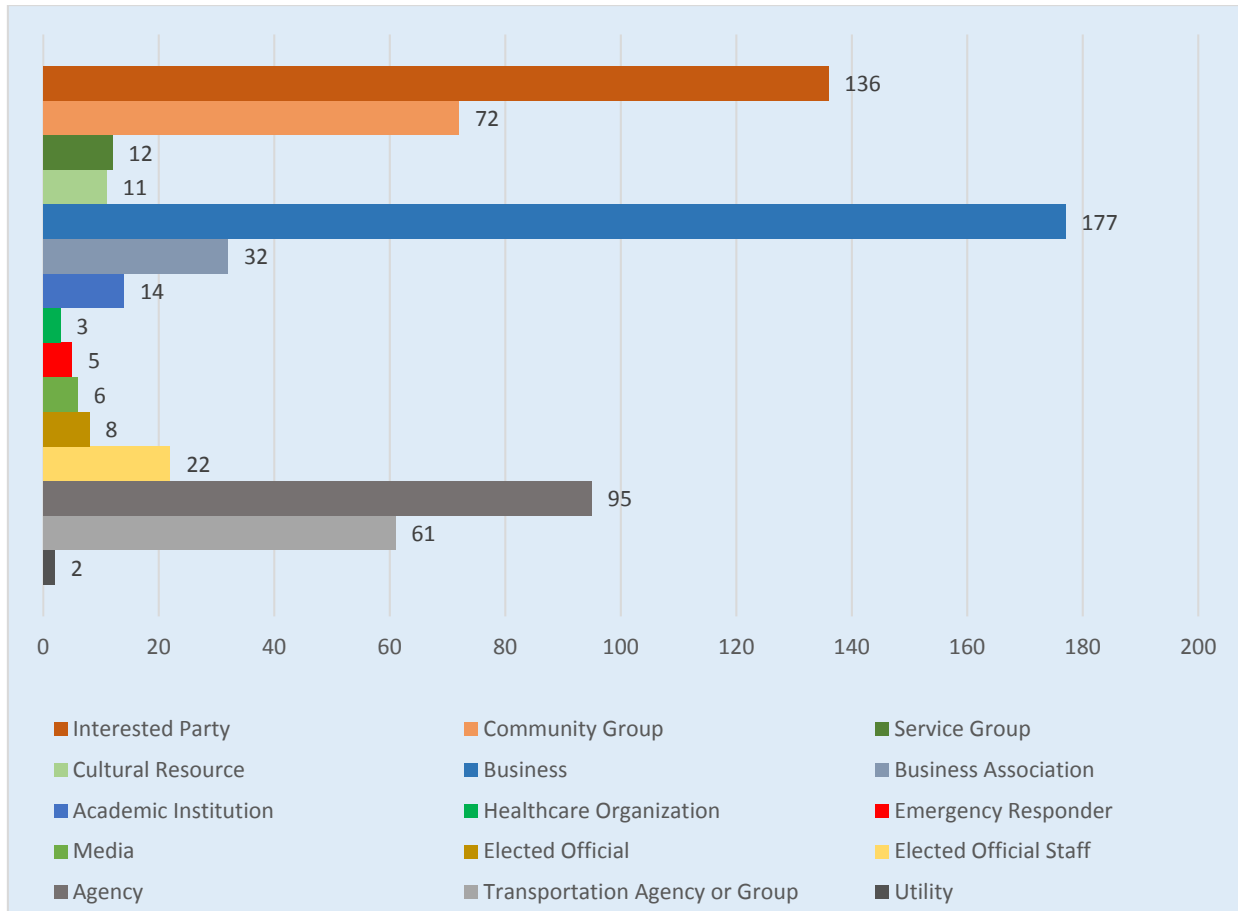
Executed outreach initiatives and highlights are designated in each of the sections below, sorted by Project phase “timing.” Timing stages include: Scoping, Revised Scoping, Release of DEIR/Hearing and Release of FEIR/Board.

2. Project Database

The project database has served as the primary resource for public notification. Database contacts have received noticed invitations to community meetings by means of direct mail, e-blasts, and through extended outreach to key stakeholders. Additional notification list for use in the release of preliminary

notifications, were also generated to include project database contacts. At the project’s start, an initial list of database contacts was developed and included 577 stakeholders. This list of stakeholders grew to 683 by the end of project. The project database includes a total of 478 contacts with mailing addresses, and 84% of all contact records include email. Database contact categories and count are as follows in the graph below.

Figure 1: Project Database by Category



3. Project Communication Resources

Outreach proposed in the PPP included a number of communications tools to aid in building public awareness to encourage public participation.

a. Branding

In conjunction with Metro Marketing, the Project Team established a clean and representative branding, which was used for all print and electronic tools and notifications. Branded project templates were created to facilitate the development of fact sheets and other handouts, meeting PowerPoint presentations, and display boards.

b. Messaging

A vision for project outreach and core messaging was developed early in the process by the Project Team. This messaging was used in print collateral, such as fact sheets and meeting notices, and share electronically, via webpage and e-blasts. Messaging was modified and materials updated to meet with the demands of project timing and to reflect mitigations or response to public comment.

c. Fact Sheets

An 8 ½” W x 11” L branded Fact Sheet was developed by the Project Team as the foundational collateral outreach tool. This two-sided project summary outlined the project partners and goals, highlighted project work, and presented a schedule of proposed activity. The Fact Sheet also provided links to key resources and project contacts. The handout was updated once during the project as result of the revised scoping process.



Image 3: Project Fact Sheet & Frequently Asked Questions

d. Frequently Asked Questions (FAQ)

A two-sided, 8 ½” W x 11” L branded FAQ was also prepared to assist in communicating proposed project work, schedule and contacts. This hand-out includes a series of project questions and responses in an easy to digest format. A second copy of the FAQ was also prepared for the revised scoping.

e. Project Website

The project website (<https://www.metro.net/projects/division-20/>) has served as both, anchor and archive, for the project’s outreach initiatives, providing the public access to:

- Core, project information;
- An online comment form for the DEIR and project contact information for other methods of comment;
- Posts for upcoming meeting notifications;
- Meeting summary reports and other meeting materials for continued reference;
- A link to the recorded project hearing webcast; and
- Links to additional projects operating within the greater Proposed Project area.

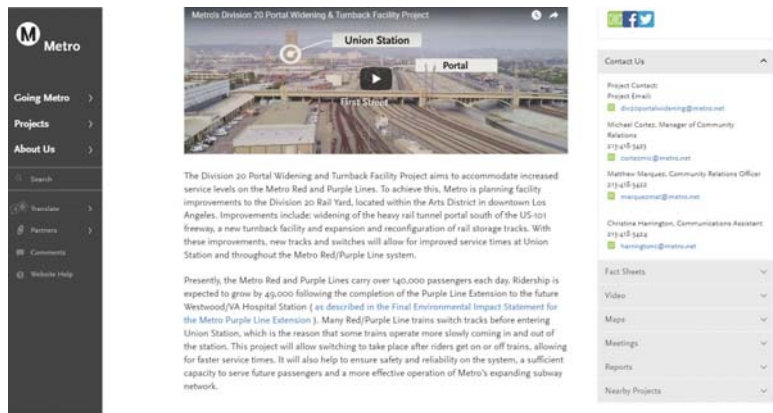


Image 4: Project Website Landing Page

The website remains a primary method for interested parties to sign-up for future information and meeting updates.

f. Webcast

A live webcast was implemented to enhance the reach of the project’s DEIR hearing and increase comment participation. The hearing presentation and oral comments were recorded and broadcasted live to expand meeting participation on the night of the event and to capture the experience for project record. The webcast video has since been posted on the Metro project website (www.metro.net/projects/division-20). An English, Spanish and Japanese version of the hearing PowerPoint presentation was also prepared and uploaded to the project webpage, providing an additional reference for those interested in reviewing Metro’s progress at that stage of the project.



Image 5: Metro Board Room

g. Project Video

An educational project video was created and shared with the public via Metro’s English-language blog The Source and Spanish-language blog El Pasajero, by way of e-blasts to the project’s database contacts, through the project website, and at the projects’ DEIR hearing. The video assisted with visualizing the project’s proposed improvements and to-date has received almost 5,000 views.

4. Meeting Notification Efforts

A variety of notification methods were employed to reach-out to the public and encourage participation in upcoming public meetings, including print and electronic meeting notices. The sections below further details each notification method used.

a. Preliminary Notice

Either a Notice of Preparation (NOP) or Notice of Availability (NOA) had been prepared and distributed for each stage of the Proposed Project to announce the progress on the Environmental Impact Report (EIR). Each of the three (3) notices were drafted and finalized in agreement with California State and Metro standards. The initial distribution list was developed by the Project Team, including 69 key stakeholders. Each subsequent notification list was reviewed and updated to include the previous stakeholders as well as the most current list of those whom had shared public comment. All preliminary notices were delivered by both, postal mail and e-mail, when available.

A comparative summary of each can be found in Table 2.

Table 2: Distribution of Preliminary Notice of Action and Environmental Report

Timing	Notice	Review (R) and/or Comment Period (CP)	Method of Distribution	Date of Mail & Counter Distribution	Date of Newspaper Distribution	Key Stakeholder Notices	Hard Copy Locations
Scoping	NOP for Preparation of Draft EIR	30-day R/CP	Postal Mail & Print Newspaper Ads	10/18/17	10/18/17	69	N/A
Revised Scoping	NOP for Preparation of Draft EIR	30-day R/CP		01/03/18	01/03/18 – 01/08/18	104	N/A
Release of DEIR/ Hearing	NOA for Release of Draft EIR	45-day R/CP	Postal Mail, Print Newspaper Ads, & Public Counter Placement	03/16/18	03/16/18 – 03/22/18	107	3

Print copies of each NOA, along with the corresponding Draft or Final EIR, were also placed at three (3) public counters to provide community access to hard copy notices and reports for review and public comment. The following libraries supported this method of distribution:

- Los Angeles Public Library, Central Library
- Los Angeles Public Library, Little Tokyo Branch
- Kappe Library at SCI-Arc

b. Newspaper Advertisements

As noted in Table 2 above, print newspaper advertisements were also used to publicly share all NOP and NOA notifications to announce the different stages of the Proposed Project. Five (5) local papers with diverse audiences and language preference were identified and used in this notification effort. Collectively, each notice newspaper circulation reached approximately 409,000 community addresses.

Newspapers used to engage the public follow in Table 3, below.

Table 3: Distribution of Newspaper Advertisements

Timing	Method of Distribution	Language	Approximate Readers/Subscribers
All	Downtown News	English	150,000
	Eastside Journal	English	24,000
	La Opinion	Spanish	115,000
	Los Angeles Daily News	English	80,000
	Rafu Shimpo	Japanese	40,000

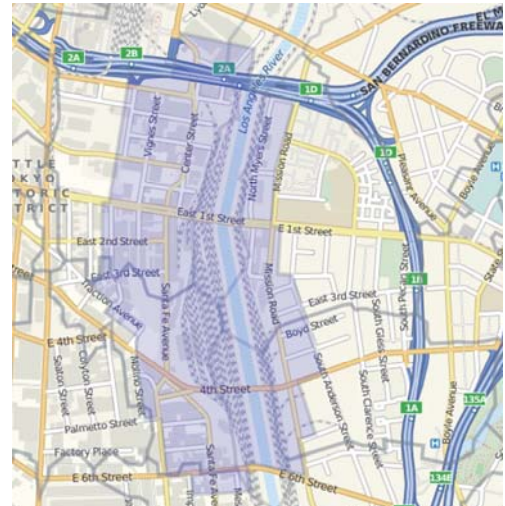


Image 6: Notification Area Boundary Map

c. Primary Notice

Print public meeting notices were developed in English, Spanish, and Japanese, by the Project Team and served as the primary means of project meeting notification. Three (3) meeting invitations were produced and distributed to mailing addresses, consisting of database stakeholders, property owners, and occupants located within 1,000 feet of the Proposed Project area to build project awareness, to encourage public involvement, and to solicit comment.

Table 4 includes a summation of each notice.

Table 4: Primary Meeting Notices

Timing	Type	Date of Distribution	Method of Distribution	Notices	Messaging
Scoping	Trifold 8 ½" W x 11" L	10/18/17	Postal Mail & Door to Door Outreach	1,903*	<ul style="list-style-type: none"> • Invitation to scoping meetings • Description of project • Purpose of scoping meetings • Overall project benefits • Meeting details, including: date, time, location and parking information • Request and methods to provide public comment
Release of DEIR/ Hearing	Postcard 11" W x 6" L	03/16/18	Postal Mail & Door to Door Outreach	2,366**	<ul style="list-style-type: none"> • Invitation to attend the public hearing • Meeting details, including: date, time, location and parking information • Request and methods to provide public comment

* Postal notification included 1,608 for scoping.

** Postal notification included 1,812 for hearing and 90 for Metro Committee distributions.

d. Door to Door Outreach

As noted in Table 4 above, the primary public meeting notices were also shared via door to door outreach through the support of key stakeholders in and around the project area. Metro focused this effort on building project awareness within the Little Tokyo/Arts District area to help spread the word about upcoming meetings to community stakeholders. Bundles of notices were placed with approval at key stakeholder locations, providing additional opportunities for public engagement. AA provided support, as needed, to Metro staff in distributing the notices throughout the community. Collectively, 759 notices were shared with the public via this method of outreach.

The level and reach of extended outreach can be found below in Table 5.

Table 5: Door to Door Distribution of Public Meeting Notices to Key Stakeholders

Timing	Name	Date of Distribution	Key Stakeholders	Public Counter Notices
Scoping	Arts District	10/19/2017	16	95
	Little Tokyo	10/19/2017	4	200
Release of DEIR/ Hearing	Arts District	03/27/18	22	209
	Little Tokyo	03/27/18	6	180
	Center Street & Vicinity	03/27/18	8	75

e. Electronic Mail Notifications

Metro prepared and scheduled 23 electronic mail notices during the project. These e-blasts were sent to e-mails collected in the project database and via MyEmma and Salesforce platforms.

A complete detail of electronic notices can be found below (Table 6).

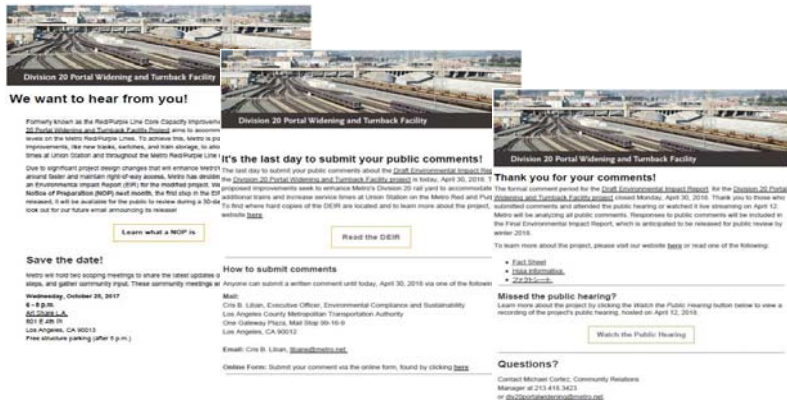


Image 7: Project E-blasts

Table 6: Distribution of E-blast Notifications

Timing	Date of Distribution	E-blasts	Sent Notices	Delivered Notices	Opened Notices
Scoping	10-03/17 – 11/17/17	8	2,844	2,814	1,156
Revised Scoping	01/03/18 – 02/06/18	5	5,180	5,163	1,384
Release of DEIR/ Hearing	03/16/18 – 05/03/18	10	4,822	4,725	1,382

f. Social Media Posts

Social media was used to support the public hearing notification process. A total of 17 social media posts were scheduled and posted from March 19th through April 11th to give audiences the most advanced and timely noticing regarding the public hearing and public comment period. Posts were published and shared by several Facebook and Twitter users and sparked dialogue among followers.

Table 7 (below) details each use of social media and metric results.

Table 7: Distribution of Social Media Posts

Timing	Method of Distribution	Post Date	Posts	Metrics
Scoping	Facebook	10/18/17	1	92 Likes, 2 Comments
	Twitter	10/20/17 – 11/06/17	4	15 Likes, 15 Retweets, 1 Comment
Revised Scoping	Facebook	01/04/18	1	48 Likes, 4 Shares, 3 Comments
	Twitter	01/04/18 – 01/29/18	4	22 Likes, 11 Shares, 2 Comments
Release of DEIR/ Hearing	Facebook	03/19/18 – 4/11/18	3	125 Likes, 14 Shares
	Twitter	03/19/18 – 4/03/18	4	30 Likes, 13 Retweets, 1 Comment

g. Blog Publications

Blog publications provided additional notification support and aided in building project awareness. Metro’s online blog publications, The Source (English) and El Pasajero (Spanish), ran nine (9) project-focused or -related articles during the course of the project. Two additional, unsolicited earned media blogs articles, posted by notable transportation blogs, were also identified.

A summary of project blogs, which had reported on the project, are shown in Table 8, below.

Table 8: Distribution of Blog Publication Posts

Timing	Method of Distribution (Language)	Post Date	Posts
Scoping	The Source (English)	10/18/17	1
	El Pasajero (Spanish)	10/18/17	1
	Other (English)	10/16/18 – 11/16/18	5
Revised Scoping	The Source (English)	01/03/18 – 01/31/18	2
	El Pasajero (Spanish)	01/04/18 – 01/31/18	2
	Other (English)	01/04/18 – 01/17/18	2
Release of DEIR/ Hearing	The Source (English)	03/16/18 – 04/11/18	2
	El Pasajero (Spanish)	04/11/18	1
	Other (English)	03/20/18 – 03/21/18	2

5. Community Engagements

The focus of project outreach has been to involve and collect feedback from agencies, key stakeholders and the general public, to adhere to and go beyond CEQA standards. Meetings and briefings were organized and held for this purpose. Meetings marked key milestones during the project schedule, while briefings reached-out to elected officials and stakeholders to assist in guiding the project forward and to address items of interest and concern. A total of three (3) public meetings and six (6) briefings with elected officials and 16 with key stakeholders were conducted with the following goals in mind (Table 9). The Metro Board meeting was not considered as an outreach meeting, rather only the corresponding notification effort was recorded as outreach initiative.

Table 9: Meetings & Briefings

Type	Date	Purpose	Meetings/ Briefings
Briefings			
Elected Official Briefings	Sept 26, 2017 – Feb 13, 2018	<ul style="list-style-type: none"> Educate and build awareness with an overview of project, process and technical studies Gather feedback and collaborate on the mitigating potential issues of concern Build consensus and garner support for an ideal outreach strategy Provide project updates before each community meeting Review next steps and anticipated project schedule 	6

Key Stakeholder Briefings	Oct 12, 2017 – Apr 11, 2018	<ul style="list-style-type: none"> Educate and build awareness with an overview of project, process and technical studies Gather feedback and collaborate on the mitigating potential issues of concern Build consensus and garner support for an ideal outreach strategy Review next steps and anticipated project schedule 	16
Meetings			
Scoping Meeting	10/25/17 – 11/08/17	<ul style="list-style-type: none"> Present a description of Proposed Project, corresponding purpose and need, list of criteria, environmental limitations, and potential alternative concepts Share an overview of the process and technical studies that will be conducted Review next steps and anticipated project schedule Communicate tips on how to “Stay Connected” Generate public input on issues that will be addressed in the upcoming technical studies 	2
Public Hearing	04/12/17	<ul style="list-style-type: none"> Update Public on project status Report on technical efforts and findings Set stage for next phase of development Included a live webcast, which was recorded and later distributed via e-mail and project website 	1

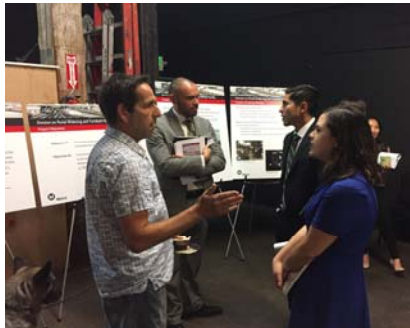


Image 8: Art Share L.A.



Image 9 & 10: Japanese American Cultural & Community Center

In support of this summary, all project meetings and briefings were documented and details recorded using Smartsheet.

a. Elected Official Staff Briefings

Prior to the initial public meetings and throughout the process, Metro maintained contact with staff of local elected official offices with interest in the Proposed Project area. A total of seven (7) elected official briefings were conducted throughout the course of the project. These briefings provided staff an opportunity to learn about the project and provide feedback and guidance on collaboration with their respective communities.

Below in Table 10, a list of Metro’s engagement with elected offices are summated.



Image 11: Metro Headquarters, 3rd Floor Lobby

Table 10: Briefings to Elected Official

Timing	Type	Briefing Date	Briefings
Scoping	Los Angeles County Supervisor Solis’s Office, District 1 City of Los Angeles Councilmember Huizar’s Office, District 14 City of Los Angeles Mayor Garcetti’s Office	09/26/17 – 12/01/17	5
Revised Scoping	City of Los Angeles Councilmember Huizar’s Office, District 14	01/12/18	1
Release of DEIR/ Hearing	City of Los Angeles Councilmember Huizar’s Office, District 14	02/13/18	1

b. Stakeholder Briefings and Technical Advisory Meetings

Additional briefings were also provided to a number of key stakeholder groups to provide open communication on poignant project issues and to encourage continued engagement during the public comment period.

The following matrix (Table 11) represents these efforts.

Table 11: Briefings to Key Stakeholders

Timing	Type	Briefing Date	Briefings
Scoping	Business Organizations, Community Organizations, Cultural and Historic Resource Groups & Metro Councils and Committees	10/12/17 – 12/14/17	7
Revised Scoping	Business Organizations, Community Organizations & Cultural and Historic Resource Groups	01/12/18 – 01/31/18	4
Release of DEIR/ Hearing	Business Organizations, Cultural and Historic Resource Groups & Metro Councils and Committees	02/26/18 – 04/11/18	5

Stakeholders Briefed included:

Business Organizations

- Arts District Los Angeles (ADLA) BID
- Central City Association (CCA) Transportation, Infrastructure, and Environment Committee

Community Organizations

- Historic Cultural Neighborhood Council (HCNC) Urban Design and Land Use Committee (LUC)
- Little Tokyo Community Council
- Los Angeles Downtown Arts District Space

Cultural and Historic Resource Groups

- Gabrieleño Band of Indians – Kizh Nation: Tribal Consultation
- LA Conservancy

Metro Councils and Committees

- Westside/Central Service Council
- Metro Technical Advisory Committee (TAC)
- Metro’s Union Station Area Roundtable
- Regional Connector Community Leadership Council (RCCLC)

c. Public Meetings

Public scoping meetings and a public hearing were used to inform the public and receive input. The Proposed Project included three (3) outreach meetings. Meeting highlights are noted (in Table 12) below.

Table 12: Meeting Attendance, Participation & Comments Collected

Timing	Date of Meeting	Meetings	Participant Sign-ins	Webcast Observers	Meeting Oral Speakers	Meeting Comment Cards	Written Public Comments	Written Agency & Elected Office Comments
Scoping	10/25/17 and 11/08/17	2	47	N/A	N/A	4	28	5
Revised Scoping	N/A	N/A	N/A	N/A	N/A	0	9	2
Release of DEIR/ Hearing	04/12/18	1	11	15	4	0	44	5

* Duplicate written comments, such as that received by postal letter, e-mail or online form, have been reflected as one.

During the course of the project, Metro received 99 formal comments from the public and participating agencies in written form and from oral speakers. Submitted comments were tracked and documented using Smartsheet in the project’s Comment Log & Issues Matrix. Comments collected pointed to a number of topics, among them cultural resources, transportation/traffic and land use & planning to name a few.

Agencies providing comment included:

- California High-Speed Rail Authority (CHSRA)
- State of California Department of Transportation, District 7 (Caltrans)
- State of California Native American Heritage Commission (NAHC)
- South Coast Air Quality Management District (SCAQMD)
- Southern California Regional Rail Authority (SCRRA)



Board Report

File #: 2018-0364, File Type: Agreement

Agenda Number: 33.

CONSTRUCTION COMMITTEE OCTOBER 20, 2018

SUBJECT: WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute a Memorandum of Agreement (MOA) with the City of Beverly Hills (City) to accommodate construction of the Wilshire/Rodeo Station, contingent upon execution of a settlement agreement.

ISSUE

Metro staff began drafting and negotiating an agreement with the City in August 2017 for the Design/Build elements of the Project. The attached MOA concludes the negotiations for those elements of the Project. The MOA describes how Metro (and the C1120 Design/Build Contractor) and the City will coordinate and cooperate in the construction of the Wilshire/Rodeo Station and related street restoration in the vicinity of the station.

BACKGROUND

Prior MOAs have been established with the City of Beverly Hills for work on the Westside Purple Line Extension Section 1 and Section 2 Projects. The first MOAs were executed in 2014 and 2017 for the advanced utility relocations work at the Wilshire/La Cienega Station and the Design/Build elements of the station. MOAs were also executed in 2017 for the advanced utility relocations work specific to the Wilshire/Rodeo Station.

DISCUSSION

The MOA describes the roles, responsibilities and obligations of Metro, its Design/Builder, and the City as it pertains to the construction of the Wilshire/Rodeo Station. The MOA specifies the procedures which the parties will follow as it relates to such tasks as the permitting process, design reviews, coordination efforts, meeting attendance, inspections, traffic control, construction staging requirements, allowable work hours, environmental mitigations and other essential elements. The MOA further describes the manner in which the City will be reimbursed for its costs related to such activities and support services.

On August 21, 2018, the Beverly City Council approved the terms of the MOA, including language related to Beverly Hills participation in law enforcement services for the Wilshire/Rodeo Station upon the start of revenue service. The version of the MOA attached to this report modifies this language to indicate that Metro and the City will commence negotiations for a security contract in good faith no later than July 1, 2021.

The City has two lawsuits pending related to the Westside Subway Extension: *City of Beverly Hills v. Federal Transit Administration, et al.*, United States District Court Case No. CV-18-03891 GW (SSx) and *City of Beverly Hills v. Los Angeles County Metropolitan Transportation Authority*, Los Angeles Superior Court Case No. BS144164. The MOA will not take effect until both the City Council and the LACMTA Board of Directors approve a settlement agreement for the two pending lawsuits.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an impact on established safety standards for Metro's construction projects.

FINANCIAL IMPACT

Funds required in fiscal year 2019 for this Board action are included in Project 865522 Westside Purple Line Extension Section 2 Project, in Cost Center 8510 (Construction Project Management), and Account Number 53101 (Acquisition of Building and Structure). Since this is a multi-year project, the Chief Program Management Officer and the Project Manager will be responsible for budgeting costs in future fiscal years.

Impact to Budget

Additional costs may be incurred by the WPLE-2 project for differences in this final agreement compared to the draft contained in the bid documents. The cost associated with the recommended action is included in the Project's life-of-project cost. The sources of funds for the Project are Federal 5309 New Starts, Congestion Mitigation and Air Quality (CMAQ), Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan proceeds and Measure R 35%. These funds are designated for this Project and do not have an impact to operations funding sources. This Project is not eligible for Propositions A and C funding due to the proposed tunneling element of the Project. No other funds were considered.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendation supports Strategic Plan Goal #3 - Plan and deliver capital projects on time and on budget while increasing opportunities for small business development and innovation. Support of the design and construction of the Wilshire/Rodeo Station by various departments of the City is extremely critical to the Project being completed on schedule and on budget. Timely execution of the MOA allows the Project's design and construction to proceed on schedule, thereby facilitating utilization of the Design/Builder's planned and contractual DBE commitment of 25.31% and 17.00% for design and construction, respectively.

ALTERNATIVES CONSIDERED

The Board may choose not to execute this MOA, however if the MOA is not executed, the City will not issue a permit for the C1120 Design/Build Contractor to begin construction of the Wilshire/Rodeo Station. This would potentially delay the Project.

NEXT STEPS

The next step is for both parties to execute the MOA so that the City can proceed with the required construction related activities to support the construction start of the Wilshire/Rodeo Station.

ATTACHMENTS

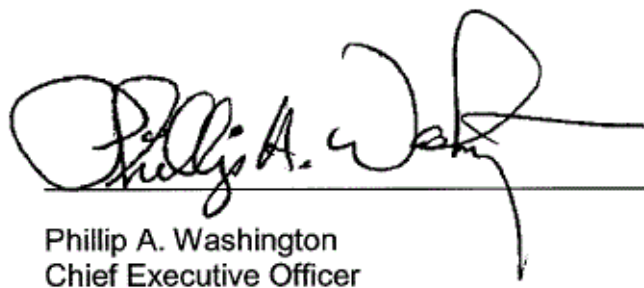
Attachment A - Memorandum of Agreement for Contract C1120 between the City of Beverly Hills and the LACMTA

Prepared by:

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Reviewed by:

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Phillip A. Washington
Chief Executive Officer

**MEMORANDUM OF AGREEMENT
FOR CONTRACT C1120
OF THE PURPLE LINE EXTENSION PROJECT – SECTION 2
BETWEEN
THE CITY OF BEVERLY HILLS
AND
THE LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

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- A – PDD Permit and City of Beverly Hills Conditions for Approval
- B – Reserved
- C – Template Form 60
- D – Detour Routes During Full Closures of Wilshire Boulevard
- E – Metro 5-Step Noise Control Plan
- F – Ambient Noise Testing Sites
- G – Public Information Graphics Program
- H – LACMTA Claims Form
- I – Design and Construction Plans Provided to City of Beverly Hills
- J – Noise and Vibration Mitigation Measures
- K – Air Quality Mitigation Measures
- L – Construction Equipment Noise Levels
- M – Vibration Monitoring Locations
- N – Pre-Construction Survey Properties

**MEMORANDUM OF AGREEMENT
FOR CONTRACT 1120
OF THE PURPLE LINE EXTENSION PROJECT – SECTION 2
BETWEEN
THE CITY OF BEVERLY HILLS
AND
THE LOS ANGELES COUNTY METROPOLITAN
TRANSPORTATION AUTHORITY**

THIS MEMORANDUM OF AGREEMENT (“Agreement”), dated, _____, 2018 (“Effective Date”) is made by and between the Los Angeles County Metropolitan Transportation Authority (the “LACMTA”) and the City of Beverly Hills (the “City”), collectively referred to herein as “the Parties.”

**ARTICLE I
Recitals**

The City and the LACMTA desire to enter into this Agreement to accommodate Construction pursuant to the C1120 Contract; this is part of Section 2 of the Purple Line Extension Project. This Agreement solely covers the C1120 Contract Construction required for the Project, including advance relocation of City-owned utilities. The City and the LACMTA have entered into separate agreements to cover the third party advance utility relocation work for the Project.

The Project is defined as a heavy rail project extending from the future Wilshire/La Cienega Station, traversing through the City of Beverly Hills and the City of Los Angeles and ending at the proposed Constellation Station in Century City. The LACMTA has informed the City that the C1120 Contract Construction is necessary to build the Wilshire/Rodeo Station and tunnels as part of the Project. The Wilshire/Rodeo Station is the only station for the Project located within the jurisdictional boundaries of the City. The Wilshire/Rodeo Station box will be located under Wilshire Boulevard generally bounded by Beverly Drive on the west, S. Canon Drive on the east and within/below the Wilshire Boulevard right-of-way. The subway tunnel will traverse underneath City Rights-of-Way, public properties, and private properties.

The scope of the C1120 Contract includes the demolition of existing buildings and the clearing of two properties within the City to facilitate the future Station entrance and Construction operations. The scope of work includes all tunneling, excavation, and Station Construction work including architectural finishes, mechanical and electrical systems and equipment including train control, traction power, communications, track work and the system tie-in to the existing Metro Purple Line, including testing and commissioning.

The C1120 Contract is a Design-Build Contract with the C1120 Contractor being responsible for the final Design and Construction of the C1120 Contract’s scope of work. The Parties desire to cooperate so that, among other things: (1) the C1120 scope of work is completed in a safe and timely manner; (2) the City has assurances that it will receive reimbursements for its costs; (3) the City has assurances that the environmental and public safety impacts of the Project are mitigated

to reasonable and equitable levels; (4) the City has assurances that, unless the Parties agree otherwise, the LACMTA complies with the requirements and standards of the Beverly Hills Municipal Code; and (5) the LACMTA has assurances that the City will issue permit(s) and review submittals in a timely fashion and perform all appropriate inspections.

By this Agreement neither party is conceding any legal position that it may assert regarding its rights to use, regulate, or construct in the public right of way in the City of Beverly Hills.

This Memorandum of Agreement for the C1120 Contract addresses the following:

- Designation of the City Representative and LACMTA Representative and the development of an emergency contact list;
- Procedures that the LACMTA and the City will follow in reviewing and approving plans, submittals, and permit applications associated with the C1120 Contract Construction, which may include the planning, designing and effecting the Rearrangement of City Facilities, City utilities and various other public and private utilities, including certain work outside of City Rights-of-Way, such as demolition of buildings;
- Manner in which the City will be reimbursed for its costs for activities associated with the Project;
- Construction staging and traffic control requirements;
- Allowable work hours and workdays, including the process for requesting work outside of the allowable work hours/days;
- Noise and light spill mitigation measures;
- Tree removal and replacement procedures;
- Mitigation measures for businesses impacted by Construction;
- Air quality mitigation measures;
- Protections for Beverly Hills High School;
- Advance notification process for all construction activities, including any planned service interruptions, and establishment of a public phone line;
- Inspection during Construction and enforcement and remedies for violations of mitigation conditions;
- Operation and maintenance of City Facilities;
- Indemnity, warranties and insurance requirements;
- Federal and other requirements; and

- Penalties for delays.

ARTICLE II

Term Of Agreement And Definitions

The term of this Agreement shall commence on the Effective Date and shall terminate when all C1120 Contract work within the jurisdiction of the City is completed and any Rearrangement of City Facilities is inspected and accepted by the City and a notice of completion is finalized and recorded.

For the purposes of this Agreement, the following terms shall have the meanings set forth below:

- (a) “Betterment” is defined as an upgrade (*i.e.* increasing capacity, capability, durability, efficiency or function) to an existing City Facility, Replacement Facility or component thereof, which is specifically identified by the City as a Betterment and requested by the City to be incorporated into the Project, or which is requested by the City and identified as a Betterment by the LACMTA and which the Parties agree is a Betterment before construction of the Betterment (whether constructed by the LACMTA or by the City or by their respective contractors), which will increase or upgrade the service capacity, capability, appearance, efficiency or function of such City Facility or Replacement Facility over that which was provided by the corresponding existing City Facility or Conflicting Facility. A Betterment may also include a redesign, upgrade, or modification to the appearance of the Project’s Design. Notwithstanding the foregoing, the following shall not be considered Betterments:
- (i) An upgrade, which the Parties mutually agree, will be of direct and principal benefit to the Construction or operation of the Project;
 - (ii) An upgrade resulting from Design or Construction in accordance with applicable City Standards;
 - (iii) Measures to mitigate Construction impacts or environmental impacts identified in the Project’s Final Environmental Impact Report or Statement, any supplemental environmental reports or this Agreement and all attachments and exhibits herein;
 - (iv) Replacement of devices or materials no longer regularly manufactured with an equivalent grade or size (or as provided in the next sentence, a better grade or size), regardless of whether the replacement grade or size exceeds the City Standard. If an equivalent grade or size is not available, the next higher grade or size shall be used unless otherwise approved by the City Representative;
 - (v) A Replacement Facility that is the consequence of changes made by the LACMTA or its designers/contractors after the release of the RFP;
 - (vi) Any Replacement Facility that is equivalent to the City Facility being replaced or surrounding City Facilities; and
 - (vii) Compliance with any permit conditions.

- (b) “C1120” or “C1120 Contract” means the contract awarded by LACMTA for the Design and Construction of the stations and tunnels for Section 2 of the Purple Line Extension Project.
- (c) “C1120 Contractor” or “Contractor” means the design build contractor under the C1120 Contract, including its designers, engineers, consultants, and subcontractors who have been contracted to design and construct the C1120 scope of work.
- (d) “City Facility” means City Rights-of-Way and real or personal property under the ownership or the exclusive operation of the City. City Facilities may include, but are not limited to, public streets, curbs and gutters, sidewalks, traffic signals, signing, roadways, bridges, retaining walls, alleys, water lines, storm drains, sanitary sewers, parking lots, parks, public landscaping and trees, traffic control devices/systems, street lighting systems, street furniture, benches, trash cans and public, police and fire alarm systems. City Facility does not include utility lateral lines that extend from a main line into private property.
- (e) “City Representative” means the person or persons designated by the City Manager pursuant to Article III of this Agreement, to represent the City who shall manage and coordinate interactions between the City and the LACMTA concerning the Project and each component thereof in a timely manner, in accordance with Article III. City Representative may include a Consultant. The City Representative is authorized to bind the City where City approval is required under this Agreement, unless (i) otherwise specified herein; or (ii) the City Council requests to exercise such approval authority for a particular discretionary decision or decisions.
- (f) “City Rights-of-Way” means real property owned by the City, whether title is held in fee, easement, right-of-way, or otherwise, whether recorded or unrecorded, including prescriptive rights and licenses.
- (g) “City Standard” means the City’s rules, regulations, ordinances, practices and codes of the City, including, but not limited to, standards, plans, specifications, general provisions and approved materials for public works projects that the City has documented in writing or has previously implemented. City Standards may also include published standards of appropriate, recognized professional organizations or requirements of the State of California or Federal Government.
- (h) “Conflicting Facility” means an existing City Facility, which the City and the LACMTA determine is so situated as to require Rearrangement in order to design and construct or operate the Project without adversely impacting the operation and maintenance of that City Facility.
- (i) “Construction” means the work of removal, demolition, replacement, alteration, realignment, building, fabricating, landscaping of all City Facilities, Facilities, Replacement Facilities, and new fixed facilities to be built and systems and equipment to be procured and installed that are necessary to complete the Project and the C1120 Contract in accordance with approved plans and specifications.

- (j) “Construction Staging Plans” means construction phasing/sequencing plans, which may include Traffic Management Plans developed for the C1120 Contract.
- (k) “Consultant” means the person, persons or entity contracted by the City for the purpose of performing work on behalf of the City, which is necessary to meet the City’s obligations under this Agreement. Consultant does not refer to the “Independent Compliance Monitor” for monitoring sound and other conditions and mitigation measure requirements.
- (l) “Costs” shall mean all Direct and Indirect Costs incurred by the City and the LACMTA.
- (m) “Days” means calendar days including Saturdays, Sundays, and legal holidays. See also definition of Working Days.
- (n) “Design” means engineering, architectural and other design work and the resulting maps, plans, specifications, special provisions, drawings, calculations, computer software and estimates which are needed to construct the Project.
- (o) “Design Review” means the process of critical evaluation of plans and specifications by the LACMTA, the City and others as necessarily required to complete the C1120 Contract.
- (p) “Direct Costs” means labor costs, Consultant costs and costs of purchasing equipment and/or materials, without markup or overhead of any kind. Direct Costs may be determined by the City’s pre-existing labor costs standards which the City may revise on an annual basis.
- (q) “Effective Date” means the date set forth in the Preamble.
- (r) “Facility” means real or personal property now or in the future to be located within the City Rights-of-Way, including but not limited to, roadways, pipes, mains, services, meters, regulators and any equipment, apparatus and/or structure appurtenant thereto or associated therewith.
- (s) “Fiscal Year” means July 1 through June 30.
- (t) “Hazardous Material” means any material that meets the definition of hazardous waste, materials, or substances set forth in: (i) California Health and Safety Code Sections 25115, 25117, 25122.7, 25316, and 25281; (ii) the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901, *et seq.* (42 U.S.C. Section 6903); and (iii) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 6901.
- (u) “Independent Compliance Monitor” or “Compliance Monitor” means the LACMTA funded independent compliance monitor selected jointly by the LACMTA and the City to ensure compliance with the conditions and required mitigation measures for the Project pursuant to Article XVI of this Agreement.
- (v) “Indirect Costs” means administrative and overhead costs.

- (w) “LACMTA Representative” means the person designated by the Chief Executive Officer of the LACMTA pursuant to Article III of this Agreement to represent the LACMTA in all dealings with the City for purposes of this Agreement, in accordance with Article III. The LACMTA Representative is authorized to bind the LACMTA where LACMTA approval is required under this Agreement, unless otherwise specified herein.
- (x) “PDD Permit” means a permit approved by the City Council and issued by City staff that authorizes the LACMTA and its contractors to proceed with construction in a manner consistent with the Project Definition Documents submitted to and reviewed by the City.
- (y) “Project” means Section 2 of the Purple Line Extension Project within the City of Beverly Hills.
- (z) “Project Definition Documents” or “PDD” mean the C1120 Contract drawings, plans, and specifications provided to the City by the LACMTA, that define the anticipated scope of the C1120 Contract.
- (aa) “Rearrangement” means the alteration, removal, replacement, reconstruction, support or relocation of a City Facility or portion thereof or Facility or portion thereof, whether permanent or temporary, which facility the LACMTA determines must be rearranged in order to complete the Project.
- (bb) “Replacement Facility” means a facility, which is constructed or provided under the terms of this Agreement as a consequence of the Rearrangement of a Conflicting Facility or portion thereof.
- (cc) “RFP” means the Request for Proposals issued by the LACMTA in connection with the C1120 Contract.
- (dd) “School District” shall mean the Beverly Hills Unified School District.
- (ee) “Section 2” means the portion of the Purple Line Extension Project generally between La Cienega Boulevard and Avenue of the Stars.
- (ff) “Traffic Management Plan” means the various Worksite Traffic Control Plans and any other measures intended to mitigate traffic circulation, which may be included in Construction Staging Plans, for the various stages of Construction that the LACMTA may submit as part of its permit applications.
- (gg) “Wilshire/Rodeo Station” or “Station” shall refer to the proposed Purple Line subway station to be constructed substantially under Wilshire Boulevard generally between Beverly and Canon Drives within the City of Beverly Hills.
- (hh) “Working Days” or “Work Days” means those days that Beverly Hills City Hall is open for business.
- (ii) “Worksite Traffic Control Plan(s)” means the plans depicting the stages of traffic control for each stage of Construction for the C1120 Contract.

ARTICLE III

Designation Of The City Representative And The LACMTA Representative; Emergency Contact List

The City Manager, with the concurrence of the City Council, shall designate as the City Representative a person, persons, the holder of specified offices or positions or a third-party Consultant or Consultants to act as the City Representative for the Project. The City Representative(s) will have the responsibility to manage and coordinate the City interaction with the LACMTA concerning the Project and each component thereof in a timely manner. The City may change its designated representative(s) by providing seven (7) Days written notice to the LACMTA.

The Chief Executive Officer of the LACMTA shall designate a person, or the holder of a specified office or position, to act as the LACMTA Representative for the Project. The LACMTA Representative will have the responsibility to manage and coordinate the LACMTA's interaction with the City concerning the Project. The LACMTA may change its designated representative by providing seven (7) Days written notice to the City.

The City Representative(s) and the LACMTA Representative shall confer from time to time to coordinate the work required to complete the C1120 Contract.

The LACMTA Representative and the City Representative shall establish an emergency contact list. Contact information for all organizations involved in the Project or organizations that have Facilities in the Project area including agencies, utility companies, contractors, sub-contractors, consultants and any other entity shall be included. The Parties shall require that each organization shall designate an emergency contact process that provides for the availability of resources twenty-four (24) hours per Day/seven (7) Days per week in the event of an emergency.

ARTICLE IV

Permitting and Submittal Process

Concurrent with the City Council approval of this Agreement, the City Council has approved the PDD Permit with appropriate conditions of approval attached as Exhibit A.

The following process shall govern City review and approval of Design submittals that are consistent with the PDD Permit approved by the City Council:

- (a) Within ten (10) Working Days after receipt of a Design submittal (i) the City shall inform the LACMTA whether the documents, including the plans and specifications, are complete for the City's technical review purposes, and (ii) if not complete, the City shall so notify the LACMTA and shall return the submittals to the LACMTA together with an identification of those portions that are not complete and a description of the missing information listing the deficiencies.
- (b) Within thirty (30) Days after the City deems the Design submittal complete, City staff shall complete its review, and (i) approve the Design submittal or (ii) transmit its comments in the form of a comment matrix and annotated plans (as appropriate) to the LACMTA.

- (c) Before the thirty (30) Day review period ends, the City and the LACMTA may mutually agree to an extension of the review period. A request for an extension by either party shall not be unreasonably withheld.
- (d) If the LACMTA wishes to pursue a Design submittal that the City determines is not consistent with the City Council-approved PDD Permit, then within thirty (30) Days after City staff has completed its review of the Design submittal, an agenda item will be included on the City Council's agenda in connection with a regularly scheduled meeting of the City Council where the Council shall consider whether to approve the Design submittal. The City Council may vote on the Design submittal or continue the matter to another meeting of the City Council. During consideration of the Design submittal, the City Council is permitted to impose conditions of approval for protection of the public health, safety or welfare. A Design submittal shall be considered consistent with the City Council approved PDD Permit if, in the opinion of the City Representative, it does not change the purpose of the PDD Permit, is de minimis and will not have material effects on City Facilities or City services or material adverse construction effects on adjacent properties.
- (e) Within seventy-two (72) hours after approval of the Design submittal by the City Council, the City must issue a revised PDD Permit and/or transmit a letter to the LACMTA approving the Design submittal, which shall include any conditions of approval.

The provisions of subsections (a) through (e) of this Article will also apply to any re-submittal of Design submittals by the LACMTA, whether in response to a City notice or return of incomplete Design submittals, or in response to the City's comments. Re-submittals shall include the City's comment matrix, the City's annotated plans and confirmation of comment resolution. The LACMTA will use its best efforts to ensure that the City's comments are resolved prior to re-submittal. The LACMTA may conduct comment resolution meetings to address concerns with the City's comments for the purpose of reaching a satisfactory resolution.

The LACMTA, its consultants, its contractors, including the C1120 Contractor, and respective third parties will be responsible for errors and omissions in the application materials, including plans, specifications, submittals and all other related contract documents that they prepare. The City's exercise of its Design Review and approval rights hereunder is solely for the City's benefit, and the City hereby disclaims any representation or warranty based on or arising out of any such approval that the Design, plans, and/or specifications are constructible, free from errors or omissions, or in compliance with applicable laws.

All changes required to accommodate differing existing site conditions are the responsibility of the LACMTA, its consultants and contractors.

ARTICLE V

Permit Fees

All Costs (Direct and Indirect) incurred by City staff or its Consultant(s) as a result of permit issuance, including without limitation, plan and/or Design Review and approval, Construction

inspection, coordination, and testing, will be reimbursed by the LACMTA through reimbursement procedures as provided for in this Agreement (see Article XI). Except for the fees associated with the permits listed below, any fees imposed will be pursuant to City Standards in place at the time the fee is triggered. The City shall not enact new fees for the primary or sole purpose of imposing new fees on LACMTA or the Project.

The Design submittal and construction approval processes as set forth in this Agreement shall be in lieu of the requirements listed below. Any costs associated with the requirements listed below shall be reimbursed by LACMTA to the City through the procedures set forth in this Agreement:

- Excavation Permits
- Demolition Permits
- Potholing Permits
- Utility Permits
- Street Improvement Permits
- Encroachment Permits
- Exemptions from Holiday Season Restrictions
- Lateral Support Bonds
- Liability Insurance
- Street Damage Restoration Fees
- Engineering Process Fees
- Discharge of Excess Water into Street Permits
- Major Transit and Transportation Construction Impact Area Traffic Management Fees
- Peak Hour Exemption
- Lane Closure Permits (including Sidewalk Closure Permits)
- Staging Material Permits (Street or Sidewalk Closure)
- Overload Permits
- Storm Drain Permits
- Connection Permits
- Revocable Encroachment Permits
- Overload Permits
- Building Material Permits
- Tree Removal Permits
- Tree Prune or Root Prune Permits
- Tree Planting Permits

Nothing in this Article relieves the C1120 Contractor from its obligation to pay the City's Business License Tax.

The LACMTA represents that the C1120 Contractor must comply with the City's Dewatering Ordinance, found at Section 9-4-610 of the Beverly Hills Municipal Code. Unless the City and C1120 Contractor mutually agree to an alternative compliance option, the agreed upon method by which the C1120 Contractor shall satisfy its obligations under the Ordinance is by obtaining a dewatering permit from the City and paying an annual replenishment fee. The City shall annually

establish the replenishment fee amount, which shall be based on the City's cost (using Metropolitan Water District rates then in effect) to purchase an equivalent amount of water removed from the City Right-of-Way in furtherance of the Project, less the City's avoided costs to extract/pump and treat the water. The fee shall be paid by January 31st following each year that the C1120 Contractor undertakes dewatering activities.

ARTICLE VI

Design Criteria and Operation and Maintenance of City Facilities

The Design, Construction, Rearrangement, and/or relocation of temporary City Facilities, including utilities, street and sidewalk restoration, traffic control, and any repair, replacement, or other construction of City Facilities shall be made, at the LACMTA's sole responsibility and expense, to conform to the City Standards in effect at the time of PDD Permit issuance, except as mutually agreed between the City and LACMTA. The Design and Construction of street and sidewalk restoration, traffic control, tree restoration, and any repair, replacement or construction of any other City Facilities, except for City utilities, for permanent use thereafter shall be located and constructed in accordance with applicable City Standards in place 180 days prior to the time permanent Construction begins. The City Standards and procedure for permanently relocating City utilities shall be governed by Article XXII. No work shall cause a material increase to maintenance and/or operation costs of the City. The City agrees that it shall not adopt any new City Standards, or otherwise amend or supplement any existing City Standards, for the sole or primary purpose of delaying or frustrating the Project. In the event that the City adopts any new City Standard, or otherwise amends or supplements an existing City Standard, the City shall immediately thereafter give notice to the LACMTA of the new, amended, or supplemented City Standard.

LACMTA agrees to be responsible, at LACMTA's expense, for operation and maintenance of City Facilities and other Facilities placed into a temporary condition as a result of the Project. The responsibility includes financial responsibility for any water quality or other regulatory violations or other violations of law that result from operation and maintenance problems with the City Facilities or other Facilities while they are being operated and maintained by the LACMTA in a long-term, temporary condition and remedying the cause of any such violations. The responsibility for operation and maintenance begins when the existing City Facilities or other Facilities are modified in any way or if access to existing City Facilities or other Facilities is not available due to Project-related Construction. The LACMTA's responsibility for operation and maintenance ends when the City Facilities and other Facilities are relocated/rearranged to their permanent location (if required by the City) and accepted in accordance with Article XXI. LACMTA further agrees to coordinate with the City and conduct utility operation or maintenance, including regulatory compliance measures, when the City Facilities or other Facilities are in a temporary condition.

Notwithstanding the LACMTA's responsibility to operate and maintain City Facilities placed in a temporary condition as a result of the Project, the City may repair such facilities if, in the City's reasonable opinion, the LACMTA has not adequately or timely addressed a malfunction, defect or maintenance problem with the City Facility. The LACMTA shall reimburse the City for all reasonable Costs associated with the City's repair of a temporary City Facility. The LACMTA shall provide the City access to repair or maintain all City Facilities.

ARTICLE VII
Betterments

At any time the City may request a Betterment to a City Facility or to LACMTA infrastructure, provided that a Betterment of LACMTA infrastructure requires LACMTA approval, which shall not unreasonably be withheld. Within forty-five (45) Days of the City's request, LACMTA shall clearly identify to the City any Design or Design change requested by the City that the LACMTA considers a Betterment. If the LACMTA fails to do so, then the City's requested Design or Design change shall not be considered a Betterment. Any Betterment requested by City staff is to be approved by City Council.

Any Design or Design change initiated by the City shall specifically identify any Betterment included in such Design or Design change.

It is understood and agreed that no Betterment may be performed in connection with the Project (whether designed or constructed by the City or by the LACMTA) which is incompatible with the Project or which cannot be performed within the constraints of applicable law, and/or any applicable governmental approvals. The City or a third party designated by the City shall bear the Cost of all Betterments. The LACMTA shall make all commercially reasonable efforts to obtain the best possible price for all Betterments requested by the City. The City may participate directly in any negotiations between the LACMTA and the Contractor concerning the price of any Betterments.

ARTICLE VIII
City Rights-of-Way And Cost Liability

The LACMTA shall be responsible for the cost of all Construction associated with the Project and C1120 Contract, including the cost of all Rearrangements and restoration of the City Rights-of-Way. If City Facilities will be relocated from the existing City Rights-of-Way to a new location that falls outside existing City Rights-of-Way, then the LACMTA, at no cost to the City, shall convey to the City a new right-of-way approved by the City for such relocated City Facilities.

ARTICLE IX
Hazardous Materials

Upon discovery of Hazardous Material in connection with any work associated with the Project, the LACMTA shall immediately notify the City regarding the proper course of action for disposition of the Hazardous Material. The C1120 Contractor will handle, treat, and dispose of encountered Hazardous Materials in accordance with specifications in the C1120 Contract. The LACMTA and C1120 Contractor will comply with all laws regarding the disposition of any Hazardous Material disturbed, and the City shall not be responsible for any costs associated with such compliance.

ARTICLE X
“As-Built” Drawings

The LACMTA shall maintain a set of “as-built” plans and “working drawings” of C1120 Contract Construction performed by the LACMTA during the progress of Construction, which shall be subject to City review. The LACMTA shall cause the Contractor to update the plans to incorporate all City-approved changes. Once the C1120 Contract Construction is approved by the City, the LACMTA shall arrange for the transfer of reproducible “as-built” drawings showing all City Facilities installed by the performing party within sixty (60) Days. All “as-built” plans shall be in a format that conforms to the electronic formats in use by the City.

ARTICLE XI
Manner In Which The City Will Be Reimbursed For Costs

The LACMTA agrees to reimburse the City in the manner provided by this Agreement for its Costs (Direct and Indirect) for all staff and Consultants performing work associated with the Contract consistent with this Agreement. Indirect Costs shall be computed based upon the maximum rates allowable under federal and/or state law. Unless the Internal Revenue Service or the California Public Utilities Commission issues regulations or rulings to the contrary, reimbursable Costs will not include taxes purportedly arising or resulting from the LACMTA’s payments to the City under this Agreement.

The City agrees to procure, and the LACMTA agrees to reimburse the City for, a third-party Consultant or Consultants who will assist the City in meeting its obligations and exercising its rights under this Agreement, except for rights exercised under Article XXX (“Resolution of Disputes”). The Consultant(s) may include a team of individuals who provide a variety of services on behalf of the City, which, at minimum, shall include the following: 1) coordinating and facilitating plan review/approval and Construction management/observation; 2) observing, inspecting and approving the installation of City Facilities; 3) monitoring and enforcing the mitigation control measures provided in the Final Environmental Impact Report, this Agreement and its attachments and exhibits; and 4) conducting community outreach. In order to perform all services at a sufficient level, with the City’s approval, the Consultant may hire a sub-consultant or sub-consultants to perform specific services when necessary. The LACMTA shall only reimburse the City for Consultant(s) work that is performed in furtherance of the Project and the Contract.

City staff may oversee, review or comment on the work of the Consultant(s) and the City shall be entitled to reimbursement for such work. The LACMTA agrees to reimburse the City for Direct and Indirect Costs of City staff performing work or providing services associated with the Project and the Contract.

To assist the LACMTA and the City in estimating the level of service to be provided for work associated with the Contract which will require work by the City and its Consultant(s) pursuant to this Agreement, the LACMTA and the City will cooperate to develop a mutually agreeable annual work plan for each Fiscal Year for which such work by the City will be required, in accordance with the following provisions:

- (a) The LACMTA has previously approved the City's Fiscal Year 2017-18 annual work plan for the Project, including the scope of work required by this Agreement, via a Form 60. Concurrent with the approval of this Agreement, the LACMTA will approve the City's Fiscal Year 2018-19 annual work plan for the Project, including the scope of work required by this Agreement, via a Form 60.
- (b) Not later than April 28 of 2019, for Fiscal Year 2019-20 and each calendar year thereafter during the term of this Agreement, the LACMTA shall provide City with information regarding anticipated Project requirements. The LACMTA's provided information shall include a list of each item of work that the LACMTA anticipates to request from the City for the Contract or the work item that the LACMTA anticipates to request from the City. Within thirty (30) Working Days after receiving the required information from the LACMTA, the City shall submit a preliminary annual work plan to the LACMTA for required work by the City during the upcoming Fiscal Year, which would include an estimated amount of money, via a Form 60 (a copy of which is attached as Exhibit C to this Agreement), that the City will require for reimbursement of work performed and purchase of requested items.
- (c) The Form 60 shall include an explanation of overhead rates for the City, including the method of computation and application of overhead expenses.

Completion of the Form 60 is required by the LACMTA to authorize the performance of all work and the purchase of all materials and equipment required under the terms and conditions of this Agreement. The City and the Consultant(s) may perform any work so authorized. The City shall not be authorized to do any work, and shall not be paid, credited or reimbursed for Costs or expenses associated with any work, not outlined in the Form 60, unless otherwise mutually agreed in writing. The City shall not be required to perform any work not included in the Form 60 or not otherwise to be reimbursed pursuant to written agreement. The City shall be reimbursed for all Costs for work included in the Form 60. The Parties will negotiate in good faith an amendment to the Form 60 if it becomes apparent that the City will exceed the Form 60's estimates. Notwithstanding the foregoing, the City shall be reimbursed for all reasonable Costs associated with the repair of a temporary City Facility or Facility.

The City shall submit billings for reimbursement of Costs on a monthly basis. Each billing shall be addressed to the LACMTA Representative, and shall include a certification that the charges identified in such billing were appropriate and necessary to perform the referenced work, and have not previously been billed or paid. The LACMTA shall reimburse the City for all undisputed amounts in each submitted billing within thirty (30) Days of receipt and shall resolve any disputes and reimburse the City for all remaining amounts within sixty (60) Days of receipt.

Except in cases of previously unscheduled Construction or emergencies, City shall provide reasonable notice to the LACMTA prior to incurring overtime rates for City staff time.

City shall be reimbursed by the LACMTA for all Costs incurred in developing and executing this Agreement and Consultant(s) contracts within thirty (30) Days of the date of this Agreement.

ARTICLE XII
Construction Staging, Traffic Control And Parking Requirements

Construction staging and traffic control requirements (including lane closures, street closures and hauling restrictions) shall be in accordance with the standards set forth in: this Article; all Construction Staging Plans, Traffic Management Plans, and Worksite Traffic Control Plans; the LACMTA's completed PDD Permit and submittals for the C1120 Contract at issue; and any conditions of approval included in a City-issued permit. To the extent that there is any conflict between those documents, the standards included in this Article shall control over the conditions in the Construction Staging Plans, Traffic Management Plans, and Worksite Traffic Control Plans, the PDD Permit and any other City-issued permits. The City-approved Construction Staging Plans, Traffic Management Plans, and Worksite Traffic Control Plans shall all control over the PDD Permit and any other City-issued permits. Standards of other City-issued permits shall control over the PDD Permit. Notwithstanding the foregoing, a more restrictive standard in a later issued permit or plan shall control over a conflicting standard in an earlier issued permit or plan.

The LACMTA and its consultants and contractors shall develop and submit to the City Worksite Traffic Control Plans that demonstrate vehicle, public safety vehicle, and pedestrian access within the Project area or approved detours at all times. The City Council hereby approves, as part of the PDD Permit, the following minimum criteria for Worksite Traffic Control Plans to be used when the LACMTA closes any traffic lanes. If after City Council approval, conditions necessitate additional criteria for Worksite Traffic Control Plans or revised Worksite Traffic Control Plans to protect public safety or accommodate business or resident needs that are immediately required, then such plans may be approved by the City Representative.

Using the traffic management system described in Exhibit A and other available monitoring devices, the City will at all times monitor traffic to ensure that the Worksite Traffic Control Plans are adequately mitigating Construction-related traffic impacts. If the City determines that traffic impacts have not been mitigated, then, at any time, the City's traffic engineer may revise the Worksite Traffic Control Plans to incorporate additional mitigation measures or to modify traffic control.

Working with City residents, City staff will develop an order of priority for traffic mitigation measures that will be included in City-approved Worksite Traffic Control Plans. The order of magnitude shall be developed within three (3) months of the effective date of this Agreement, but only after conducting a public meeting with City residents. The order of priority may only be changed by the City after consultation with City residents.

The LACMTA shall comply with the following requirements:

- (a) Except as provided in the work hours matrix in Article XIII, the minimum traffic lane requirements for arterial streets (Beverly Drive and Wilshire Boulevard) impacted by Construction activities shall be as follows:
 - Wilshire Boulevard: (1) three lanes in each direction between the hours of 7 AM and 9 AM (except when K-rail is permitted on Wilshire Boulevard pursuant to a City-approved Worksite Traffic Control Plan, in which case the minimum traffic

lane requirements are two lanes in each direction); (2) two lanes in each direction between the hours of 9 AM and 4 PM; (3) three lanes in each direction between the hours of 4 PM and 8:15 PM (except when K-rail is permitted on Wilshire Boulevard pursuant to a City-approved Worksite Traffic Control Plan, in which case the minimum traffic lane requirements are two lanes in each direction); and (4) one lane in each direction between the hours of 8:15 PM and 7 AM. With prior approval of the City, Wilshire Boulevard may be reduced to two lanes in each direction when pile installation and ground improvement (e.g., jet grouting) activities occur behind K-rail, provided that the City will not permit lane reductions until the Contractor is prepared to immediately begin Construction on those activities and then only for the least amount of time and area necessary in order to effectuate the planned Construction.

- Beverly Drive: (1) two lanes in each direction between the hours of 7 AM and 9 AM; (2) one lane in each direction between the hours of 9 AM and 4 PM; (3) two lanes in each direction between the hours of 4 PM and 8 PM; and (4) one lane in each direction between the hours of 8 PM and 7 AM.

These minimum traffic requirements may be varied by a City-approved Worksite Traffic Control Plan that protects the surrounding residential and business neighborhoods and promotes the free flow of traffic along the arterial streets.

- (b) The minimum traffic lane requirements for all other commercial and residential streets impacted by Construction activities shall be one lane in each direction, unless varied by a City-approved Worksite Traffic Control Plan that protects the surrounding residential and business neighborhoods.
- (c) Access shall be maintained to and from all alleys at one or both ends of the alley. If an alley is obstructed at one end such that a turnaround by any vehicle is not feasible, then at its sole expense the LACMTA will provide flaggers to control the alley.
- (d) The Worksite Traffic Control Plans shall be designed to minimize traffic impacts on residential streets.
- (e) Parking, staging, or queuing of Project-related vehicles, including workers' vehicles, trucks, and heavy vehicles, shall be prohibited on City streets at all times, including for miscellaneous trips, outside of a permitted workspace identified in a City-approved Worksite Traffic Control Plan or if otherwise approved by the City. The LACMTA shall notify the City thirty (30) Days in advance of any agreement for off-street parking with any owner of a private parking facility within the City. In an effort to assist the LACMTA meet its obligations hereunder, the City will provide the LACMTA with ten (10) parking spaces in a City-owned parking facility near the Project's staging yards during Construction.
- (f) The Construction Staging Plans or Worksite Traffic Control Plans developed by the C1120 Contractor shall include a parking management plan that observes the conditions set forth in this Agreement. The Worksite Traffic Control Plans shall also address how Construction

vehicles and trucks will arrive at the worksite, queue, and enter and exit the Construction area along the designated haul route.

- (g) On-street parking may not be used by the LACMTA or the C1120 Contractor for their vehicles or equipment unless the City and the LACMTA agree that such use is necessary. If the Parties agree that such use is necessary, then a parking management plan satisfactory to the City Representative shall provide for equivalent overnight replacement parking for removed residential permit parking spots at the nearest possible location to the location where parking has been removed. In the event that any on-street metered parking spaces are removed because the work is directly beneath the subject parking space or a Worksite Traffic Control Plan or other form of traffic control requires the removal of the parking space, including spaces removed by the City to provide loading or valet zones for impacted businesses, the LACMTA shall reimburse the City for the City's lost parking meter revenue due to the removal of the metered parking space. Additionally, the LACMTA shall mitigate the loss of metered parking spaces by making available an equivalent number of parking spaces in an off street parking facility located along Wilshire Boulevard between Rodeo Drive and S. Canon Drive. If off street parking is not available along Wilshire Boulevard due to a street closure, then the LACMTA shall procure parking spaces in the nearest off street available facility. The parking spaces shall be provided for public use at a rate no greater than the metered parking rate. The LACMTA shall provide public notice of the availability of the alternative parking spaces through consultation with businesses and the use of signage. The LACMTA shall further post appropriate signage on on-street metered parking spaces when Construction activities may restrict the use of a metered parking space.

- (h) Temporary Street Closures and Detours:

Temporary full street closures are permitted upon thirty (30) days' notice to the City only for the following work activities:

- Installation of piles across Wilshire Boulevard;
- Installation of decking along Wilshire Boulevard;
- Installation of piles and decking for appendages along and across Beverly Drive, S. Canon Drive, and Reeves Drive; and
- Removal of decking.

The City and LACMTA shall meet and confer ninety (90) days prior to the planned date of the temporary full street closure to coordinate community outreach for the closure. Such community outreach will include at least one meeting with businesses and residents to discuss and receive comments for each temporary full street closure.

Temporary directional street closures for ground improvement activities on residential streets (e.g., Moreno Drive) may be permitted with prior approval from the City, provided that the LACMTA gives thirty (30) days' notice to the School District and the Construction

is conducted during Beverly Hills High School's summer holiday schedule. The minimum traffic lane requirements at all other times shall be one lane in each direction.

Additional activities may be conducted concurrently with the above activities during a full street closure. The LACMTA shall comply with the work hours provided for in Article XIII of this Agreement during any temporary street closure. All detour routes during temporary street closures shall be subject to review and approval by the City. Detour routes must not use residential streets as depicted in Exhibit D and the City-approved Worksite Traffic Control Plans. Advance public notification of street closures in accordance with the notification process outlined in this Agreement is required.

- (i) The Construction Staging Plans and Worksite Traffic Control Plans shall include Pedestrian Access Plans which shall be approved by the City. Pedestrian Access Plans shall be subject to the following minimum criteria:
- Pedestrian access to buildings shall be maintained during all times that the buildings are open to the public.
 - The LACMTA shall maintain all crosswalks, unless infeasible to do so. Whenever the LACMTA or its Contractor removes a crosswalk from service, the LACMTA shall establish and maintain temporary replacement crosswalks as close as practicable to the original crosswalk locations unless the City determines that a replacement crosswalk is not necessary to maintain an adequate level of service. Replacement crosswalks shall be identified and controlled by wayfinding signs approved by the City.
 - The Pedestrian Access Plans shall include a program of wayfinding signage.
 - The sidewalk shall be used exclusively for pedestrian use and shall not be used for Construction activities or staging, unless Construction is taking place within the sidewalk.
 - Sidewalks that are being maintained in a temporary condition shall meet all applicable safety standards and meet the following criteria:
 - Sidewalks in a temporary condition in excess of one month shall be constructed of pre-cast concrete panels or cast in place concrete; unless pre-cast or cast in place concrete is infeasible and the City grants approval to use metal replacement panels, asphalt, or other satisfactory material;
 - Sidewalks in a temporary condition up to one month shall be covered on a temporary basis by a material satisfactory to the City; and
 - Asphalt shall not be used as a temporary sidewalk material unless approved in advance by the City.

- At all times the LACMTA shall cause the C1120 Contractor to protect pedestrians from Construction-related debris, dust, and noise, and such protection may include the use of dedicated pedestrian barriers.
- Temporary sidewalks and any sidewalk adjacent to Construction activities shall be illuminated to City Standards in order to protect public safety.
- Temporary lighting shall be set to turn on automatically when ambient light falls below City Standards.
- Sidewalks that are being maintained in a temporary condition shall meet then current standards required by the Federal Americans with Disabilities Act and similar California laws for sidewalks being maintained in a temporary condition.
- Temporary street light and traffic signal foundations outside of the Construction work zones shall be wrapped in an aesthetically pleasing material satisfactory to the City and changed out periodically. Overhead electrical wiring shall be maintained in a neatly bundled condition.
- Sidewalk closures in accordance with an approved Construction Staging Plan or Worksite Traffic Control Plan are permitted only when necessary to facilitate C1120 Contract work and when approved by the City.
- The LACMTA will provide crossing guards at locations requested by the City when crosswalks or sidewalks are closed.
- Unless subject to an approved closure or an approved width reduction, the minimum sidewalk width shall be five (5) feet and additional width shall be required as necessary to protect the public safety and the operational needs of impacted properties within the Project area, when requested by the City. The C1120 Contractor shall endeavor to maintain the maximum width of sidewalk possible.

(j) Preliminary Haul routes and Overload routes:

Haul routes and overload/oversized vehicle routes must be reviewed and approved by the City. Hauling is prohibited on the residential portions of City streets. Hauling is prohibited between the hours of 7 AM – 9 AM and 4 PM – 7 PM). The following streets are designated for use by vehicles exceeding a maximum gross weight, including the vehicle and its load, of three (3) tons:

La Cienega Boulevard;

Wilshire Boulevard; and

Robertson Boulevard (only if approved by the City Representative because other haul routes are impracticable)

The City may restrict one or more of the above haul routes during special events within the City or situations when lane restrictions affect a haul route, except that the City must leave open at least one haul route at all times.

Additional haul routes may be approved by the City Council, provided that the routes are approved City haul routes and consistent with the Final EIR.

- (k) The LACMTA shall at all times provide adequate street access to public safety vehicles, including when lane or street closures are in place. All Worksite Traffic Control Plans shall demonstrate the manner in which public safety vehicles access properties within the Project area vicinity.
- (l) The LACMTA shall provide adequate street access to City service vehicles, including but not limited to trash pickup and street sweeping service vehicles, during planned service times.
- (m) Prior to the start of any street piling activities, but after January 1, 2019, at its own expense the LACMTA, through the C1120 Contractor, shall design and construct a temporary, twenty (20) feet tall sound wall across N. Canon Drive at Wilshire Boulevard to improve Construction operations and mitigate Construction traffic and noise impacts. The sound wall shall have a wall assembly of STC-25 or greater, and the ability to reduce noise by at least 5 dBA. The LACMTA shall also rearrange Crescent Drive, Clifton Way, and N. Canon Drive with traffic control, signage, and striping, and other Facilities and improvements identified in a City-provided design plan to facilitate the temporary use of the area as a cul-de-sac. The LACMTA shall remove the sound wall and associated pilings and restore the street and traffic controls at the conclusion of Construction, unless the City allows a traffic control device to remain in place.
- (n) The LACMTA shall reimburse the City for the Cost of traffic control officers (TCOs) to assist in mitigating cut-through traffic on residential streets. The LACMTA shall also reimburse the City for the Cost of TCOs for all City-approved special events impacted by Construction.
- (o) The LACMTA shall discontinue the use of LACMTA bus stops within the work zone when lane or street closures are in place.

Prior to Construction, the LACMTA will establish monitoring stations across residential streets and other non-arterial streets designated by the City (“Designated Streets”) to determine pre-existing traffic levels along those Designated Streets (“Baseline Traffic Levels”). Thirty (30) Days after the LACMTA commences Construction, periodically thereafter at least every sixty (60) Days when lane restrictions are in place, and at times of any full street closures, the City shall review traffic levels on those Designated Streets. If the City finds that Construction-related impacts have caused a material amount of traffic to divert onto the Designated Streets, then the City shall notify the LACMTA of this traffic condition. Thereafter, the Parties shall work collaboratively to develop and implement additional mitigation intended to reduce street traffic onto the Designated Streets caused by Construction, to the maximum extent practicable, levels that meet Baseline Traffic Levels. Such additional mitigation will be developed and implemented at the expense of

the LACMTA, and the City may also contribute funding from the Mitigation Fund defined in Article XVII for such purposes. If after implementation of the additional mitigation the City finds that a material amount of traffic continues to divert onto the Designated Streets due to Construction, the City may engage the services of a traffic engineer to conduct a study of traffic levels and develop further mitigation measures to reduce traffic on the Designated Streets. The LACMTA shall pay for the monitoring, the services of this traffic engineer, and mitigation of Construction related impacts. For the purposes of this paragraph, a material amount of diverted traffic shall consist of the following percentage increases over Baseline Traffic Levels:

Baseline Total Traffic Levels	ADT Increase Caused By Construction
Average Daily Trips (ADT) less than 2,000	16%
ADT greater than 2,001 but less than 4,000	12%
ADT greater than 4,001 but less than 6,750	8%
ADT greater than 6,750	6.25%

ARTICLE XIII

Allowable Work Hours And Workdays

Allowable work hours and workdays, including after hours construction, holiday moratorium exceptions and peak hour exemptions shall be in accordance with the standards set forth in: this Article; the PDD Permit and submittals for the C1120 Contract; and any conditions of approval included in a City-issued permit. To the extent that there is any conflict between those documents, the standards of this Article shall control over standards included in the PDD Permit and submittals for the C1120 Contract and any other City-issued permit. Conditions of other City-issued permits shall control over the PDD Permit and submittals for the C1120 Contract. Notwithstanding the foregoing, a more restrictive standard in a later issued permit or plan shall control over a conflicting standard in an earlier issued permit or plan.

The City and the LACMTA agree that the following shall apply, unless the Parties agree that it is unsafe to perform the scope of work in question under the requirements below:

Construction Activity	Weekdays	Weekends
Engineering (Survey / Potholing / Geotechnical Borings / Instrumentation & Monitoring), unless in conjunction with another activity listed below	Wilshire: 7:00am to 4:00pm 8:00pm to 7:00am*	Wilshire & Off Wilshire: 8:00am to 7:00pm*
Well installation and dewatering activities occurring outside K-rail enclosures	Off Wilshire: 8:00am to 6:00pm 8:00pm to 7:00am*	
Utility relocations & new utility services	9:00am to 4:00pm, unless conducted with another construction activity in	10:00am to 6:00pm*, unless conducted with another construction activity in which

	<p>which case the hours for that activity apply</p> <p>8:00pm to 7:00am*</p>	<p>case the hours for that activity apply</p>
<p>Pile installation & ground improvement along Wilshire/well installation and dewatering activities (behind K-rail enclosures)</p>	<p>8:00am to 9:00pm</p> <p>Breakdown, clean-up and other non-drilling activities may occur between 9:00pm and 11:00pm.</p>	<p>8:00am to 9:00pm</p> <p>Breakdown, clean-up and other non-drilling activities may occur between 9:00pm and 11:00pm.</p>
<p>Ground improvement on residential streets</p>	<p>8:00am to 6:00pm</p>	<p>Not Permitted</p>
<p>Pile installation (across Wilshire, Beverly, & S. Canon)</p>	<p>Not Permitted</p>	<p>7:00am to 8:00pm</p> <p>Breakdown, clean-up and other non-drilling activities may occur between 8:00pm and 10:00pm.</p>
<p>Deck installation in the public right-of-way</p>	<p>Friday 8:00pm to Monday 7:00am (59 hours)</p>	<p>Friday 8:00pm to Monday 7:00am (59 hours)</p>
<p>Activities that support deck installation in the staging yard that occur within the public right-of-way</p>	<p>7:00am to 4:00pm</p> <p>8:00pm to 7:00am*</p>	<p>8:00am to 6:00pm</p> <p>6:00pm to 8:00am*</p>
<p>Access through deck panels for excavation</p>	<p>7:00am to 4:00pm</p> <p>Additional or alternate work hours may be approved by the City Council when and if the LACMTA or the Contractor provides a noise study to the City, which finds that excavation work occurring between 4:00pm and 7:00am will comply with the Municipal Code and not cause an unreasonable impact to surrounding residential, transient occupancy, and business uses. The City Council will review the noise study and may approve additional work hours and conditions during those hours. The Independent Compliance Monitor will have the ability to stop nighttime excavation in</p>	<p>8:00am to 6:00pm</p> <p>Additional or alternate work hours may be approved by the City Council when and if the LACMTA or the Contractor provides a noise study to the City, which finds that excavation work occurring between 6:00pm and 8:00am will comply with the Municipal Code and not cause an unreasonable impact to surrounding residential, transient occupancy, and business uses. The City Council will review the noise study and may approve additional work hours and conditions during those hours. The Independent Compliance Monitor will have the ability to stop nighttime excavation in</p>

	<p>accordance with Article XVII.</p> <p>If excavation between 4:00pm and 7:00am causes an unreasonable impact to the surrounding residential and business neighborhoods, additional mitigation will be added to the construction work plan for that activity. If the unreasonable impact continues despite further mitigation, the City may require that activity to be conducted between 7:00am and 4:00pm or such other hours as determined by the City. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.</p>	<p>accordance with Article XVII.</p> <p>If excavation between 4:00pm and 7:00am causes an unreasonable impact to the surrounding residential and business neighborhoods, additional mitigation will be added to the construction work plan for that activity. If the unreasonable impact continues despite further mitigation, the City may require that activity to be conducted between 7:00am and 4:00pm or such other hours as determined by the City. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.</p>
<p>Access through deck panels for occasional material delivery and utility maintenance</p>	<p>9:00am to 4:00pm</p> <p>9:00pm to 7:00am The LACMTA shall present to the City a construction work plan, which shall contain noise, light and other types of targeted mitigation measures, for each activity conducted during these hours demonstrating that the activity will not have an unreasonable impact on the surrounding residential and business neighborhoods. The City and the LACMTA shall jointly agree on the contents of each construction work plan. If any activity during these hours causes an unreasonable impact to the surrounding residential or business neighborhood, additional mitigation will be added to the construction work plan for that activity. If the unreasonable impact continues despite further mitigation, the City may require that activity to be</p>	<p>8:00am to 6:00pm</p> <p>9:00pm to 7:00am The LACMTA shall present to the City a construction work plan, which shall contain noise, light and other types of targeted mitigation measures, for each activity conducted during these hours demonstrating that the activity will not have an unreasonable impact on the surrounding residential and business neighborhoods. The City and the LACMTA shall jointly agree on the contents of each construction work plan. If any activity during these hours causes an unreasonable impact to the surrounding residential or business neighborhood, additional mitigation will be added to the construction work plan for that activity. If the unreasonable impact continues despite further mitigation, the City may require that activity to be</p>

	<p>conducted exclusively during the following hours: 9:00am to 4:00pm. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.</p>	<p>conducted exclusively during the following hours: 8:00am to 6:00pm. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.</p>
<p>Work conducted in the staging yards to support Station Construction or other work within the staging yards</p>	<p>8:00am to 8:00pm</p> <p>8:00pm to 8:00am. The LACMTA shall present to the City a construction work plan, which shall contain noise, light and other types of targeted mitigation measures, for each activity conducted during these night hours demonstrating that the activity will not have an unreasonable impact on the surrounding residential and business neighborhoods. The City and the LACMTA shall jointly agree on the contents of each construction work plan. If any activity during these hours causes an unreasonable impact to the surrounding residential or business neighborhood, additional mitigation will be added to the construction work plan for that activity. If the unreasonable impact continues despite further mitigation, the City may require that activity to be conducted exclusively during the following hours: 8:00am to 8:00pm. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.</p> <p>If work conducted in the staging yards to support Station Construction or other work within the staging yards is limited to 8:00am to 8:00pm, then any dependent</p>	<p>8:00am to 8:00pm</p> <p>8:00pm to 8:00am. The LACMTA shall present to the City a construction work plan, which shall contain noise, light and other types of targeted mitigation measures, for each activity conducted during these night hours demonstrating that the activity will not have an unreasonable impact on the surrounding residential and business neighborhoods. The City and the LACMTA shall jointly agree on the contents of each construction work plan. If any activity during these hours causes an unreasonable impact to the surrounding residential or business neighborhood, additional mitigation will be added to the construction work plan for that activity. If the unreasonable impact continues despite further mitigation, the City may require that activity to be conducted exclusively during the following hours: 8:00am to 8:00pm. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.</p> <p>If work conducted in the staging yards to support Station Construction or other work within the staging yards is limited to 8:00am to 8:00pm, then any dependent</p>

	work requiring access through the deck panels for material delivery or utility maintenance on Wilshire Boulevard may be performed from 9:00am to 8:00pm while maintaining two lanes in each direction, if required.	work requiring access through the deck panels for material delivery or utility maintenance on Wilshire Boulevard may be performed from 8:00am to 8:00pm while maintaining two lanes in each direction, if required.
Deck Removal in the public right-of-way	Friday 8:00pm to Monday 7:00am (59 hours)	Friday 8:00pm to Monday 7:00am (59 hours)
Activities that support deck removal in the staging yard that occur within the public right-of-way	7:00am to 4:00pm 8:00pm to 7:00am*	8:00am to 6:00pm 6:00pm to 8:00am*
Street Restoration behind concrete barriers for curb, gutter, bus pad and sidewalk	8:00am to 9:00pm Breakdown, clean-up and other quiet activities may occur between 9:00pm and 11:00pm. 11:00pm to 8:00am*	8:00am to 9:00pm Breakdown, clean-up and other quiet activities may occur between 9:00pm and 11:00pm. 11:00pm to 8:00am*
Utility restoration work	7:00am to 4:00pm 8:00pm to 7:00am*	8:00am to 6:00pm 6:00pm to 8:00am*
Final street restoration	7:00am to 4:00pm 8:00pm to 7:00am*	8:00am to 6:00pm 6:00pm to 8:00am*

For activities not shown in the table above, the default work hours shall be as follows:

Weekdays	Weekends
7:00am to 4:00pm	8:00am to 6:00pm
8:00pm to 7:00am*	6:00pm to 8:00am*

The work hours designated by an asterisk may be permitted only for the following activities and by pre-approval of the City:

- Construction that will create planned service interruptions for water, electrical power, and sewer;
- Construction activities requiring the reduction of available traffic lanes on Wilshire Boulevard to one lane in either direction;

- Construction where the work zone is located in the sidewalk and building entrances or adequate pedestrian access cannot be provided; and
- Construction activities when the work zone requires the complete closure of driveways.

For those activities when Construction is permitted to begin at 7 AM, traffic control for those activities may begin at 6:30 AM on Wilshire Boulevard. No other Construction is permitted during this one half hour time period.

Full Street Closure Completion Incentives

The following activities shall be completed exclusively during continuous weekends when Wilshire Boulevard or Beverly Drive, as applicable, will be fully closed to traffic:

- Deck installation along Wilshire Boulevard and pile installation across Wilshire Boulevard;
- Deck removal along Wilshire Boulevard;
- Deck and pile installation along and across Beverly Drive; and
- Deck removal along and across Beverly Drive.

The LACMTA shall pay the City fifty thousand dollars (\$50,000) per day, excluding a Friday or Monday, that the C1120 Contractor must close Wilshire Boulevard or Beverly Drive, as the case may be, in order to continue work beyond the respective number of authorized weekends for each phase of work (e.g., beginning the Saturday of the 14th weekend for deck installation along Wilshire Boulevard and pile installation across Wilshire Boulevard), in accordance with the following schedule:

- Deck installation along Wilshire Boulevard and pile installation across Wilshire Boulevard (collectively, 13 weekends);
- Deck removal along Wilshire Boulevard (13 weekends);
- Deck and pile installation along and across Beverly Drive (collectively, 5 weekends); and
- Deck removal along and across Beverly Drive (5 weekends).

The City shall submit an invoice to the LACMTA for any amounts incurred pursuant to this subsection, and the LACMTA shall pay the invoice within thirty (30) days of receipt. Funds received by the City for this purpose shall be expended on activities or programs reasonably related to mitigating or preventing construction impacts to businesses or residents. The LACMTA shall not be required to make payments to the City pursuant to this paragraph if the delay is caused by a Permitted Delay as defined in Article XXIX. If the LACMTA believes that a delay is caused by a Permitted Delay, the LACMTA shall provide documentation to the City demonstrating the basis for this conclusion accompanied by all available supporting evidence within thirty (30) Days of receipt of the City's invoice. If the City, after reviewing the evidence, finds that the delay was not caused by a Permitted Delay, then the Parties shall resolve the dispute in accordance with Article XXX.

As provided in Article V and Exhibit A, the C1120 Contractor must pay the City's Business License Tax in accordance with Article 2, Chapter 1, Title 3 of the Beverly Hills Municipal Code. For each day, excluding a Friday or Monday, that the C1120 Contractor completes each phase of work prior to the conclusion of the number of authorized weekends in accordance with the following schedule, the C1120 Contractor shall receive a credit of twenty-five thousand dollars (\$25,000) against the C1120 Contractor's total Business License Tax liability:

- Deck installation along Wilshire Boulevard and pile installation across Wilshire Boulevard (collectively, 9 weekends);
- Deck removal along Wilshire Boulevard (9 weekends);
- Deck and pile installation along and across Beverly Drive (collectively, 3 weekends); and
- Deck removal along and across Beverly Drive (3 weekends).

The C1120 Contractor shall not receive a credit if the work is completed on the Sunday of the final Authorized Weekend for each phase of work. Under no circumstances shall the total credit value exceed the Contractor's total Business License Tax liability.

If a holiday moratorium falls on a Friday, Saturday, Sunday, or Monday, then the C1120 Contractor will not close Wilshire Boulevard or Beverly Drive, as the case may be, for the weekend, and that weekend will not count against the authorized weekends for the phase of work. Wilshire Boulevard and Beverly Drive shall remain fully open during this period. Upon request by the C1120 Contractor, the City may permit the C1120 Contractor to work over a weekend that includes a holiday moratorium, and that weekend shall count against the number of weekends authorized for the respective phase of work. The C1120 Contractor shall submit the request to the City six (6) months prior to the beginning of such phase of work.

The LACMTA shall provide the City notice of the start date of each full closure at the earliest possible time, but in no case less than sixty (60) Days prior to the start of the full closure.

After-Hours Work Permits

For any additional work hours, the LACMTA may file an application for an after-hours construction permit, which describes the type of construction activities that will take place during the hours authorized by the permit and provides justification, satisfactory to the City, that the after-hours construction is necessary for one of the five reasons set forth above. The City Council may approve an after-hours permit for additional construction activities.

If the City denies a request for an after-hours permit or additional authorized work hours for work that would conflict with a requirement of this Agreement to 1) maintain pedestrian or driveway access during business hours, or 2) maintain minimum traffic requirements on Wilshire Boulevard, then the LACMTA may nevertheless conduct the work during the hours as shown in the table above. In that event, the LACMTA shall identify to the City the conflicting requirement and shall identify to the satisfaction of the City how the LACMTA will minimize the conflict's duration. Upon doing so, the LACMTA may proceed with the work hours shown in the table above.

The Independent Compliance Monitor (see Article XVI) shall be responsible for monitoring enforcement of the conditions of after-hours construction permits and enforcing available remedies pursuant to the procedures of Article XVII of this Agreement.

Holiday Moratorium

Except when work is otherwise permitted by the City in accordance with this Article, no work shall be permitted during a holiday moratorium. For the purpose of this Article, a “holiday moratorium” shall mean:

- New Year’s Day
- The Golden Globe Awards
- Martin Luther King Jr. Day
- President’s Day
- The Academy Awards
- Easter Sunday
- The Erev Passover and First Two Days of Passover
- Mother’s Day
- Memorial Day
- Father’s Day
- Independence Day
- Next Night Block Party (work on Beverly Drive only)
- Labor Day
- Erev Rosh Hashanah and Rosh Hashanah
- Erev Yom Kippur and Yom Kippur
- Veteran’s Day
- Thanksgiving Day through New Year’s Day (work outside staging areas and City Rights-of-Way north of Charleville Boulevard only)

For the purposes of this Article, “Erev” begins one hour before sundown.

The LACMTA may file an application for a permit to work during a holiday moratorium. The application shall be filed 60 Days prior to the proposed holiday moratorium work day(s), and by August 1st of each year for any Construction proposed between Thanksgiving Day through New Year’s Day. The application shall describe the types of Construction activities that will take place during the holiday moratorium and the proposed days and hours of such work. The City Council shall have sole and absolute discretion to approve the permit.

ARTICLE XIV Noise and Vibration Control Plans And Mitigation Measures

Noise control plans and mitigation measures shall be in accordance with the standards set forth in: this Article; Exhibit E, attached hereto (entitled “Metro 5-Step Noise Control Plan”); specific Noise Control and Noise Monitoring Plans; the PDD Permit and the LACMTA’s submittals for the Project work at issue; and any conditions of approval included in a City-issued permit. To the extent that there is any conflict between those documents, the standards of this Article shall control

over Exhibit E, specific Noise Control and Noise Monitoring Plans, the PDD Permit and other City-issued permits. Exhibit E shall control over specific Noise Control and Noise Monitoring Plans, the PDD Permit and other City-issued permits. The conditions included in the PDD Permit shall control over specific Noise Control and Noise Monitoring Plans and other City-issued permits. Other City-issued permits shall control over specific Noise Control and Noise Monitoring Plans. Notwithstanding the foregoing, a more restrictive standard in a later issued permit or plan shall control over a conflicting standard in an earlier issued permit or plan.

Noise Control Plans

The LACMTA, through its consultants, contractors, subcontractors or agents, shall follow the Metro 5-Step Noise Control Plan incorporated into this Agreement as Exhibit E. Additionally, the LACMTA, through its consultants, contractors, subcontractors or agents, shall develop specific Noise Control and Noise Monitoring Plans that include all requirements contained in this Agreement and Exhibit E and submit such plans to the City Representative for approval prior to commencing Construction on the associated phase of work.

In evaluating the effectiveness of specific Noise Control and Noise Monitoring Plans, the factors which may be considered include, but are not limited to, the following:

- A. The volume of the noise;
- B. The intensity of the noise;
- C. Whether the nature of the noise is Construction or non-Construction related;
- D. Whether the origin of the noise is natural or unnatural;
- E. The volume and intensity of the background noise, if any;
- F. The proximity of the noise to residential or transient occupancy sleeping facilities;
- G. The nature and zoning of the area within which the noise emanates;
- H. The density of the inhabitation of the area within which the noise emanates;
- I. The time of the day or night the noise occurs;
- J. The duration of the noise; and
- K. Whether the noise is recurrent, intermittent, or constant.

Noise Control Measures

As part of the Metro 5-Step Noise Control Plan and specific Noise Control and Noise Monitoring Plans, the LACMTA and the C1120 Contractor shall employ the following noise control measures:

<u>Source</u>	<u>Noise Control Measures</u>
Backup alarms	When backup alarms are used, they shall be low impact alarms, which include manually-adjustable alarms, self-adjusting alarms and broadband alarms. Configure traffic pattern to minimize backing movement.
Truck tailgates	No slamming tailgates. Establish truck cleanout staging areas as needed.

	Use rubber gaskets or functional equivalent or decrease speed of tailgate closure.
Pavement breakers (jackhammers)	Fit with manufacturer approved exhaust muffler. Tightly enclose pavement breaker and cutting activities within a four-sided noise barrier enclosure or equivalent, with the addition of a roof when the equipment does not exceed eight (8) feet in height.
Vibratory rollers and packers	The use of vibratory rollers and packers will be avoided near vibration sensitive areas and structures. The vibration sensitive areas and structures shall be determined by a structural engineer as part of the preconstruction surveys and subject to verification by the City. The LACMTA shall also conduct a preconstruction survey for any property owner of a structure identified in Exhibit N.
Drilling for Piles	No impact pile driving will be used.
Prolonged idling of Equipment	No idling of heavy equipment or vehicles when not in use. Locate equipment away from noise sensitive areas to the extent practicable.
Construction Operations Planning	No truck traffic shall be permitted on residentially zoned streets, except for access to laydown yards when necessary and only by using a route approved by the City. Use modern equipment equipped with state of the art engine insulation and mufflers, in accordance with all applicable City, State, and Federal standards. Where a generator is necessary, it shall be equipped with the best available technology to minimize noise. Operate equipment at the lowest possible power levels. Provide noise muffling enclosures for fixed equipment. Provide noise awareness training to contractors/workers. Use solar, battery powered, or hybrid equipment whenever practical. All staging areas shall be enclosed with a minimum 20' high sound wall. All sound walls shall have a wall assembly of STC-25 or greater, and the ability to reduce noise by at least 5 dBA. Place plywood or dirt beds on all trucks or any other mutually agreed to effective noise mitigations when loading concrete or steel on beds of trucks.

The following noise mitigation techniques shall be employed at all times to reduce the impact of construction noise:

- Use of temporary noise barriers and sound control curtains or an equivalent form of solid object to either destroy part of the sound energy by absorption, or to redirect part of the energy by wave deflection.

- All jackhammers, pavement breakers and saw cutters used at the Construction site shall be tightly enclosed on four sides with shields, acoustical barrier enclosures, noise barriers, or equivalent, with the addition of a roof when the equipment does not exceed eight (8) feet in height.
- Enclose activities likely to create a noise disturbance and enclose stationary equipment.
- Employ sound blankets over a movable fence, including the use of state-of-the-art technology where necessary to achieve no more than 5dBA above pre-existing ambient noise levels at the property line of the nearest residential or transient occupancy building. If sound blankets are to remain in place for more than five (5) Days, the LACMTA must seek approval from the City.
- Employ targeted noise mitigation when Construction is proximate to historic structures and transit occupancy uses and may exceed 5dBA (Leq 15 min) above pre-existing ambient noise levels during business hours at historic structures and transit occupancy uses.
- Only use equipment that complies with the maximum noise levels set forth in Exhibit L.

If any activity causes an unreasonable noise impact to the surrounding residential or business neighborhood, then mitigation shall be implemented to reduce the impact to a reasonable level. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the proximity to the work site, and other similar factors.

Except by written permission from the City during emergencies that may threaten public health and safety, sawcutting, jackhammering, and the use of vacuum trucks are prohibited at the following times and locations:

- 12 PM to 2:30 PM, Monday through Saturday, on N. Canon Drive
- 6 PM to 9 AM, Monday through Friday, on all streets
- 6 PM to 10 AM, Saturday through Sunday, on all streets

Noise and Vibration Control Monitoring

Construction noise levels will be limited to the following:

- No more than five (5) dBA above pre-existing ambient noise levels at all times at the property line of any residential and transient occupancy buildings evaluated on a fifteen (15) minute average noise level (Leq 15 min);
- No more than two (2) instances within a one (1) hour period between the hours of 9 PM and 11 PM above eighty-five (85) dBA evaluated at an instantaneous maximum noise level (Lmax) at the property line of any residential and transient occupancy buildings;

- No more than one (1) instance within a two (2) hour period between the hours of 11 PM and 9 AM above eighty-five (85) dBA evaluated at an instantaneous maximum noise level (Lmax) at the property line of any residential and transient occupancy buildings;
- No more than ten (10) instances within a one (1) week period between the hours of 9 PM and 9 AM above eighty-five (85) dBA evaluated at an instantaneous maximum noise level (Lmax) at the property line of any residential and transient occupancy buildings; or
- No more than two (2) instances within a one (1) week period between the hours of 9 PM and 9 AM above ninety-five (95) dBA evaluated at an instantaneous maximum noise level (Lmax) at the property line of any residential and transient occupancy buildings.

The above-referenced noise limits are collectively referred to as the “Noise Standard.” The LACMTA and the City shall jointly establish the preexisting ambient hourly noise levels at properties with residential and transient occupancy uses and at Beverly Hills High School that are closest to C1120 Construction activities, as identified in Exhibit F, and incorporated herein by this reference.

Exhibit F shall include locations on the property lines of transient occupancy uses at elevations and locations determined by the City, in consultation with noise experts provided by the LACMTA and the Compliance Monitor, for the purpose of establishing the preexisting ambient hourly noise levels. Thereafter, the Noise Standard will be applied and noise monitoring will be evaluated using noise monitors installed and maintained by the Compliance Monitor at the property line of each building and at heights above the sound walls, noise barriers, and the line of sight of Construction activities below.

In the event that the Compliance Monitor identifies a potential violation of the Noise Standard at a property line where the ambient noise level has not previously been established: (1) the Compliance Monitor shall use the ambient noise level established at the nearest pre-existing monitoring location unless and until a new ambient noise level is established at the location of the potential violation; (2) LACMTA shall take the steps necessary to meet the Noise Standard at the location of the potential violation; and (3) LACMTA may elect to jointly establish with the City a new ambient noise level at the location of the potential violation. The Compliance Monitor shall then use the ambient noise level established at the pre-existing location or the newly established ambient level, as applicable, as the baseline for determining whether to impose a monetary contribution as provided for under Article XVII.

If the Compliance Monitor identifies an exceedance of the Noise Standard, then the LACMTA and the Contractor shall promptly discontinue the Construction activity that caused the exceedance until additional mitigation measures, possibly including reduction of Construction activities, are implemented to reduce noise levels below the Noise Standard. In addition, an exceedance of the Noise Standard shall constitute a violation of the Permit Conditions. However, an exceedance of the Noise Standard, which would otherwise cause the LACMTA to make a monetary contribution into the Mitigation Fund, shall be excused if the Compliance Monitor does not identify any further exceedances of the Noise Standard within a thirty (30) Day period following the date of the exceedance that caused the monetary contribution. The terms “Permit Conditions” and “Mitigation Fund” have the definitions ascribed to those terms in Article XVII.

At all times, Construction vibration levels at a distance of 50 feet from Construction limits or at the property line of any building shall be limited to no more than the root-mean square unweighted vibration velocity levels in vertical direction over a frequency range of 1 to 100 Hz, as listed below:

Vibration Type	Permissible Aggregate Duration	Vibration Limit (peak particle velocity (PPV))	Vibration Limit (VdB re 10 ⁻⁶ in/sec)
Sustained	>1 hour/day	0.01 in/sec	80
Transient	<1 hour/day	0.03 in/sec	90
Transient	<10 minutes/day	0.10 in/sec	100

At all times, Construction peak particle vibration levels at the property line of any building shall be no greater than the peak particle vibration levels as listed below:

Building Category	Allowable Peak Vibration (peak particle velocity (PPV) in/sec)	Allowable Peak Vibration (VdB re 10 ⁻⁶ in/sec)
Reinforced-concrete, steel or timber (no plaster)	0.50	114
Engineered concrete and masonry (no plaster)	0.30	110
Non-engineered timber and masonry buildings	0.20	106
Buildings extremely susceptible to vibration damage	0.12	101

The LACMTA, at its sole expense, shall place and continuously operate vibration monitoring equipment at the property line of the building or buildings depicted in Exhibit M closest to any Construction activity in order to verify compliance with the above-referenced limits. If at any time a Construction activity results in vibration levels that exceed such limits, then (i) the LACMTA shall immediately halt Construction on the offending activity until such time as additional mitigation can be implemented and/or an alternative Construction method can be used that will result in lower vibration levels within the prescribed limits; and (ii) thereafter conduct additional monitoring at the property line of the nearest building to the exceedance identified as a “secondary monitoring location” in Exhibit M for a continuous period of sixty (60) Days following identification of the exceedance.

ARTICLE XV
Light Plans And Mitigation Measures

Light plans and mitigation measures shall be in accordance with the standards set forth in: this Article; the PDD Permit and submittals for the Project work at issue; and any conditions of approval included in a City-issued permit. To the extent that there is any conflict between those documents, the standards of this Article shall control over the PDD Permit. The conditions included in the PDD Permit shall control over other City-issued permits.

Lighting Spill Mitigation Measures

Construction activities during evening and nighttime hours may require the use of temporary lighting. To minimize the impact of temporary lighting on adjacent properties, the following mitigation measures shall be implemented:

- Lighting will be directed downwards and shielded. Care shall be taken in the placement and orientation of portable lighting fixtures to avoid directing lights toward sensitive receptors, including automobile drivers.
- Temporary lighting will be limited to the amount necessary to safely perform the required work.
- In addition to minimizing light spill, sensitive receptors and motorists on public streets will not have direct views of the light source (glare) from construction lighting. Light sensitive receptors include but are not limited to residential areas and transient occupancy uses.
- Light trespass shall not exceed one foot-candle above ambient light level as measured at any adjacent property.

ARTICLE XVI
Independent Compliance Monitor

The LACMTA shall fund an Independent Compliance Monitor to ensure compliance with the conditions and required mitigation measures covered under this Agreement, all exhibits attached hereto and any conditions of approval included in the PDD Permit or other City-issued permits. The Compliance Monitor shall be an independent contractor, not otherwise employed by the LACMTA or the City, and shall be selected jointly by the LACMTA and the City. The Compliance Monitor shall have no pre-existing relationship with either Party, unless this requirement is specifically waived by the Parties. The City, the LACMTA and the Compliance Monitor have entered into a three-party contract to engage the services of the Compliance Monitor. The Compliance Monitor shall invoice the LACMTA or the City for its work and, subject to the City's and the LACMTA's verification and approval of the invoice, the LACMTA shall pay the Compliance Monitor. Alternatively, the City may pay the Compliance Monitor and the LACMTA shall reimburse the City. The engagement of the Compliance Monitor shall be for a term of one year increments, with said engagement to be reviewed annually by both the City and the LACMTA and subject to renewal by consensus of both the City and the LACMTA or to termination by either the City or LACMTA. Unless otherwise agreed to by the Parties, a Compliance Monitor shall be

employed and on site during all hours which the C1120 Contract Construction within the scope of this Agreement is being performed. The Compliance Monitor will exercise its independent judgment to determine appropriate staffing levels necessary to verify compliance with the Permit Conditions, as that term is defined in Article XVII. Nothing in this Article shall be construed to limit the ability of: (1) the City Engineer, City Representative, or Consultant(s) to notify or inform the LACMTA or the Compliance Monitor of any alleged violations of mitigation measures or conditions of approval; or (2) the LACMTA Representative or Contractor to respond to any alleged violations of mitigation measures or conditions of approval with the City or the Compliance Monitor.

ARTICLE XVII
Enforcement Of Permit Conditions And Mitigation Measures

When the Compliance Monitor finds that the LACMTA or its Contractor have violated the terms of the PDD Permit or modifications to the PDD Permit for the work at issue or conditions and required mitigation measures covered under this Agreement and all exhibits attached hereto (collectively for the purposes of this Article “the Permit Conditions”), the Compliance Monitor shall provide documentation of the violation to both the City and the LACMTA within twenty-four (24) hours of the violation. The LACMTA shall provide a written response to the nonconformance report within forty-eight (48) hours that shall include a description of the investigative actions taken to resolve the nonconformance, a description of the cause of the nonconformance, the actions taken or planned to correct the nonconformance, and the actions taken to prevent recurrence of the nonconformance.

The Compliance Monitor shall have the power to order compliance with the Permit Conditions. If the Compliance Monitor identifies two or more violations of the same Permit Condition with impacts on the same business, residence, or within a one hundred fifty (150) foot radius of the violation, within a fourteen (14) Day period, the LACMTA shall be required to make a monetary contribution into a fund established for the purpose of mitigating construction impacts on businesses and residents impacted by the construction (“Mitigation Fund”) as follows:

- Violation 2: \$15,000
- Violations 3 or more: \$25,000 per violation

If the LACMTA or the Contractor deliberately disregards an order from the Compliance Monitor to comply with the Permit Conditions or the Compliance Monitor identifies a willful or reckless violation of the Permit Conditions, then the LACMTA shall be required to make a monetary contribution into the Mitigation Fund as follows, unless the City Representative determines in writing that the LACMTA took appropriate action to cure the conduct or violation:

- Violation 1: \$25,000
- Violation 2: \$50,000
- Violation 3: \$75,000
- Violation 4: \$100,000

5 or more violations: An additional \$25,000 for each successive violation (e.g., \$125,000 for the fifth violation, \$150,000 for the sixth violation, and so on)

The City shall control the Mitigation Fund and shall direct expenditures to mitigate construction impacts on businesses and residents or to additional enforcement, monitoring, or other remedial actions deemed reasonably appropriate to address the violation upon finding a link between the violation and the impact to businesses or residents. The City shall hold at least one meeting with impacted businesses and/or residents, as applicable, before making a final determination on an expenditure of such funds. This Article is in lieu of any other method set forth in the Beverly Hills Municipal Code for imposing monetary fines or penalties upon the LACMTA for violations of the Permit Conditions. Nothing herein shall impair or diminish the rights or claims of any property owner, business owner, or other person with respect to any damage to his, her, or its real or personal property.

In addition to any monetary contributions required under this Article, the Compliance Monitor may order an immediate halt to the work causing a violation or prohibit work that would imminently and obviously cause a violation until the LACMTA, its Contractor or other third parties take action to correct the violation and prevent the violation from being repeated. If the work is halted or prohibited, the Compliance Monitor shall not allow resumption of the work causing the violation or that would imminently and obviously cause a violation until the violation is resolved and will not be repeated. The Compliance Monitor may only preemptively halt the work if the work would cause a violation of a specific Permit Condition that leaves no room for discretion, such as failing to utilize proper noise mitigation equipment or conducting work at an unpermitted time.

The Compliance Monitor shall also order a halt to any work that poses a clear and immediate threat to public safety. If work is halted for reasons of public safety, the Compliance Monitor shall not allow resumption of the work until the threat to public safety has been abated. This paragraph shall not be construed to limit the authority of any authorized safety engineer, inspector, police or fire official, or other person to halt any work that poses a threat to public safety.

The Compliance Monitor shall provide a written report to the City and the LACMTA on no less than a weekly basis regarding compliance with the Permit Conditions for the work covered by the scope of this Agreement.

City inspectors, including the Consultant and delegates of the City Representative may notify the LACMTA and/or its Contractor of alleged violations of Permit Conditions. When a City inspector provides written notice to the LACMTA and/or its Contractor of an alleged violation of a Permit Condition, then the LACMTA shall provide documentation of the violation to the City within forty-eight (48) hours of the written notice of violation that shall include a description of the investigative actions taken to resolve the violation, a description of the cause of the violation, the actions taken or planned to correct the violation, and the actions taken to prevent recurrence of the violation. This process of notifying the LACMTA and/or its Contractor of an alleged violation is separate and distinct from the Compliance Monitor's authorities described above and will not result in a monetary contribution if a violation has actually occurred.

ARTICLE XVIII
Tree Removal And Replacement

Tree removal will be avoided wherever possible. The LACMTA shall strictly comply with a tree removal and replacement plan that will ensure that any landscaping removed as a result of C1120 Contract Construction is eventually returned to its condition prior to removal. The tree removal and replacement plan shall be approved in writing by the City before any trees are removed and shall substantially conform to the following requirements:

- New replacement trees shall be a 36” box of the same species and planted in the same location as the removed tree when not in conflict with new infrastructure, in which case the City’s arborist shall designate an alternative location and/or size;
- New replacement palm trees shall be a minimum 20’ in height;
- The LACMTA shall replace trees within six (6) months of restoration and completion of that portion of Wilshire Boulevard that may impact the tree. To the extent feasible, the LACMTA shall replace trees on an ongoing basis so long as doing so does not conflict with future C1120 Contract Construction; and
- The LACMTA shall mitigate the City’s lost value as a result of tree removal by compensating the City for the difference in lost value between removed trees and new replacement trees, with the difference in value determined using the TFM (Trunk Formula Method) as defined in “Guide for Plant Appraisal, 9th Edition”.

The LACMTA shall coordinate with the City’s arborist to ensure that the tree removal and replacement plan is executed to the satisfaction of the City’s arborist. The LACMTA or its Contractor shall maintain all trees and other landscaping installed by the LACMTA or its Contractor for a period of three (3) years from the date of planting and shall warranty the trees and landscaping for one (1) year after planting. Prior to the end of the one year warranty period, the City, LACMTA and its Contractor will conduct an inspection of all replacement trees and landscaping for general health as a condition of final acceptance by the City. If, in the City’s determination, a replacement tree or landscaping does not meet the health requirements of the City, then the LACMTA shall replace that tree within thirty (30) days. For any trees or landscaping that must then be removed, the original warranty shall be deemed renewed commencing from when the tree or landscaping is replaced.

ARTICLE XIX
Construction Mitigation

The LACMTA and the City shall implement business mitigation measures for the purpose of assisting those businesses financially affected by the C1120 Contract Construction performed under this Agreement. Business mitigation assistance will include, but is not limited to, the following:

- Advertising
 - Weekly advertisement in a local or regional newspaper

- Social media
- Sign advertising in the event that the City Council authorizes the establishment of signs at the Project site
- Eat, Shop, Play (ESP) program
 - The ESP program allows businesses (“Participating Businesses”) to advertise on Metro.net/purplelineext
 - Participating Businesses will be highlighted in The Source
 - Participating Businesses will be included in marketing materials
 - Participating Businesses will be included in local and regional publications
- Parking mitigation
 - Parking validation and other incentives for local businesses
 - If the LACMTA’s obligated replacement parking is unavailable, then the LACMTA shall provide either a valet service or shuttle service or reimburse the City for such services.
 - Additional valet parking services if the LACMTA interrupts a pre-existing valet parking operation.
 - Signage advertising where and when parking incentives have been made available and how to access the parking
 - Social media shall be used to advise customers on alternate parking locations
- Communications and Outreach support
 - Provide on-call public relations representatives, including City staff and consultants to the City. The average Cost of up to two (2) full time equivalent consultants (excluding City staff time) for this purpose will be paid for by the LACMTA over the course of the Project.
 - Radio, print and social media advertising of detours during closures of Wilshire Boulevard
 - One community meeting at night per month within the City, one monthly coordination meeting with Project stakeholders at the Beverly Hills Chamber of Commerce, and one-on-one meetings with individual stakeholders as requested by the particular stakeholder. In addition, the City will conduct meetings with the Beverly Hills Chamber of Commerce and individual stakeholders as much as necessary to keep them informed about the Project.
- Banners/signage
 - “Businesses Open During Construction” signage will be provided to all affected local business
 - The LACMTA will work directly with business owners to develop customized and appropriate signage
 - All LACMTA signage not related to traffic control or noise control placed in the City shall be mutually approved by the City and the LACMTA
 - Fund cost of production and installation of street banners promoting local businesses as approved by the City
 - Pedestrian-oriented wayfinding signage, including but not limited to, illustrations of parking areas and open businesses, will be provided in appropriate areas
- Marketing

- The LACMTA will work directly with businesses to develop and procure marketing materials
- Public Information Graphics
 - Design, produce, and install the items included in Exhibit G (“Public Information Graphics Program”)
 - At the City’s request, replace Public Information Graphics with the City’s desired design(s) up to two (2) times per year during the duration of the Construction.
- Additional lighting of streets and sidewalks during Construction to promote a business friendly atmosphere or when not in compliance with the City Standard of no less than 1.2 foot candle.
- Additional support from the Beverly Hills Fire Department during decking operations.
- The LACMTA and City shall notify commonly used GPS services and applications such as Google Maps, Waze and Apple Maps of extended road closures.
- Other urban design, mitigation, public outreach, lighting, and business assistance projects as mutually agreed upon by the Parties.

The LACMTA shall fund the above-referenced business mitigation measures until all surface Construction on the Project is complete, Wilshire Boulevard and Beverly Drive are fully restored, and all punch list items are completed. The City may request funding or reimbursement for any business mitigation measures referenced above. In the event that the LACMTA disagrees on the use of funds for the requested business mitigation measure, and the City desires to implement the measure using LACMTA funds, then the following dispute resolution process will be followed:

- Within ten (10) Days of the City’s request, the LACMTA’s General Counsel shall provide a written explanation of the reasons that it is unable or unwilling to fund the measure;
- If the expenditure would violate federal or state law or cause a breach of LACMTA’s federal funding agreement, then the LACMTA shall provide legal citations to the applicable federal or state law or regulation causing the violation or breach;
- If the City agrees with the General Counsel’s reasons, then the measure shall not be funded using business mitigation funds;
- If the City disagrees with the General Counsel’s reasons, then the dispute will be resolved according to Article XXX (Arbitration - Work Stoppage), provided that the arbitrator’s decision to require or not require the LACMTA to make the expenditure, as the case may be, will be based on a finding of whether or not the City’s proposed business mitigation measure reasonably mitigates an impact(s) on businesses that is directly or indirectly caused by the Project or insufficient business mitigation funds. The City may implement its requested measure while the arbitration is pending, provided that the LACMTA may not reimburse the City for its expenses if the arbitrator agrees with the LACMTA’s determination. The City will not withhold review or approval of Construction or Design plans solely on account that an arbitration is pending.

If the General Counsel does not provide a written explanation of the LACMTA’s reasons that it is unable or unwilling to fund the City-requested measure within ten (10) days of the City’s request,

then the measure shall be deemed approved and the LACMTA shall reimburse the City for its Cost of implementing the measure.

The LACMTA also agrees to provide the following additional environmental and business mitigation, either as part of current LACMTA operations or by a third party as part of the C1120 Contract and the cost of these activities shall not be funded with funding devoted to business mitigation above:

- Clean worksite and adjacent areas, including street and sidewalk sweeping, at least once each work day and remove and/or paint over graffiti within twenty-four (24) hours of discovery. The City may undertake similar activities more frequently if it determines that additional cleaning, street sweeping, or graffiti removal is necessary to promote a business friendly atmosphere. The City's decision to exercise this option shall not excuse the LACMTA's or the Contractor's obligation to perform. The LACMTA shall reimburse the City for its reasonable expenses, provided that the City provides an invoice to the LACMTA detailing the City's expenditures and a written justification explaining why the additional cleaning, street sweeping, or graffiti removal was necessary due to Construction.
- Remove visible construction-related roadway dust tracked out on public sidewalks at the conclusion of each shift.
- Placement of large, clearly visible signage indicating that all businesses are open during construction at locations identified by the City.

ARTICLE XX

Community Outreach

The advance notification process and establishment of a public phone line shall be in accordance with the standards set forth in: this Article; the LACMTA's completed PDD Permit and submittals for the Project work at issue; and any conditions of approval included in a City-issued permit. To the extent that there is any conflict between those documents, conditions included in this Article shall control over the PDD Permit. The conditions included in the PDD Permit shall control over other City-issued permits.

The Project area is a sensitive area for residents, businesses, commuters, and visitors. The LACMTA and the C1120 Contractor and consultants will be required to minimize any inconvenience to the public and provide advance notification to the public of Construction activities and planned service interruptions. The plan shall include monthly public meetings to provide Project Construction information to residents and businesses nearby the Project, unless the City and the LACMTA mutually agree to reduce the meeting frequency. The LACMTA shall provide to the City for review all notices, presentations, and other materials presented to the public at least seventy-two (72) hours in advance of distribution or presentation to the public, and any substantive changes to the materials made thereafter shall be provided to the City as soon as practicable.

The LACMTA shall be responsible for all advance notifications to the public for work associated with the Project. The notification distribution area shall be reviewed and approved by the City. Project information and Construction notifications may be provided in multiple formats including, electronic mail, Project website, social media and on-street portable changeable message boards.

All signage not related to traffic controls or noise control shall be mutually approved by the City and the LACMTA. The City will design wayfinding signage relating to the Project within the City and the LACMTA will procure and install the wayfinding signage based on the approved design. The LACMTA shall maintain all signage, including signage related to traffic and noise control, detours, and business promotion, in a neat, clean, presentable manner and free of dirt, graffiti, dents, or tears. The LACMTA shall replace any signage within twelve (12) hours after notification from the City that such signage's appearance is unsatisfactory.

The LACMTA will continue to provide advance notification for the following activities:

- a) Start of Each Major Construction Activity Listed in Article XIII (pile installation, street decking, jet grouting, and deck removal) and the Demolition of any Building
 - i) 21 Days – On-street Changeable Message Signs (CMS)
 - ii) 60 Days (1st notice) – Mail or hand deliver and email to affected businesses and residents
 - iii) 2 Days (2nd notice) – Mail or hand deliver and email to affected businesses and residents
 - iv) Updates via Eblast, website, Facebook and Twitter
- b) Utility Service Interruption
 - i) 60 Days if possible, but no less than 30 Days – Mail or hand deliver and email to affected businesses and residents
 - ii) 2 Days – Hand deliver and email to affected businesses and residents
- c) Driveway Closure
 - i) 7 Days – Mail or hand deliver and email to affected businesses and residents
 - ii) 2 Days – Mail or Hand deliver and email to affected businesses and residents
- d) Sidewalk Closure
 - i) 7 Days – On-sidewalk signs
 - ii) 2 Days – Hand deliver and email to affected businesses and residents
 - iii) Updates via Eblast, website, Facebook and Twitter
- e) Lane Closure
 - i) 7 Days – On-street Changeable Message Signs (CMS)
 - ii) Updates via Eblast, website, Facebook and Twitter
- f) No Parking
 - i) 7 Days – On-street signs
 - ii) Updates via Eblast, website, Facebook and Twitter

- g) Bus Stop Relocations
 - i) 14 Days – Mail or hand deliver and email to affected businesses and residents
 - ii) 14 Days – Notification sign placed on bus stop

In addition to the foregoing, the LACMTA shall send all such notices in electronic format to businesses, residents, and other interested persons that request to receive notices by email. The LACMTA shall continuously maintain an email list for such purpose and a website dedicated to the Project where persons may sign up to receive notices. The LACMTA shall also post all Project-related notices on an LACMTA website dedicated to the Project and conspicuously visible to the public.

The LACMTA shall also provide the City with the following information on the first Working Day of each calendar month: (i) a detailed schedule of Construction activities to occur over the next sixty (60) Days; and (ii) a schedule of Construction activities anticipated to occur over the next two (2) years.

On-street changeable message boards related to lane closures, driveway closures, sidewalk closures and parking restrictions will be located based on traffic engineering plans and documents. They shall be removed during periods when no changeable messages are required by this Agreement or the City of Beverly Hills. The requirements of this Article will be incorporated into traffic plans as they are submitted by the C1120 Contractor.

The LACMTA shall provide to the City a monthly schedule of all proposed activities within the City.

Establishment of a Public Phone Line

The LACMTA shall establish and fund a toll-free phone line that is available twenty-four (24) hours a Day to respond to concerns related to construction disturbances within the City. This phone line shall incorporate a construction relations phone line prompt for immediate live response. Contact information for the public liaison person and phone line shall be included in all Construction notices. The LACMTA shall respond to complaints within twenty-four (24) hours of receipt and, where possible, shall address the complaint by corrective action in a timely manner. The LACMTA shall provide documentation to the City Representative that the complaint was effectively resolved. The LACMTA will immediately log the complaint and immediately notify the City Representative and the Compliance Monitor. The City will post the complaint on its website.

The City may use its own dedicated phone line, in addition to the LACMTA-established toll-free phone line. If the City uses its own dedicated phone line, then at the City's request all LACMTA notices and signs relating to Construction must include both the LACMTA's and City's phone numbers.

ARTICLE XXI
Inspection of City Facilities During Construction

The City and the LACMTA agree that all work on City Facilities will conform to City Standards as they relate to inspection, sampling, and testing. The LACMTA agrees to require adherence to such policies and practices by the Contractor and other contractors and will include those requirements in its contracts with its Contractor and other contractors.

Notwithstanding City inspection or approval of any Construction, all work performed by either party for Construction of the Project shall be subject to LACMTA inspection and final approval. The LACMTA also may inspect the Construction of Rearrangements to ensure that the work has been performed in accordance with the approved Designs.

All Rearrangement and Construction of City Facilities by the LACMTA shall be offered by LACMTA to the City for inspection. Reimbursement for inspection services shall be in accordance with Article XI. The City shall provide inspectors, who may be either City staff or Consultant(s), who will be available throughout Project Construction, at the LACMTA's expense and as needed to observe and inspect the Rearrangement of City Facilities so that upon completion of Construction, the City will have a basis for acceptance of the work. The City's inspectors shall coordinate with the LACMTA Representative and the Contractor. The City's inspection shall also include planned field reviews for compliance with all requirements of this Agreement, including any relevant exhibits. Inspection will involve the verification of the safety and adequacy of vehicular and pedestrian access and circulation immediately adjacent to the Construction area, and maintenance of appropriate access to businesses, as provided in the Construction Staging Plans and Worksite Traffic Control Plans.

During any inspection, each party shall cooperate to quickly resolve any deviations from, or violations of, any approved plans discovered in the course of such inspection. The City will provide immediate verbal notice of any deviation, violation or nonconformance to the LACMTA's construction manager as well as to the LACMTA staff (as designated by the LACMTA Representative), followed by a written notice not later than twenty-four (24) hours after discovery. Each notice shall include an explanation of the resolution desired by the inspector. Failure to provide notice shall not constitute a waiver by the City.

As soon as the work of any specific Rearrangement has been completed (and tested when called for by the approved Design), the party which performed the Construction work, shall notify the other party in writing that the Rearrangement is ready for final inspection. After notification is provided in writing, the inspection shall take place within twenty-four (24) hours of such notification. The final inspection of any Rearrangement shall be attended by the LACMTA Representative and the City Representative, at the LACMTA's expense. Each party will provide to the other party's representative immediate verbal notice of any deficiencies or discrepancies in any Construction on any Rearrangements or any other issues discovered in the course of the final inspection, followed by a written notice within five (5) Days thereafter. Each notice shall include an explanation of the resolution desired by the notifying party. Promptly upon completion of the City Facility Rearrangement (including if applicable, completion of any corrective work performed), the City shall furnish its written notice that Construction of the City Facility complies with Design submittals and City Standards. Notwithstanding the preceding, the City's final

inspection and acceptance of any City Facility shall not occur until the portion of Wilshire Boulevard that may impact the City Facility is restored and completed and all punch list items are closed, except in those instances when beneficial and exclusive use of a City Facility or utility is transferred to the City by mutual agreement prior to the complete restoration of Wilshire Boulevard within City limits.

Interim inspection of those City Facilities that will be covered, buried and/or no longer visible due to some future Construction or other activity will have the appropriate level of City inspection performed and punch-lists created prior to cover-up.

ARTICLE XXII

Operation And Maintenance Of City Utilities

The LACMTA proposes to relocate and rearrange existing City owned utilities including, water distribution pipelines and facilities, sanitary sewer collection systems, storm drain pipelines, traffic signal systems, fiber optic communications facilities and street light systems. The LACMTA and the City recognize that Rearrangement of City-owned utilities is necessary to accommodate the Construction of the Rodeo Station. The LACMTA and the City further acknowledge that certain relocated/rearranged City-owned utilities will remain within the limits of Station construction in a long-term, temporary condition and may rely on the Station excavation shoring system for support.

Upon completion of the Rodeo Station Construction, the City-owned utilities will be relocated into their permanent location and constructed in accordance with applicable City Standards, including standards for depth and materials. All permanently relocated City-owned utilities shall conform to the City Standards in place at the time the permanent relocation work begins. At its sole discretion, the City may allow certain utilities to remain in their long-term, temporary condition or location on a permanent basis.

LACMTA agrees to be responsible, at LACMTA's expense, for operation and maintenance of City-owned utilities in their temporary condition. The responsibility includes financial responsibility for any water quality or other regulatory violations that result from operation and maintenance problems while the utilities are in a long-term, temporary condition and remedying the cause of any such violations. The responsibility for operation and maintenance begins when the existing utilities are modified in any way or if access to existing utilities is not available due to Project-related construction. The responsibility for operation and maintenance ends when the City-owned utilities are relocated/rearranged to their permanent location (if required by the City) and accepted in accordance with this Agreement. LACMTA further agrees to coordinate with the City and conduct utility operation or maintenance, including regulatory compliance measures, when the City-owned utilities are in a temporary condition.

LACMTA and its Contractor will be required to operate and maintain all utilities in accordance with City Standards and the City's Utility Maintenance Plan for the Project, as amended from time to time and on file with the City's Public Works Department. The LACMTA will provide uninterrupted service to the maximum extent feasible by minimizing any utility service interruptions. Additionally, LACMTA agrees to provide emergency response twenty-four (24) hours per day, seven days per week, to utility operation and maintenance issues for the City-owned utilities under its control in accordance with City service standards. Under no circumstances will

the LACMTA or the Contractor undertake Construction that will interfere with the City's ability to operate its utilities.

Notwithstanding the LACMTA's responsibility to operate and maintain all utilities placed in a temporary condition as a result of the Project, the City may repair such utilities if, in the City's reasonable opinion, the LACMTA has not adequately or timely addressed a malfunction, defect or maintenance problem with the utility. The LACMTA shall reimburse the City for all reasonable Costs associated with the City's repair or operation of a temporary utility. The LACMTA shall provide the City access to repair or maintain all utilities.

Nothing in this Agreement shall be construed as providing the LACMTA authority to replace lateral lines that extend from a main line into private property because the City does not own such lateral lines. LACMTA shall be responsible for any damage to lateral lines during Construction. LACMTA shall promptly take corrective action to fix any damaged lateral lines, but in no case more than forty-eight (48) hours after the damage is identified. This provision is included in this Agreement for the benefit of property owners whose lateral lines are affected by the C1120 Contract.

ARTICLE XXIII Indemnity, Warranties And Insurance Requirements

The LACMTA shall defend, hold harmless, and indemnify the City and its directors, elected officials, officers, agents and employees against any and all loss, liability, damage, or expense for injury or death to persons, including employees of either Party, and damage to property, including property of either Party, arising out of the Project's Design, the LACMTA's or the Contractor's handling, treating, or disposing of Hazardous Materials, or in connection with intentional, willful, wanton, reckless or negligent conduct arising out of or relating to (i) the C1120 Contract and/or any other contract for Construction; and (ii) the performance of the LACMTA's obligations hereunder. However, the LACMTA shall not defend and indemnify the City hereunder for any loss, liability, damage, or expense resulting from its sole negligence, willful misconduct, or resulting directly out of the color of the City-requested K-rail. The requirements of this paragraph shall survive the termination of this Agreement.

The City shall defend, hold harmless, and indemnify the LACMTA and its directors, elected officials, officers, agents and employees against any and all loss, liability, damage, or expense for injury or death to persons, including employees of either Party, and damage to property, including property of either Party, arising out of or in connection with intentional, willful, wanton, reckless or negligent conduct arising out of or in connection with the City's actual proprietary Design or Construction performance for any work or Betterment undertaken by the City pursuant to this Agreement. However, the LACMTA shall not be indemnified hereunder for any loss, liability, damage, or expense resulting from its or its Contractor's sole negligence or willful misconduct. The requirements of this paragraph shall survive the termination of this Agreement.

The LACMTA shall maintain an administrative claims process throughout the term of this Agreement that may be initiated by filing a claim substantially in the form set forth in Exhibit H. The City shall make copies of Exhibit H available upon request at City Hall and on its website to

any persons or businesses claiming damage caused by the LACMTA. The LACMTA shall inform the City of any claims submitted through the administrative claims process.

In contemplation of the provisions of Section 895.2 of the Government Code of the State of California imposing certain tort liability jointly upon public entities solely by reason of such entities being parties to an agreement as defined by Section 895 of said Code, the Parties hereto, as between themselves pursuant to the authorization contained in Sections 895.4 and 895.6 of said Code, contract out of Section 895.2 of said Code and agree to indemnify and defend the other in accordance with the terms of this Article for the full liability imposed upon it, or any of its officers, agents or employees, by law for injury caused by a negligent or wrongful act or omission occurring in the performance of this Agreement to the same extent that such party would be responsible under this Article.

The LACMTA hereby warrants that Project Construction will maintain the structural integrity of all City Rights-of-Way and buildings adjacent to the Project for a period of at least two (2) years following completion of the C1120 Contract. The LACMTA hereby warrants Project Rearrangement work for at least one (1) year following the City's acceptance of any work. Said warranties shall require the LACMTA, its contractors (including the C1120 Contractor) and suppliers to warrant that any work shall be free from defect and include the City as a beneficiary of said warranties. Defects may include, but are not limited to, damage to the City Rights-of-Way and City Facilities caused by excavation activities or the failure of any Rearrangements. The LACMTA must promptly remedy or cause to be remedied any defect or damage subject to the warranties. The LACMTA must include provisions for the warranties provided for under this Article in any contracts it enters into with contractors for Project work. Nothing in this Article shall be construed to limit or reduce the City's ability to claim that any Project work suffers from a latent or patent defect and to enforce any rights it may have to remedy a latent or patent defect. If warranted work fails and is replaced, removed, or substantially rebuilt, then the original warranty on such work shall be deemed renewed commencing from when the warranted work was replaced, removed, or rebuilt and accepted by the City.

Promptly, but no later than thirty (30) Days after the execution of this Agreement, the LACMTA shall cause and shall provide to the City a certificate to each of the following policies naming the City and the LACMTA as additional insureds: 1) unless otherwise mutually agreed by the Parties, Construction contractors shall provide evidence of insurance in at least the following amounts or any greater amounts otherwise required by law: \$2,000,000 in General Liability with an aggregate limit of \$4,000,000, \$2,000,000 in Workers' Compensation / Employer's Liability, \$10,000,000 in Combined Single Limit (CSL) in Auto Liability, and \$250,000,000 in excess liability coverage; 2) unless otherwise mutually agreed by the Parties, Design contractors shall provide evidence of insurance in at least the following amounts or any greater amounts otherwise required by law: \$2,000,000 in General Liability with an aggregate limit of \$4,000,000, \$2,000,000 in Workers' Compensation / Employer's Liability, \$10,000,000 (CSL) in Auto Liability, \$2,000,000 in Professional Liability, and \$250,000,000 in excess liability coverage. In the event of a cancellation or reduction of insurance, the contractors or suppliers shall be required to give at minimum thirty (30) Days prior written notice to the LACMTA and the City. The City recognizes and agrees that insurance can be provided through a contractor-controlled insurance program, or a program of self-insurance. The aforementioned policies of insurance shall contain endorsements that (i) waive all

rights of subrogation; and (ii) require the insurer(s) to give at minimum thirty (30) Days prior written notice to the LACMTA and the City before cancelling and/or reducing the insurance.

ARTICLE XXIV Audit And Inspection

Upon reasonable notice, each party (and its authorized representatives) shall have reasonable rights to inspect, audit and copy, during normal business hours, and upon reasonable notice, the other's records relating to its performance hereunder (and all costs incurred with respect thereto) for the C1120 Contract, from the date hereof through and until expiration of three (3) years after the accepted completion of the C1120 Contract, or such later date as is required under other provisions of this Agreement. By providing any of its records to the other party for examination, the party providing such records represents and warrants that such records are accurate and complete. The Parties shall mutually agree upon any financial adjustment found necessary by any audit. If the Parties are unable to agree on such adjustment, then the matter shall be resolved pursuant to Article XXX. The City and the LACMTA shall insert into any contracts entered into by the City or the LACMTA, respectively, for the performance of work hereunder the above requirements and also a clause requiring their respective contractors to include the above requirements in any subcontracts or purchase orders. In the case of such contractors, subcontractors and suppliers, the records subject to the above requirements shall include, without limitation, any relevant records as to which a tax privilege might otherwise be asserted.

ARTICLE XXV Federal And Other Requirements

This Agreement may be subject to a financial assistance agreement with the U.S. Department of Transportation, Federal Transit Administration, and is therefore subject to the following terms and conditions:

The City agrees to comply with all financial record keeping, reporting and such other requirements as may be imposed as a condition to or requirement of funding obtained by the LACMTA from third parties, but only if the LACMTA provides to the City reasonable notice and evidence of such requirements demonstrating the City's requirements and obligations. In that event, the City shall permit the authorized representatives of the LACMTA, the U.S. Department of Transportation, the Comptroller General of the United States, and any other government agency providing funding or oversight on the Project, to inspect, audit and copy, during normal business hours and upon reasonable notice, all Costs and other relevant records relating to performance by the City, its contractors and subcontractors for the Project or Rearrangements of City Facilities related thereto, from the date of this Agreement through and until expiration of three (3) years after the accepted completion of all Rearrangements for the Project, or such later date as is required by the rules and regulations of any such government agency (provided that the LACMTA gives reasonable notice of such later date to the City). Examination of a document or record on one occasion shall not preclude further examination of such document or record on subsequent occasions. By providing any of its records for examination, the City represents and warrants that such records are accurate and complete to the knowledge of the City Representative. The City shall insert into any contracts it enters into for the performance of work hereunder the above requirements and also a clause requiring the contractors (or consultants) to include the above requirements in any subcontracts or

purchase orders. In the case of such contractors, consultants, subcontractors and suppliers, the records subject to the above requirements shall include, without limitation, any relevant records as to which a tax privilege might otherwise be asserted.

No members of or delegate to the Congress of the United States shall be admitted to any share or part of this Agreement or to any benefit arising therefrom.

No member, officer, elected official or employee of the LACMTA, or of the City, during his or her tenure or for one year thereafter shall have any interest, direct or indirect, in this Agreement or the proceeds thereof, except in his or her capacity as a resident of the City. To the LACMTA's and the City's knowledge, no board member, officer or employee of the LACMTA has any interest, whether contractual, non-contractual, financial or otherwise in this transaction, or in the business of the City; and if any such interest comes to the knowledge of either party at any time, a full and complete disclosure of all such information will be made in writing to the other party, even if such interest would not be considered a conflict under Article 4 of Division 4 (commencing with Section 1090) or Division 4.5 (commencing with Section 3690) of the Government Code of the State of California.

In connection with the performance of this Agreement, the Parties shall not discriminate against any employee or applicant for employment because of age, race, religion, color, sex, sexual orientation, national origin or disability. The Parties shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their age, race, religion, color, sex, sexual orientation, national origin, or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

In connection with the performance of this Agreement, the City will cooperate with the LACMTA so that the LACMTA may meet all applicable federal regulations imposed on the LACMTA with regard to the maximum utilization of disadvantaged business enterprises. Nothing in this Agreement shall require the City to adopt or implement a Disadvantaged Business Enterprise program or preference.

Without limiting any other provision of this Article, the City agrees to comply, and to cause all of its contractors who work on projects subject to this Agreement to comply with, all applicable nondiscrimination laws, rules and regulations, imposed on the City, whether imposed by Federal, State or local authority.

Both Parties understand that the Buy America requirements in Title 49 USC § 5323(j)(1) and the applicable regulations in 49 CFR Part 661 ("Buy America") may apply to the procurement of certain manufactured products and other materials procured for use in the work outlined in this Agreement. If all good faith efforts are made to obtain and utilize Buy America-compliant material, but such material is not produced in sufficient and reasonably available quantities of a satisfactory quality (meeting the City's standards), the LACMTA will seek a waiver from the Federal Transit Administration pursuant to Part 661.7 of the Buy America regulations. The City will cooperate with the LACMTA, and provide supporting documentation, in pursuit of any such

waiver from Buy America requirements. All costs of using Buy America-compliant material or material that is subject to a waiver request shall be borne by the LACMTA.

ARTICLE XXVI

Construction Review Deadlines And Delays

LACMTA shall provide to the City for its review and, as authorized by this Agreement, approval all Design and Construction plans falling within the categories outlined in Exhibit I. The City shall have the authority to approve any Design and Construction plan that impacts a City Facility. In addition, the LACMTA shall provide to the City for its review any other Design and Construction plans requested by the City following the City's review of the Contract Data Requirements List (CDRL). Any changes to the CDRL shall be provided to the City following execution of this Agreement. Exhibit I may be amended from time to time to reflect material changes to the CDRL.

City shall complete its review and take action on any Construction submittals that are consistent with the PDD Permit approved by the City Council within twenty (20) Days from the date a complete application is submitted to the City. City staff shall transmit its comments in the form of a comment matrix and annotated plans (as appropriate) to the LACMTA. If the City has not completed its review within that time, the LACMTA may provide the City notice to cure. The City shall have ten (10) Days to cure by completing its review after receipt of the LACMTA notice. If, in the City's discretion, the LACMTA or its Contractor has submitted a Construction submittal or series of submittals that cannot reasonably be completed within twenty (20) days due to the submittal's volume, complexity or other condition beyond the City's control, City staff shall provide notice within seven (7) Days of receipt of a submittal to the LACMTA of its inability to complete its review to the LACMTA. The City and the LACMTA shall thereafter mutually agree on a new deadline for the City to complete its review of any or all pending Construction submittals, provided that in no event shall the review period exceed forty-five (45) Days.

City shall complete its review and take action on any Requests for Information that are consistent with the PDD Permit as approved by the City Council within seven (7) Days from the date a complete application is submitted to the City. If the City has not completed its review within that time, the LACMTA may provide the City notice to cure. The City shall have seven (7) Days to cure by responding to the Request for Information after receipt of the LACMTA notice.

City shall complete its review and take action on any Requests for Change that are consistent with the PDD Permit as approved by the City Council within three (3) Working Days from the date a complete application is submitted to the City. If the City has not completed its review within that time, the LACMTA may provide the City notice to cure. The City shall have two (2) Working Days to cure by completing its review after receipt of the LACMTA notice.

If the City fails to meet the established deadlines in this Article and additionally fails to respond to the notice to cure established in this Article, and if the LACMTA demonstrates to the City that this failure constitutes an adverse impact to the Cost of the Project that is a direct result of the delays to the C1120 Contract's critical path work from the City's failure to meet the established deadlines, then the LACMTA may direct its Contractor to perform the work, on a conditional basis pending the City's compliance.

If a Party or its contractor fails to meet any review deadline, then any affected time deadlines for the other Party or other activities under this Agreement shall be revised accordingly.

ARTICLE XXVII

Protections for Beverly Hills High School

The LACMTA shall meet and confer with representatives of the School District as necessary to discuss and coordinate Construction with School District operations.

The LACMTA and Contractor shall not conduct any surface Construction on School District property in connection with the Project's cross passages, including ground improvement activities. The LACMTA and Contractor shall conduct all piling activities on the east side of Century Park East after 3:30 PM on weekdays or on weekends in order to avoid impacting Beverly Hills High School, if the work occurs during the School District's academic year.

The LACMTA shall provide the City with the following plans at least ninety (90) Days before tunneling may begin underneath Beverly Hills High School: (i) Building and Utility Settlement Assessment Report; and (ii) Action Plan for Tunneling and Settlement Control. The City may comment on such plans. The LACMTA shall consider such comments in good faith and attempt to address comments relating to settlement at the High School.

Noise and Vibration Monitoring

The LACMTA shall develop noise criteria for the school classrooms and occupied spaces at Beverly Hills High School in consultation with the School District and Beverly Hills High School administrators. With the School District's consent, the LACMTA shall conduct noise monitoring within the property encompassing Beverly Hills High School at locations mutually agreed upon by the LACMTA and School District. The noise monitoring shall ensure compliance with the noise criteria developed in consultation with the School District and school administrators. The LACMTA shall develop, through the Contractor, noise control plans to maintain the noise criteria within the school classrooms and occupied spaces. Such noise control plans shall be updated at three (3) month intervals and submitted to the City for review within ten (10) days of the start of each quarterly period or upon any major change in work schedule, construction methods, or equipment operations not included in the most recent noise control plan.

The LACMTA shall comply with the vibration levels set forth in Article XIV at the property line of Beverly Hills High School nearest to the adjacent Construction. The LACMTA shall not exceed a groundborne noise level of forty-five (45) dBA (dB re 20 micro Pascals) in any school space, including temporary classrooms. If the School District consents, the LACMTA shall place monitoring equipment at such property line in order to verify compliance with the levels set forth in Article XIV, which shall operate continuously during all Construction activity.

The LACMTA shall also comply with all mitigation measures identified in the Final and Supplemental EIR and EIS, as more particularly described in Exhibit J, in order to protect Beverly Hills High School from C1120 construction-related vibration and noise impacts. The LACMTA shall conduct daily monitoring of all construction in the City and the City of Los Angeles to verify compliance with such mitigation measures. If the LACMTA identifies a violation of a mitigation

measure or receives a complaint of excessive noise or vibration, then the LACMTA shall promptly review its noise and vibration monitoring or conduct additional monitoring to ensure construction-related noise and vibration levels do not exceed applicable criteria levels and, if an exceedance is identified, promptly implement additional mitigation measures, possibly including reduction of construction activities, to reduce noise and vibration levels below the criteria levels.

Air Quality Monitoring

Construction shall not cause air quality levels to exceed 100 ppb for nitrogen oxides (NO₂) over a one (1) hour period and 50 µg/m³ for particulate matter smaller than or equal to 10 microns (PM₁₀) and 2.5 microns (PM_{2.5}) in size over a five (5) hour period (collectively, the “Threshold Levels”). If a Threshold Level is exceeded, then the LACMTA and the Contractor shall immediately stop Construction and promptly implement additional mitigation measures, possibly including reduction of Construction activities, to reduce air quality levels below the Threshold Levels before Construction may resume.

Alert levels will be set at eighty (80) percent of the Threshold Levels (“Alert Levels”). If an Alert Level is exceeded, then the LACMTA and the Contractor shall promptly implement additional mitigation measures to prevent an exceedance of the Threshold Levels.

The LACMTA shall identify at least three locations (one upwind and two downwind) at Beverly Hills High School where the LACMTA will place monitors to verify compliance with such air quality levels. Separate monitors will be used for PM₁₀, PM_{2.5} and NO₂. The monitors shall be positioned to monitor the Project’s contribution to ambient PM_{2.5}, PM₁₀, and NO₂, and in secure locations with access to power and limited public access. The monitors will meet the requirements set forth by the federal Environmental Protection Agency and SCAQMD. Monitoring shall be continuous during tunneling construction activities in Century City. An anemometer shall also be used to measure wind speeds and directions. Monitoring data shall be made available to the Independent Compliance Monitor, the City, the LACMTA, and the Contractor. Monthly reports shall also be provided to the City and made available to interested persons.

The Compliance Monitor shall provide immediate notification (via visual alarm and email notification) to the LACMTA, the Contractor, and the Independent Compliance Monitor when the Alert Levels or Threshold Levels are exceeded.

The LACMTA shall also comply with the air quality requirements established under Article XXVIII. The LACMTA shall also comply with all mitigation measures identified in the Final and Supplemental EIR and EIS, as more particularly described in Exhibit K, in order to protect Beverly Hills High School from C1120 construction-related air quality impacts. Such mitigation measures include “CON 97,” which provides in full:

Install MERV 16-rated filters on the air intakes at the Beverly Hills High School temporary classroom site and the medical rehabilitation facility. As these areas are predicted to potentially experience air quality levels above the SCAQMD PM10 significance threshold for a limited time period, the installation of these filters is recommended during this time period. MERV 16-rated filters are designed to

control particulate contamination in the size range of 0.3 – 1.0 microns, which is expected to reduce PM10 and PM2.5 levels within the buildings by over 95 percent.

Enforcement

The Independent Compliance Monitor shall be responsible for monitoring enforcement of the conditions of this Article and enforcing available remedies pursuant to the procedures of Article XVII of this Agreement between the hours of 7 AM and 3:30 PM on days when Beverly Hills High School is in session. However, the LACMTA shall not be responsible for the Independent Compliance Monitor's costs attributable to enforcing this Article.

ARTICLE XXVIII

Air Quality

The LACMTA and the Contractor shall comply with all SCAQMD standards and regulations to reduce the amount of particulate matter caused by Construction, including SCAQMD Rule 403. SCAQMD Rule 403 includes limits on PM₁₀ levels.

The Independent Compliance Monitor shall monitor compliance with such standards and regulations during Construction, which standards and regulations shall be enforceable under the terms of Article XVII, above. In addition to visual inspections conducted by the Compliance Monitor, a monitoring device shall be implemented when Construction occurs to alert the LACMTA of potential fugitive dust and particulate matter impacts. If the monitoring identifies fugitive dust and/or particulate matter, then the LACMTA shall implement additional mitigation measures to prevent dust and/or particulate matter from spreading to adjacent properties. The LACMTA shall also comply with the mitigation measures in Exhibit K.

ARTICLE XXIX

Miscellaneous

Under no circumstances shall the City be liable to the LACMTA for damages to the LACMTA for delays associated with the Project work under this Agreement. The LACMTA and the City acknowledge and agree that this Agreement and the City's exercise of its rights hereunder are deemed to be in furtherance of the Project, other than Article XXX ("Resolution of Disputes").

The Parties and their contractors shall timely commence, diligently prosecute and complete the Construction and other activities on or before the applicable deadlines established in this Agreement.

Neither Party shall arbitrarily or capriciously withhold or delay any action or approval required under this Agreement or necessary to complete the C1120 Contract.

In no event shall work be stopped in the event of a claim or dispute, except for reasons of public health or safety, or where the Independent Compliance Monitor orders a halt to the work pursuant to Article XVII, or where it is absolutely necessary to first resolve the dispute in order to be able to continue work.

The LACMTA and its Contractor shall protect and maintain all basement walls, footing encroachments, and marquees of all buildings adjacent to the Construction work zone.

The City Representative or his or her designees, the City Engineer, and Consultant(s), as well as the Independent Compliance Monitor, shall at all times be permitted to enter the Project area, including LACMTA work sites, in order to conduct monitoring for compliance with this Agreement, mitigation measures, and C1120 Contract requirements. The City Representative, City Engineer, and Consultant(s) shall further be permitted to communicate any alleged violations of this Agreement or mitigation measures or technical defects they independently identify to the LACMTA Representative and/or the Compliance Monitor.

All persons entering the Project area, including LACMTA work sites, shall comply with the LACMTA's safety plan.

The City has two lawsuits pending related to the Westside Subway Extension: *City of Beverly Hills v. Federal Transit Administration, et al.*, United States District Court Case No. CV-18-03891 GW (SSx) and *City of Beverly Hills v. Los Angeles County Metropolitan Transportation Authority*, Los Angeles Superior Court Case No. BS144164. The Parties acknowledge that nothing in this Agreement is intended to waive the causes of action or defenses asserted in this lawsuit or to relinquish or otherwise modify in any way the positions of the parties in this lawsuit.

This Agreement and the rights conferred upon the LACMTA hereunder shall not take effect until both the City Council and the LACMTA Board of Directors duly approve a settlement agreement for the two pending lawsuits stated in the preceding paragraph. The settlement agreement will include the following terms: (1) the City's purchase of 9393 Wilshire Boulevard and the air rights above 9385 Wilshire Boulevard; (2) the City's acquisition of an access easement across 1940 Century Park East in the City of Los Angeles; and (3) the City's acquisition of options for the air rights above the properties encompassing La Cienega and Wilshire/Rodeo Stations.

Throughout the term of this Agreement, if the City plans to construct new facilities unrelated to Construction that would cross or otherwise occupy locations that might conflict with Construction, the City will coordinate the Design and installation of such facilities with the LACMTA.

Performance by any Party of its obligations hereunder (other than for payment of money) shall be excused during any period of "Permitted Delay." Permitted Delay shall mean and include delay beyond a Party's reasonable control (despite the good faith efforts of such Party), including without limitation, all of the following: acts of God; civil commotion; riots; strikes; picketing or other labor disputes; shortages of materials or supplies; damage to work in progress by reason of fire, floods, earthquake, or other casualties; failure, delay or inability of the other Party to act; and litigation brought by a third party attacking the validity of this Agreement.

In recognition of the City's interest in neighborhood identity, the LACMTA agrees that it will not name a rail/subway station in the City without the City Council's Consent. The requirements of this paragraph shall survive the termination of this Agreement.

The City will participate in partnering sessions between the LACMTA and the Contractor relating to City Facilities and other partnering sessions when appropriate.

All preconstruction surveys required by this Agreement shall be provided to the respective property owners within thirty (30) Days of completion.

The Project's tunnel alignment does not travel underneath any detached single family structures in the City.

No later than July 1, 2021, the LACMTA and the City shall commence negotiating, in good faith, a security agreement allowing the Beverly Hills Police Department to provide security and law enforcement services to the portions of the Project within the City.

ARTICLE XXX Resolution Of Disputes

Attempt to Resolve: In the event of a claim or dispute arising out of or relating to this Agreement, both Parties shall make good faith efforts to resolve the claim or dispute through negotiation or voluntary mediation.

Arbitration – No Work Stoppage: Failing a resolution through these “good faith efforts,” or in the absence of good faith efforts to resolve, either party may serve upon the other a written demand for arbitration. The Parties shall, within ten (10) Days thereafter, or within such extended period as they shall agree to in writing, attempt to agree upon a mutually satisfactory arbitrator. If they are unable to agree, each party, prior to the expiration of the ten (10) Day or extended period, shall designate one person to act as arbitrator. The two designated arbitrators shall promptly select a third arbitrator (“neutral arbitrator”) to form a three person panel. If either party fails to designate its arbitrator within ten (10) Days after the date of delivery of the demand for arbitration or the agreed extended period, or if the two designated arbitrators are unable to select a neutral arbitrator within five (5) Days after appointment, a neutral arbitrator shall be designated pursuant to Section 1281.6 of the California Code of Civil Procedure who shall hear the matter as the sole arbitrator.

California Law: Section 1283.05 of the California Code of Civil Procedure is specifically made applicable, but only with respect to those issues not involving work stoppage. A hearing date shall be set as promptly as possible following selection of the arbitrator(s). The arbitrator(s) award shall follow promptly the hearing's conclusion, shall be supported by law and substantial evidence and the issuance of written findings of fact and conclusions of law. The making of an award failing to comply with the requirements of the immediately preceding sentence shall be deemed to be in excess of the arbitrator(s)' power and the court shall vacate the award if after review it determines that the award cannot be corrected without affecting the merits of the decision upon the controversy submitted.

Arbitration - Work Stoppage: In the event that work is stopped and it is necessary to resolve a claim or dispute in order to resume work, either party may serve upon the other a written demand for arbitration. A neutral arbitrator shall be immediately designated pursuant to Section 1281.6 of the California Code of Civil Procedure.

Arbitrator: No person shall act as neutral arbitrator who in any way has any material financial or personal interest in the results of the arbitration. Failure to disclose any such interest or relation shall be grounds for vacating the award. Notwithstanding Sections 1282.2(b) and Section 1282(e)

To LACMTA: Michael McKenna
Executive Officer, Project Management
One Gateway Plaza
MS 99-17-5
Los Angeles, California 90012

With copy to: Charles Safer
Assistant County Counsel
One Gateway Plaza, 24th Floor
Los Angeles, California 90012

Notices given by certified mail shall be deemed delivered on the date of delivery or attempted delivery shown on the return receipt. Notices given by messenger or reputable overnight delivery service shall be deemed delivered one (1) business day after delivery to the messenger or overnight delivery service unless a later actual delivery date is confirmed by the records of the messenger or overnight delivery service, in which case that actual delivery date shall govern. Any signatory hereto may from time to time, by notice given to the other signatories hereto change the address to which communications to such signatory are to be sent or designate one or more additional persons or entities to which communications are to be sent.

Time is of the essence of each provision hereof in which time is a factor.

If any provision of this Agreement shall for any reason be held to be invalid, illegal or unenforceable by any court of competent jurisdiction, the validity of the other provisions of this Agreement shall in no way be affected thereby.

No alteration, amendment or modification of this Agreement shall be valid unless evidenced by a written instrument executed by the Parties hereto with the same formality as this Agreement.

No waiver by any party of the rights, conditions, or the performance of any covenant or promise herein shall be effective unless contained in a writing signed by such party. No such written waiver shall reduce the rights or remedies of the Parties nor shall it invalidate this Agreement, nor shall it be deemed to be a waiver by such party of any other rights, conditions, or the performance of any covenant or promise (whether preceding or succeeding and whether or not of the same or similar nature). No failure or delay by one party to exercise any right or remedy it may have by reason of the default of any other party shall operate as a waiver of default or modification of this Agreement or shall prevent the exercise of any right or remedy by such party while the other party continues to be so in default. No grant of a permit or extended hours shall be construed as a grant of any other permit or extended hours, nor shall it be construed as a commitment to grant additional permits or extended hours.

Except as otherwise expressly provided in this Agreement, the Parties do not intend by any provision herein to confer any right, remedy or benefit upon any third party (express or implied), and no third party shall be entitled to enforce or otherwise shall acquire any right, remedy or benefit by reason of any provision of this Agreement.

The Parties agree that specific performance and injunctive relief are available to enforce the rights of the Parties under this Agreement, including the provisions of any Construction Staging Plan or Worksite Traffic Control Plan or other measure developed pursuant to this Agreement.

The section headings used in this Agreement are for convenient reference only and shall not be used in construing this Agreement. The words “include,” “including” or other words of like import are intended as words of illustration and not limitation and shall be construed to mean “including, without limitation.”

WHEREOF, the Parties have caused this Agreement to be executed as of the dates set forth above.

City of Beverly Hills,
A Municipal Corporation

Los Angeles County Metropolitan
Transportation Authority

JULIAN A. GOLD, M.D.
Mayor of the City of Beverly Hills, California

By: _____
Its: _____

ATTEST:

_____ (SEAL)
BYRON POPE
City Clerk

Approved as to Form:

Approved as to Form:

LAURENCE S. WIENER
City Attorney

RONALD W. STAMM
Principal Deputy County Counsel

Exhibit A
PDD Permit and City of Beverly Hills Conditions for Approval

CITY OF BEVERLY HILLS
CONDITIONS FOR APPROVAL OF
SUBWAY CONSTRUCTION PERMITS

The following permit conditions (the “Permit Conditions”) shall constitute the terms of the Project Definition Documents (“PDD”) permit for the C1120 Contract work. The Permit Conditions are based on that certain Memorandum of Agreement between the City of Beverly Hills (the “City”) and the Los Angeles County Metropolitan Transportation Authority (the “LACMTA”) entitled “Memorandum of Agreement for Contract C1120 of the Purple Line Extension Project – Section 2” (the “Agreement”); all exhibits attached thereto; Worksite Traffic Control Plans, Traffic Management Plans, Construction Staging Plans, Noise Control and Noise Monitoring Plans, Tree Removal and Replacement Plans and other plans submitted by the LACMTA; the March 2012 Final Environmental Impact Report for the Westside Subway Extension (the “Final EIR”); the November 2017 Final Supplemental Environmental Impact Report for the Westside Subway Extension (the “Supplemental SEIS”); and all completed permit applications and submittals for the scope of work at issue. Any conflicts between the Permit Conditions and those documents shall be interpreted and resolved pursuant to the applicable provisions of the Agreement.

The following Permit Conditions shall be enforceable by the Independent Compliance Monitor established by Article XVI of the Agreement to the fullest extent provided under Article XVII of the Agreement:

Construction Staging and Traffic Control

- The LACMTA shall abide by the provisions of Article XII of the Agreement, “Construction Staging, Traffic Control and Parking Requirements.”

Pedestrian Access and Sidewalk Maintenance

- The LACMTA shall abide by the provisions of Article XII of the Agreement, “Construction Staging, Traffic Control and Parking Requirements.”

Parking

- The LACMTA shall abide by the provisions of Article XII of the Agreement, “Construction Staging, Traffic Control and Parking Requirements.”

Hauling Routes

- The LACMTA shall abide by the provisions of Article XII of the Agreement, “Construction Staging, Traffic Control and Parking Requirements.”

Allowable Work Hours and Workdays

- The LACMTA shall abide by the provisions of Article XIII of the Agreement, “Allowable Work Hours and Workdays.”
- Unless work is otherwise permitted within the street during evening hours, full street access shall be restored at the end of each working day.
- The LACMTA shall comply with all conditions of any afterhours construction permit issued by the City.

Noise and Vibration Mitigation Measures

- The LACMTA shall abide by the provisions of Article XIV of the Agreement, “Noise and Vibration Control Plans and Mitigation Measures.”
- The LACMTA shall abide by Exhibit E of the Agreement, “Metro 5-Step Noise Control Plan.”

Light Mitigation Measures

- The LACMTA shall abide by the provisions of Article XV of the Agreement, “Light Plans and Mitigation Measures.”

Tree Removal and Replacement

- The LACMTA shall abide by the provisions of Article XVIII of the Agreement, “Tree Removal and Replacement.”

Advance Public Notification

- The LACMTA shall abide by the provisions of Article XX of the Agreement, “Community Outreach.”

Final EIR

- The LACMTA shall comply with all mitigation measures of the Final EIR and Supplemental SEIS applicable to the C1120 Contract work.

Business Mitigation

- Clean worksite and adjacent areas at least once each work day and remove and paint over graffiti within twenty-four (24) hours of discovery.
- Remove visible Construction-related roadway dust tracked out on public sidewalks at the conclusion of each shift.

- Place large clearly visible signage, at locations identified by the City, indicating that all businesses are open during construction.

Beverly Hills High School

- The LACMTA shall abide by the provisions of Article XXVII of the Agreement, “Protections for Beverly Hills High School.”

Air Quality Mitigation Measures

- The LACMTA shall abide by the provisions of Article XXVIII of the Agreement, “Air Quality.”

Miscellaneous

- The LACMTA shall provide the public with at least thirty (30) days’ written notice prior to conducting any Construction activities located outside the staging yard on the south side of Wilshire Boulevard, including the installation and demolition of sound walls around the staging yard and hauling activities through the adjacent alley. If such Construction activities would threaten the safe use of Reeves Park by the public, as determined in the City Representative’s sole discretion, then the LACMTA shall close a portion of the park, deemed reasonably necessary by the City Representative to protect public safety, before Construction begins and the public notice shall address the park closure. Notwithstanding anything to the contrary in Article V of the Agreement, the LACMTA shall pay the City’s park rental fee at the rate then in effect for “event strike/prep time” for non-residents, or a similar fee if such fee no longer exists. The fee for Fiscal Year 2017-18 is currently \$2,250 per day that the park is closed, and the fee for Fiscal Year 2018-19 will be \$2,330 per day that the park is closed.
- On a monthly basis, the LACMTA shall provide the City Representative with those portions of the Critical Path Method (CPM) schedule relevant to surface Construction outside the staging yards, as updated or modified from time to time by the Contractor. The CPM is provided for informational purposes only and not subject to City approval or formal comment. On a weekly basis, the LACMTA shall provide a three-week look ahead schedule.
- The LACMTA shall protect and maintain all basement walls, footing encroachments, and marquees of all buildings adjacent to the construction work zone.
- The LACMTA’s Contractor shall comply with the City’s Business License Tax Ordinance. No Construction within the City of Beverly Hills may commence until the Contractor has paid the City’s Business License Tax in full.
- The LACMTA or its Contractor shall ensure that all dewatering complies with the City’s Dewatering Ordinance found at Section 9-4-610 of the Beverly Hills Municipal Code.
- The closed-circuit television (CCTV) system monitoring the Station plaza and the Station’s interior public spaces shall include a live feed provided to the City’s Police and Fire Departments for safety purposes.

- In order to mitigate traffic impacts during Construction, LACMTA shall reimburse City for a traffic management system that allows the City to review traffic conditions in real time and remotely adjust traffic controls. The new traffic management system will include the installation of CCTV cameras and accessory equipment at the following locations: (1) Robertson Blvd./ Olympic Blvd.; (2) Robertson Blvd./Wilshire Blvd.; (3) S. Santa Monica Blvd./Rexford Dr.; (4) S. Santa Monica Blvd./Crescent Dr.; (5) S. Santa Monica Blvd./Canon Dr.; (6) S. Santa Monica Blvd./Beverly Dr.; (7) Olympic Blvd./ Rexford Dr.; (8) Olympic Blvd./ Doheny Dr.; (9) Olympic Blvd./La Peer Dr.; (10) Olympic Blvd./Robertson Blvd.; (11) Burton Wy./Maple Dr.; and (12) Burton Wy./Foothill Rd. Such CCTV cameras will be mounted on existing City poles or other infrastructure and will connect via City-owned fiber optic cables to the City's traffic management center. Signal system upgrades will include controllers, IP switches, traffic software upgrades, and cabinet upgrades at intersections. The City will be responsible for installing the CCTV cameras and accessory equipment. As soon as practicable after execution of the Agreement, City will provide to LACMTA specifications for the traffic management system. The traffic management system will be included in a Form 60 that is submitted to the LACMTA in accordance with Article XI of the Agreement.
- To the extent possible, the Station's emergency generator shall reduce diesel exhaust from intruding onto private property.
- The Station's electrical equipment at 9385 Wilshire Boulevard shall be screened with an aesthetically pleasing and reasonably priced material satisfactory to City.
- To the extent possible, grates shall be constructed away from the sidewalk. Methane vents shall be located in tree wells where possible, and designed to be isolated from tree roots.
- Evaluate and coordinate with City on joint development potential of Metro property.
- The LACMTA will be responsible for reviewing and approving the support of excavation's structural design for compliance with the LACMTA's design criteria provided in the PDD. No later than thirty (30) Days prior to the support of excavation and decking work (not including implementation of the traffic control plans required to allow potholing and pile installation behind K-rail), the LACMTA or the Contractor shall submit to the City a comprehensive Support of Excavation Final Design Package for review and comment, which will include as a minimum the following:
 - a) Geotechnical Report for the Wilshire/Rodeo Station Area;
 - b) SOE Design Drawings & Calculations for Wilshire/Rodeo Station;
 - c) Dewatering Design Report & Drawings;
 - d) Wastewater Management Plan;
 - e) Building Settlement Assessment Report including analyses related to the Contractor's impact assessment for predicted dewatering and ground movements;
 - f) Utility Settlement Assessment Report;
 - g) Geotechnical Instrumentation Drawings;
 - h) Geotechnical Monitoring Threshold Report that outlines the maximum allowable values for the installed instrumentation;

- i) Contingency Plan(s) that explain what actions will be taken if monitoring threshold values are exceeded. The Contingency Plan will be submitted to the City's Public Works Department prior to the start of excavation, and shall constitute the Project's final and approved Contingency Plan. The Contingency Plan may be amended from time to time by the LACMTA without City approval, except that any change affecting the junctures where dewatering or excavation must stop or the City's role or approval authority with respect to the plan shall require the City's written consent; and
- j) Completed preconstruction survey reports for adjacent structures and those structures identified in Exhibit N of the Agreement, including historic structures (subject to the structure owners written consent).

The Support of Excavation Final Design Package may be submitted to the City for review and comment in discreet submittals as they are completed. The City shall provide comments, if any, to the LACMTA, in the time and manner prescribed under Article XXVI for Construction submittals. To the extent permitted by law, the LACMTA or the Contractor shall provide copies of pre-construction surveys of all properties to property owners for record only prior to any support of excavation work.

- The Contractor shall conduct daily monitoring of the ground, buildings and utilities adjacent to the work area during the excavation, shoring and dewatering work, and the LACMTA shall provide to the City any reports and other written results, analyses, interpretations, and conclusions generated as a result of such monitoring and received by the LACMTA. If building or utility movements exceed the threshold values specified in the approved Geotechnical Monitoring Threshold Report then the Contractor will evaluate the movement per the Contingency Plan. If settlement-related building damage is observed, then the Contractor and its engineer of record shall immediately investigate the cause and severity of the damage in accordance with the approved Contingency Plan. If the observed damage and geotechnical instrumentation data indicate that the structural integrity of the building is at risk, excavation shall be temporarily halted in the affected area. The Contractor and its engineering staff shall propose appropriate mitigation measures to safely rectify the problem, if necessary. Excavation in the affected area shall not resume until an evaluation is performed, mitigations are implemented to prevent further damage to the affected building, and the City is in agreement.
- In the event that a building within the City is proven to be significantly damaged by the Project, then the LACMTA shall provide the City with a report identifying the cause of the damage and the steps the LACMTA will undertake to fix the damage or compensate the property owner. In addition, if the damaged building is a historic structure, then the LACMTA shall undertake all remediation and restoration measures required by law.

In addition to the Permit Conditions provided above, the following standard permit conditions of the City shall apply to the PDD Permit for the 1120 Contract work.

- Restoration of City facilities shall be per City Standards, as defined in the Agreement, City of Beverly Hills Standard Detail Drawings and approved plans.

- Trash collection service shall be maintained at all times. Applicant to coordinate work with appropriate trash collection service providers. Call Public Works Customer Service at (310) 285-2467 for service provider information.
- Contact Dig Alert prior to excavation.
- Schedule pre-construction inspection two (2) days prior to work on any City facilities. Contact: Robert Welch, Project Manager, at 310-285-2497 or email: rwelch@beverlyhills.org.
- Restore full street access at the end of each working day.
- Trench plates shall be recessed and secured per City Standard drawings and requirements.
- Unsecured trench plates shall be re-secured within six (6) hours of notification from the City Representative, but in no case shall remain unsecured past the hours of 10 PM.
- Posting of “No Parking” signs indicating the dates and time of the parking restriction seven (7) days prior to work activity or as required by the City Representative.
- Contact parking enforcement to register parking restrictions 72 hours in advance of proposed restriction. Unregistered parking restrictions or parking restrictions with improperly maintained signage will not be enforced.
- Hauling that meets the following criteria may require engineering investigations, routing definition, coordination, police escort, and control of permit movement:
 - a. Loads in excess of 14 feet wide.
 - b. Loads in excess of 135 feet in overall length.
 - c. Loads that are of a weight that require:
 - i. More than a 13-axle, single-vehicle width hauling combination, or
 - ii. A 13-axle, single-vehicle width hauling combination with a load deck where the inner axles in the groups bordering the load deck are 40 feet or more apart, or
 - iii. Two or more side-by-side vehicles with a combined width of 14 feet or more supporting the load.
- Damage to public improvements as a result of permitted transport shall be reported to the Police Department immediately.

Exhibit B
RESERVED

Exhibit C
Template Form 60

CONTRACT PRICING PROPOSAL (Professional Services)		LACMTA "FORM 60"		PAGE 1 of 2	
Name of Proposer:		Service to be Furnished			
Home Office Address					
Project /Location (s) Where work is performed		Total Amount of Proposal		Contract No.	
DETAILED DESCRIPTION OF COST ELEMENTS					
1a. Direct Labor (Specify)		Est. Hours	Rate/ Hour	Est. Cost(\$)	Total Est. Cost
Administration					
Construction Management					
Inspection					
1b. Overtime					
Total Direct Labor					\$ -
2. Labor Overhead		O.H. (%)	x Base=	Est. Cost(\$)	
Labor Overhead					
Construction Labor Overhead					
Total Labor Overhead					\$ -
3. Travel*				Est. Cost(\$)	
a. Transportation					
b. Per Diem or Subsistence					
Total Travel					\$ -
4. Subcontractors/Subconsultants **				Est. Cost(\$)	
Total Subcontractors					\$ -
Fee on Subcontractors					
5. Other Direct Costs *					\$0.00
6. General & Admin. Expenses					
TOTAL ESTIMATED COST					\$ -
7. Fee					
TOTAL ESTIMATED COST AND FEE					\$ -
* Itemize on "Form 60" - Continuation Page					
** Attach LACMTA "Form 60" for all proposed subcontractors/subconsultants					

CONTRACT PRICING PROPOSAL (Professional Services) <i>Continuation Page</i>		LACMTA "FORM 60"	PAGE 2 of 2	
SUPPORTING SCHEDULE				
ITEM NO.	ITEM DESCRIPTION	Est. Cost (\$)	Total Est. Cost (\$)	
Travel:				
Other Direct Costs:	Reimbursables			
	Mileage			
TOTAL				
Type Name and Title:		Signature:		
Name of Firm:		Date:		

Exhibit D
Detour Routes During Full Closures of Wilshire Boulevard



Metro Purple Line Extension Project

Section 2 Rodeo Station

Decking Detour Map

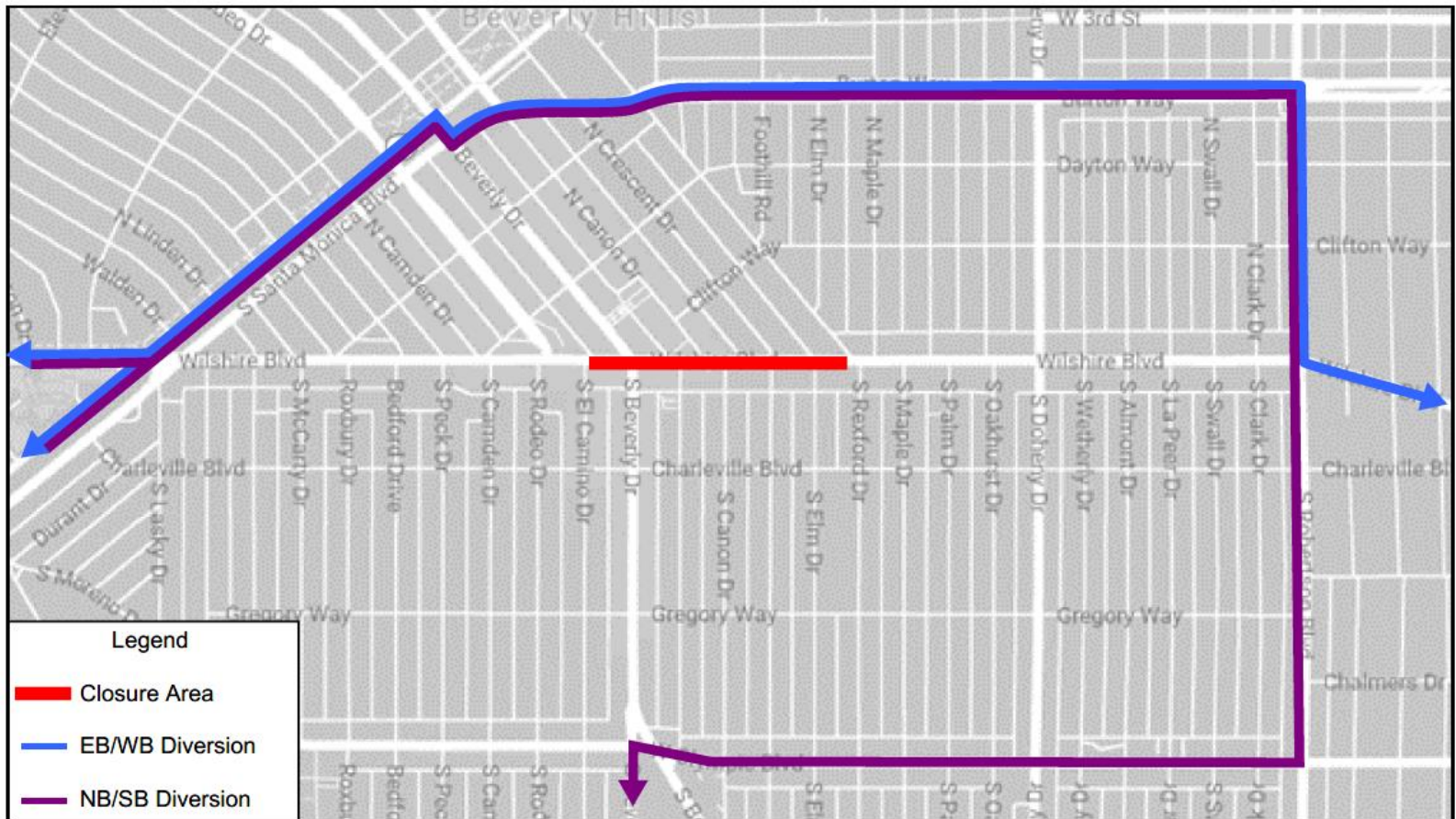


Exhibit E
Metro 5-Step Noise Control Plan

5-Step Noise Control Plan

1. Training
2. Scheduling of Noisy Activities
3. Noise Control Measures
4. Monitoring
5. Response

The measures contained in this 5-Step Noise Control Plan (“Plan”) are for Contract C1120 of the Purple Line Extension Project – Section 2 between the City and Metro (“Agreement”). To the extent that there is any conflict between the Plan and the Agreement, the standards set for in the Agreement shall control over the Plan. Any omission of a noise mitigation measure or standard provided for in the Agreement shall not be construed as a waiver of that measure or standard.

Part 1 - Training

- 1.1 Employees must take Noise Awareness Training.
- 1.2 Metro shall provide mandatory training to all construction personnel.
- 1.3 Emphasize the importance of noise control.
- 1.4 Inform workers that Metro is working under an agreement with Beverly Hills that governs work hours and noise mitigation standards and an After Hours Construction Permit with Beverly Hills.
- 1.5 Discuss methods of limiting noise on the construction site:
 - (a) No yelling or loud music;
 - (b) No idling of equipment;
 - (c) Avoid staging equipment in front of residences or other noise sensitive areas; and
 - (d) Use Noise control measures such as noise blankets, quiet equipment, placing materials instead of dropping, etc.

Part 2 - Scheduling of Work

2.1 Schedule noisiest activities during daytime hours (however traffic restrictions may require that some of this work occur at night, to the extent permitted by the Agreement and with permission by City). Examples of noisy activities include:

- (a) Saw-cutting
- (b) Pile-drilling
- (c) Jack-hammering
- (d) vacuum trucks

2.2 Comply with all work hour restrictions contained in Article XIII of the Memorandum of Agreement for Contract C1120 of the Purple Line Extension Project – Section 2 (“Agreement”).

Part 3 - Noise Control Measures

Noise Control Measures include:

Equipment

3.1 When a backup alarm must be used, use low impact backup alarms on equipment, which include manually-adjustable alarms, self-adjusting alarms, and broadband alarms. Ambient-sensitive self-adjusting backup alarms shall be strategically placed on vehicles to minimize engine noise interference. Configure traffic patterns to minimize backing movements.

3.2 Use modern equipment equipped with state of the art engine insulation and mufflers, in accordance with all applicable City, State, and Federal standards.

3.3 No generators larger than 950 KVA shall be used and, when a generator is necessary, it shall be equipped with the best available technology to minimize noise, including a sound attenuated enclosure with a silencer. Operate equipment at the lowest possible power levels.

3.4 Use solar-powered, battery-powered, or hybrid equipment, including generators and light stands (not engine powered) whenever practical.

3.5 Fit pavement breakers and other equipment with manufacturer approved exhaust muffler

3.6 Use solar-powered or battery powered arrow boards to the extent practical.

3.7 Use nylon slings for lifting in lieu of chain fall, when permissible by CALOSHA.

Hauling/Staging

3.8 Configure traffic patterns to minimize backing movement.

3.9 Use Approved Haul Routes on Major Streets.

3.10 No truck traffic permitted on residentially zoned streets, except for access to laydown yards when necessary and only by using a route approved by the City.

Work Areas

3.11 Enclose pavement breaker and sawcutting activities within a four-sided noise barrier enclosure or equivalent, with the addition of a roof when the equipment does not exceed eight (8) feet in height. Noise barriers shall include a STC rating of 25 or greater.

3.12 Provide noise muffling enclosures for fixed equipment.

3.13 To minimize slamming tailgates use rubber gaskets or equivalent or decrease speed of tailgate closure.

3.14 Place plywood or dirt beds on all trucks or any other mutually agreed to effective noise mitigations when loading concrete or steel on beds of trucks.

3.15 No slamming tailgates.

- 3.16 Establish truck cleanout staging areas as needed.
- 3.17 No impact pile driving will be used.
- 3.18 Locate equipment away from noise sensitive areas to the extent practicable.
- 3.19 Use noise control signage in work zone that states "Noise Control Zone."
- 3.20 Stage equipment away from residences, where possible.
- 3.21 No idling of heavy equipment or vehicles, when not in use.
- 3.22 The use of vibratory rollers and packers will be avoided near vibration sensitive areas and structures. The vibration sensitive areas and structures shall be determined by a structural engineer as part of the preconstruction surveys and subject to verification by the City.
- 3.23 No parking by construction staff on city streets.

Staging Areas

3.24 Noise barrier walls at all staging areas/lay-down yards to have a wall assembly of STC-25 or greater, and the ability to reduce noise by at least 10 dBA. Noise barrier walls shall be at least 20 feet in height.

3.25 Noise control signage in staging areas that state "Noise Control Zone" and "Slow Down."

Part 4 - Noise Monitoring

- 4.1 4 levels of monitoring:
 - (a) Metro
 - (b) Contractor
 - (c) Environmental consultant
 - (d) Independent Compliance Monitor

4.2 A trained Metro acoustic monitor shall verify that such activities do not generate noise greater than 5dBA above ambient noise levels, when measured at the property line nearest to sensitive receptors and at heights above the line of site of construction activities.

4.3 Unless otherwise agreed to by the Parties, a trained Independent Compliance Monitor shall be present on-site at all times when construction activities are being performed to verify compliance with all terms of this Plan and the Agreement, including verification that such activities do not generate noise greater than noise levels identified in Article XIV of the Agreement, when measured at the property line nearest to sensitive noise receptors.

4.4 The Independent Compliance Monitor shall exercise all of the powers conferred upon it by Article XVII of the Agreement.

4.5 Acoustical engineer interprets results, prepares monthly compliance reports, provides input/comments. Monthly compliance reports will be provided to the City of Beverly Hills, and are available to others upon request.

4.6 Construction noise must be limited to no more than 5 dB above the ambient noise levels jointly agreed to by the City and Metro. In addition, if any activity conducted between the hours of 10 p.m. and 7 a.m. causes an unreasonable noise impact to the surrounding residential or business neighborhood, reasonable mitigation, agreed to by the City and Metro, shall be implemented to reduce the impact to a reasonable level. When determining whether an impact is unreasonable, the City shall take into account the hour of day, the established ambient level at the closest receptor, the proximity to the work site, noise sources not related to the project, and other similar factors.

4.7 Metro and the City shall jointly establish the preexisting ambient hourly noise levels at the property lines of residential and temporary occupancy uses in accordance with Article XIV of the Agreement.

Part 5 - Response

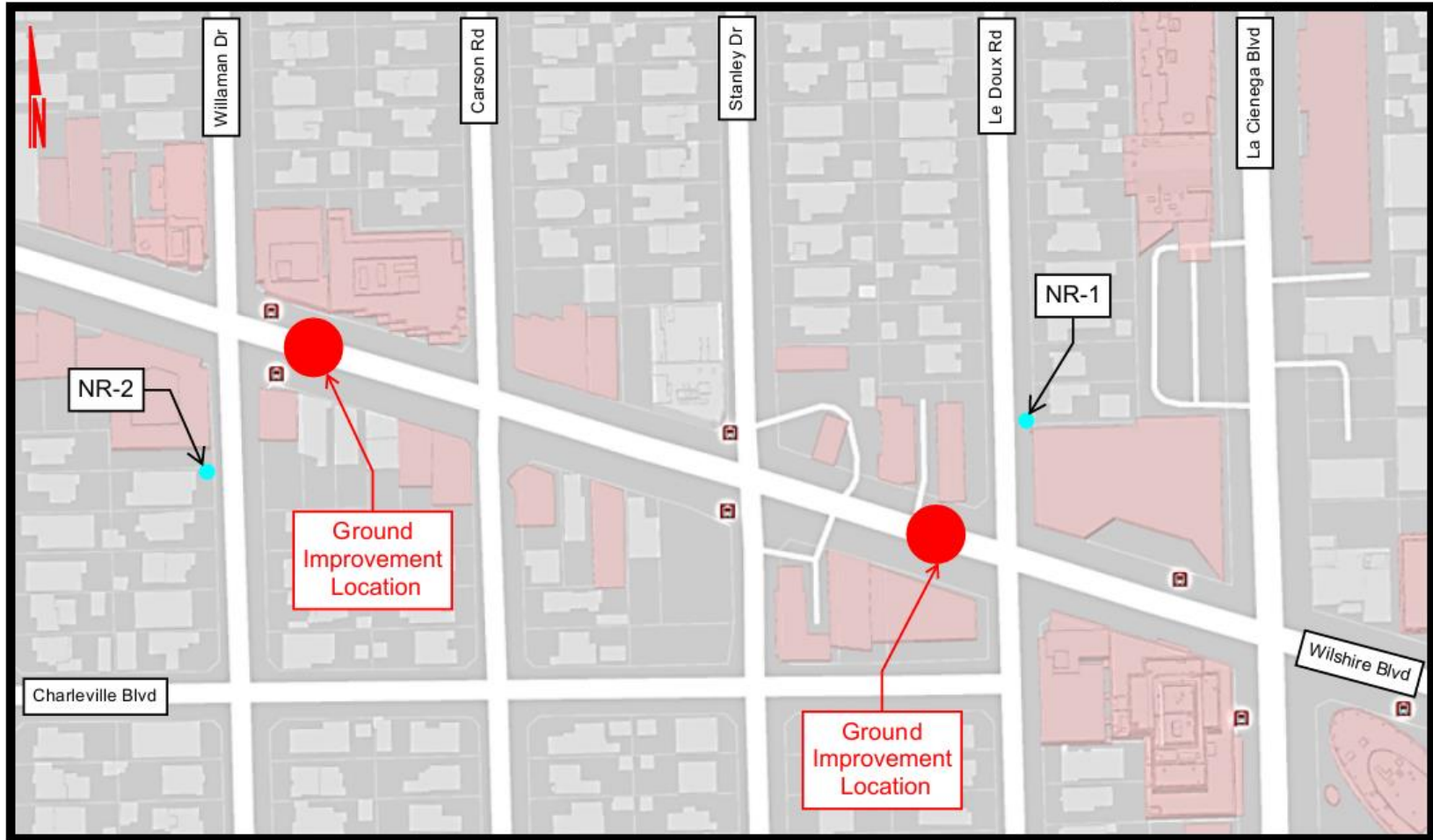
- 5.1 24-hour hotline and email.
- 5.2 Hotline will be monitored by a live person.
- 5.3 Contact information is provided to the community via:
 - (a) All project materials
 - (b) Signs
 - (c) Website
 - (d) Social media channels
 - (e) E-mail

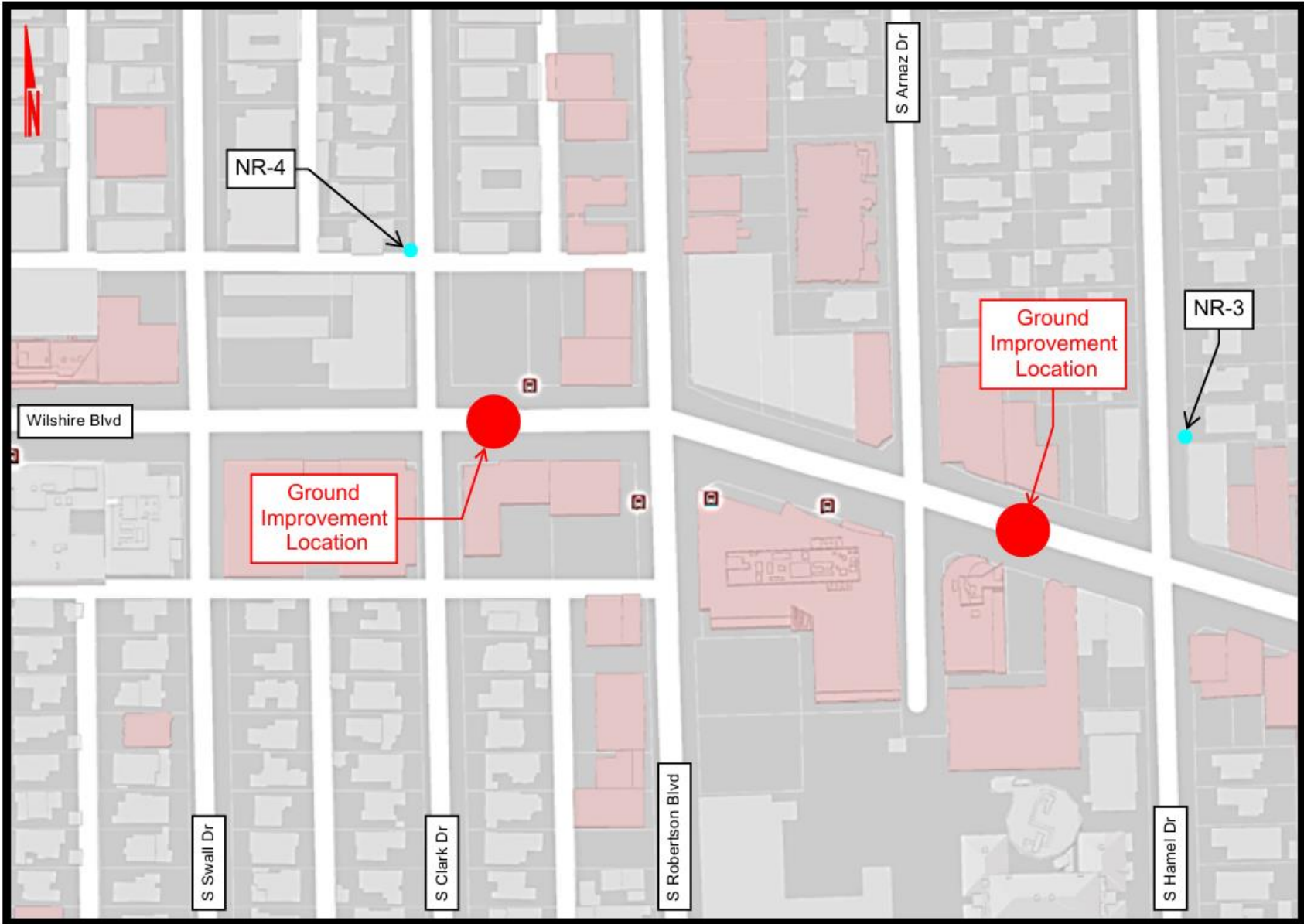
Exhibit F
Ambient Noise Testing Sites

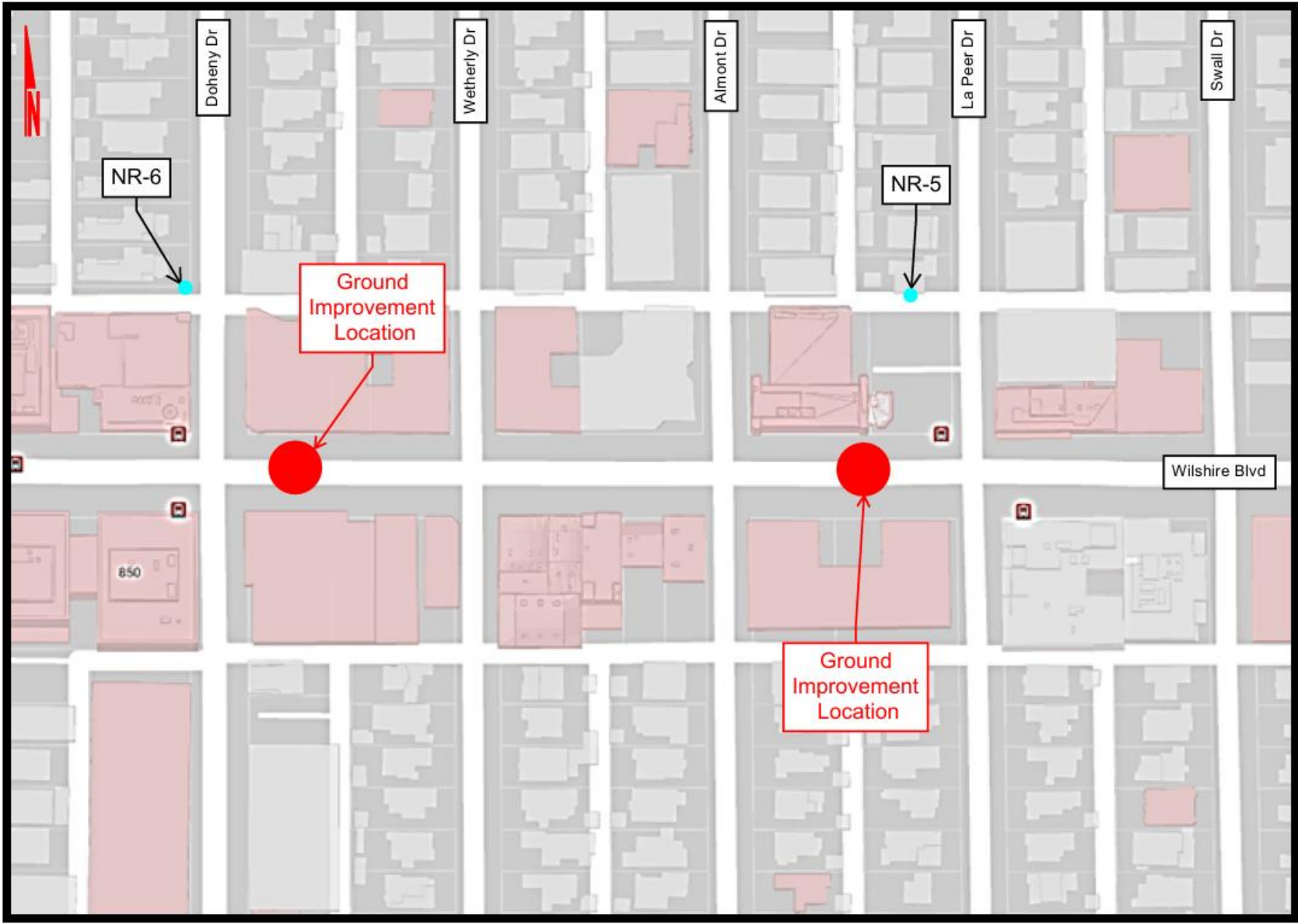
Exhibit F - Noise Monitoring Locations

-  Station Box
-  Construction Staging Yard
-  Hotels
-  Noise Monitoring Location*
-  Elevated Noise Monitoring Location*

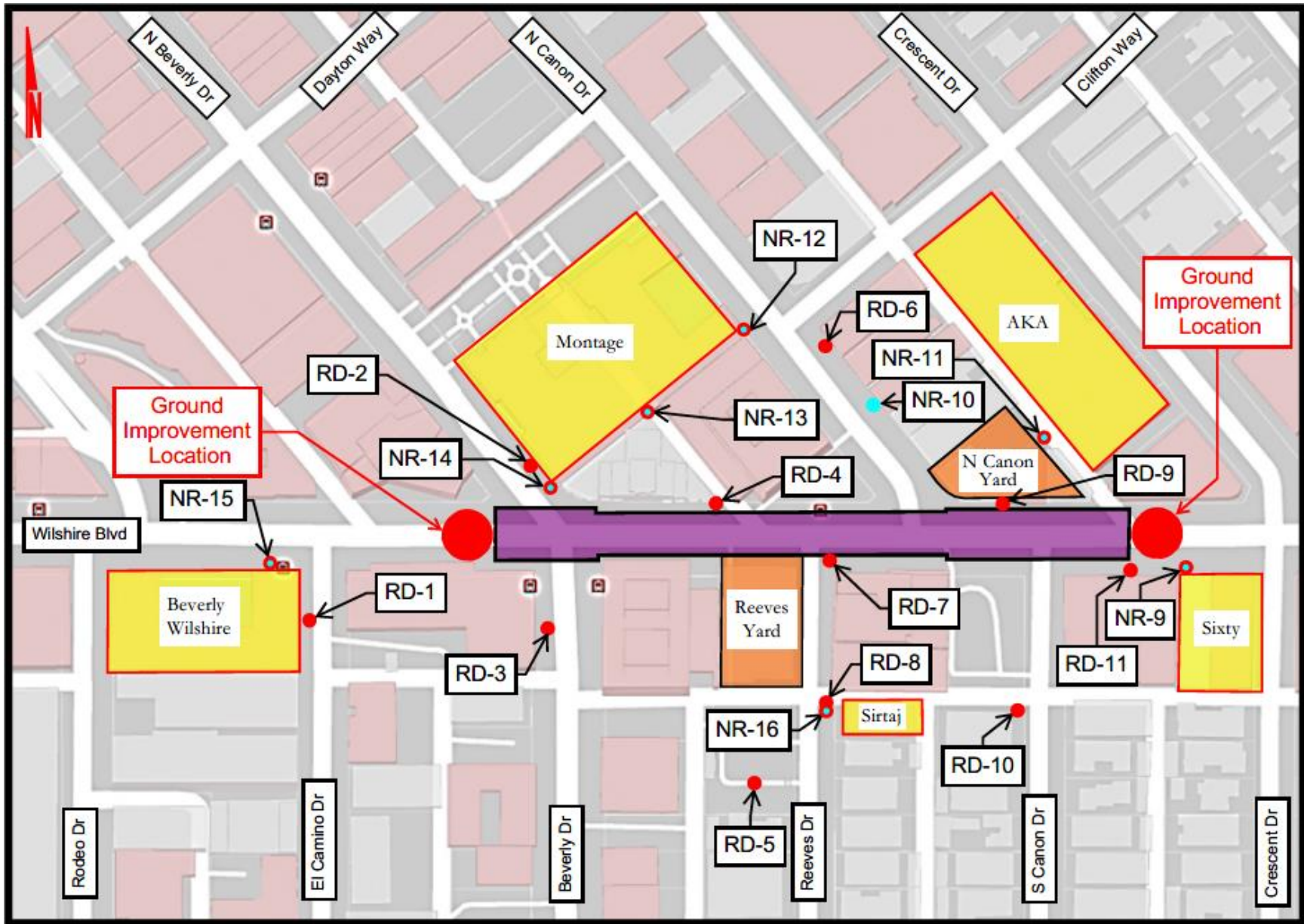
*Locations are subject to final approval by the City of Beverly Hills

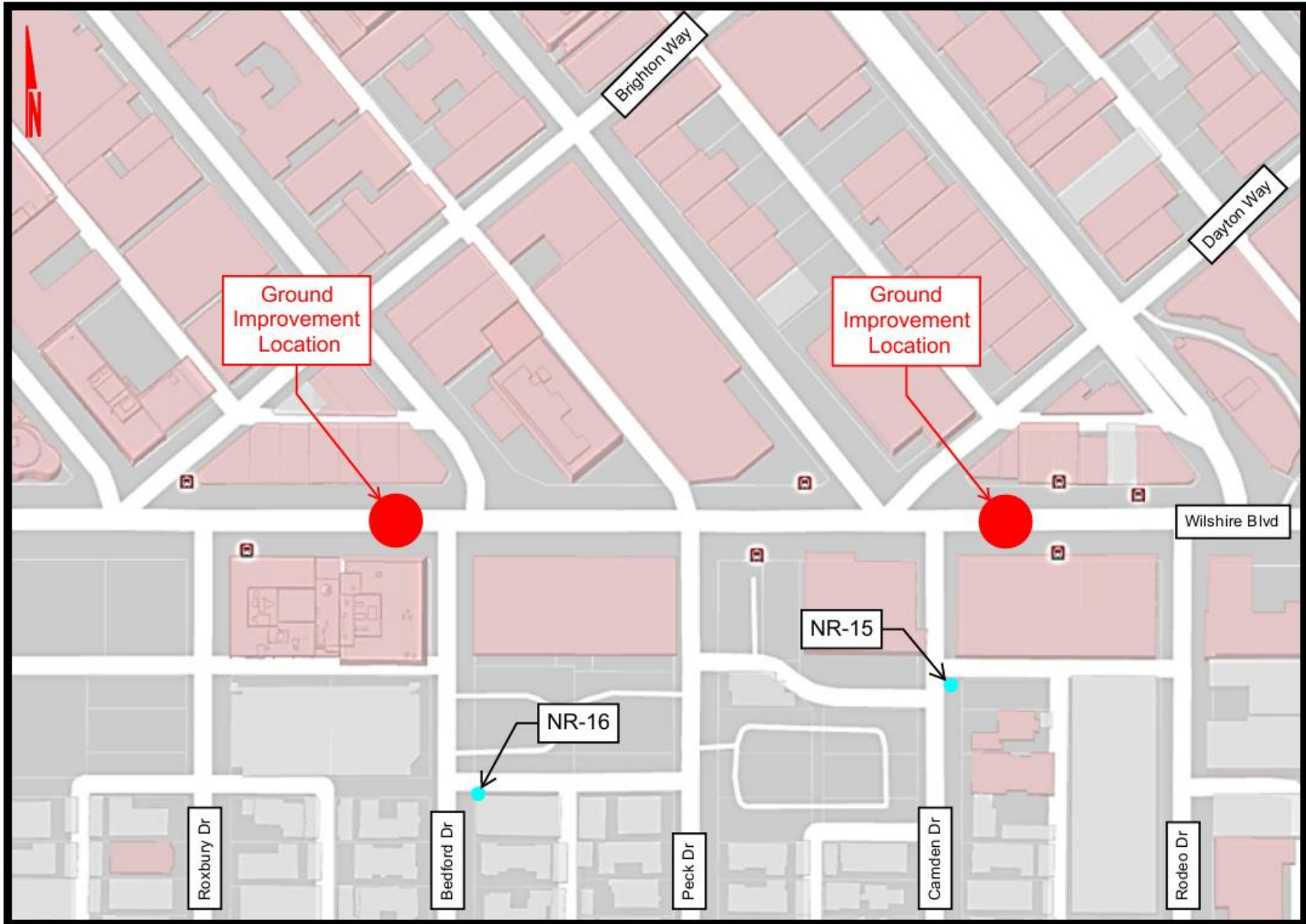


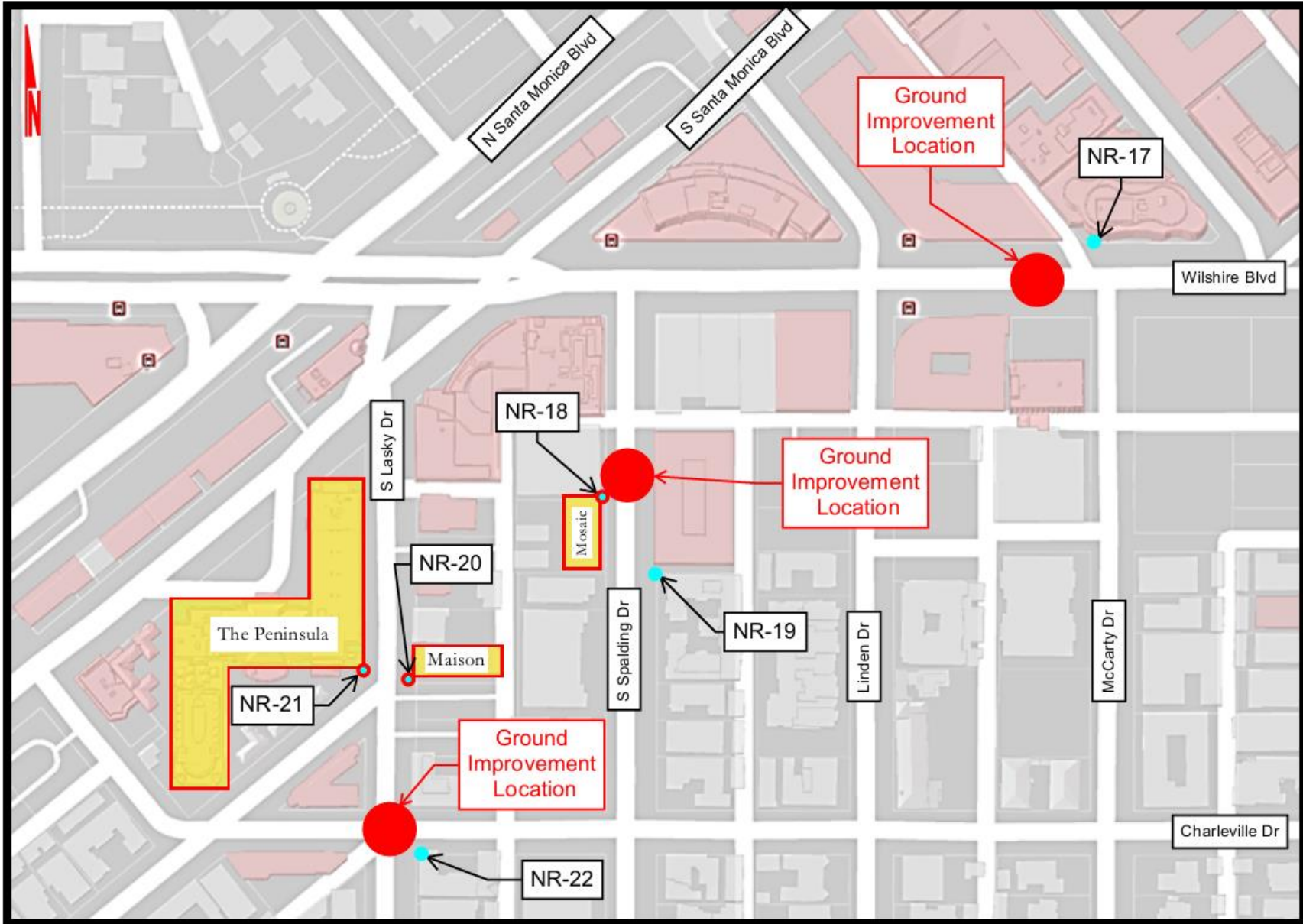


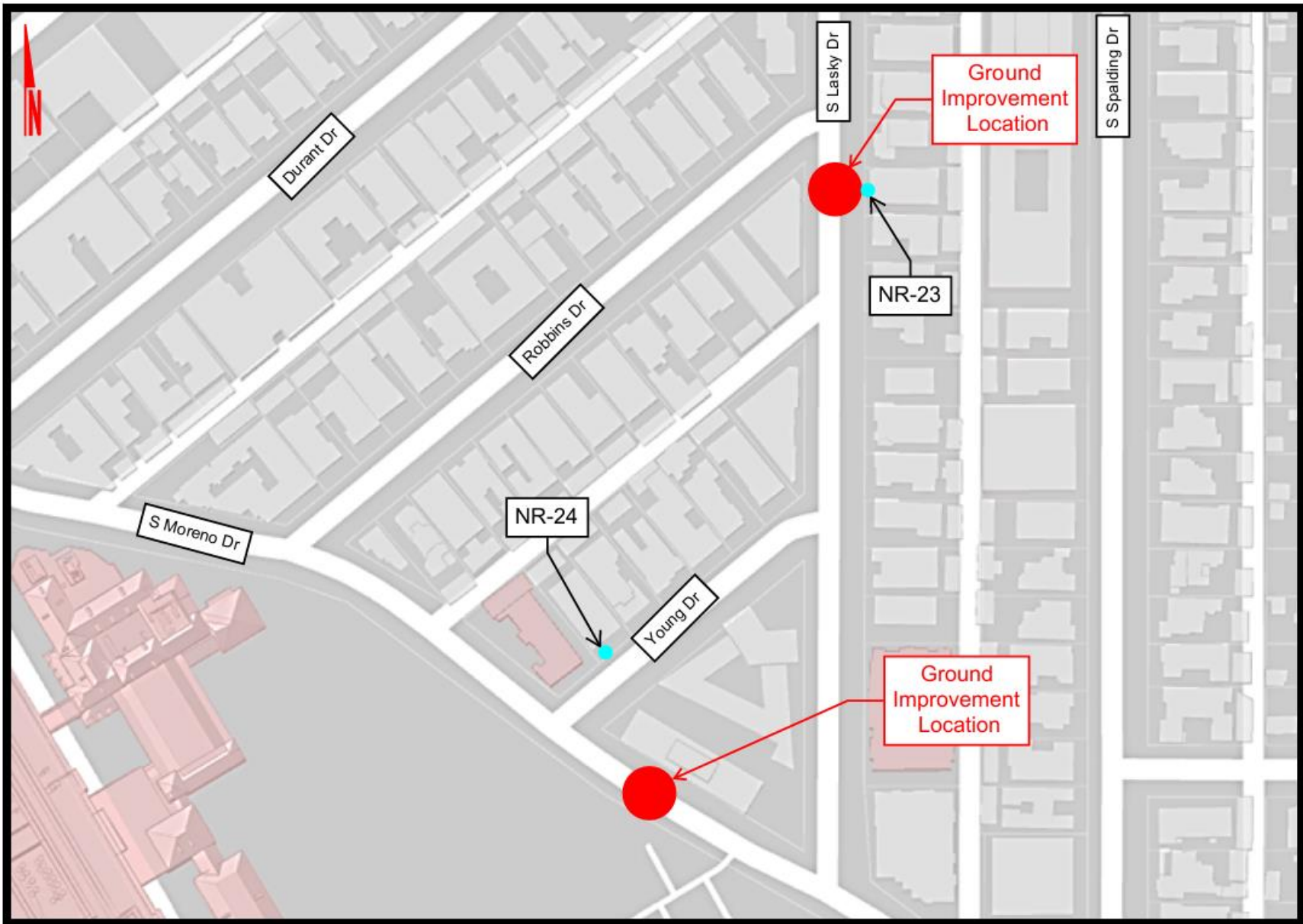












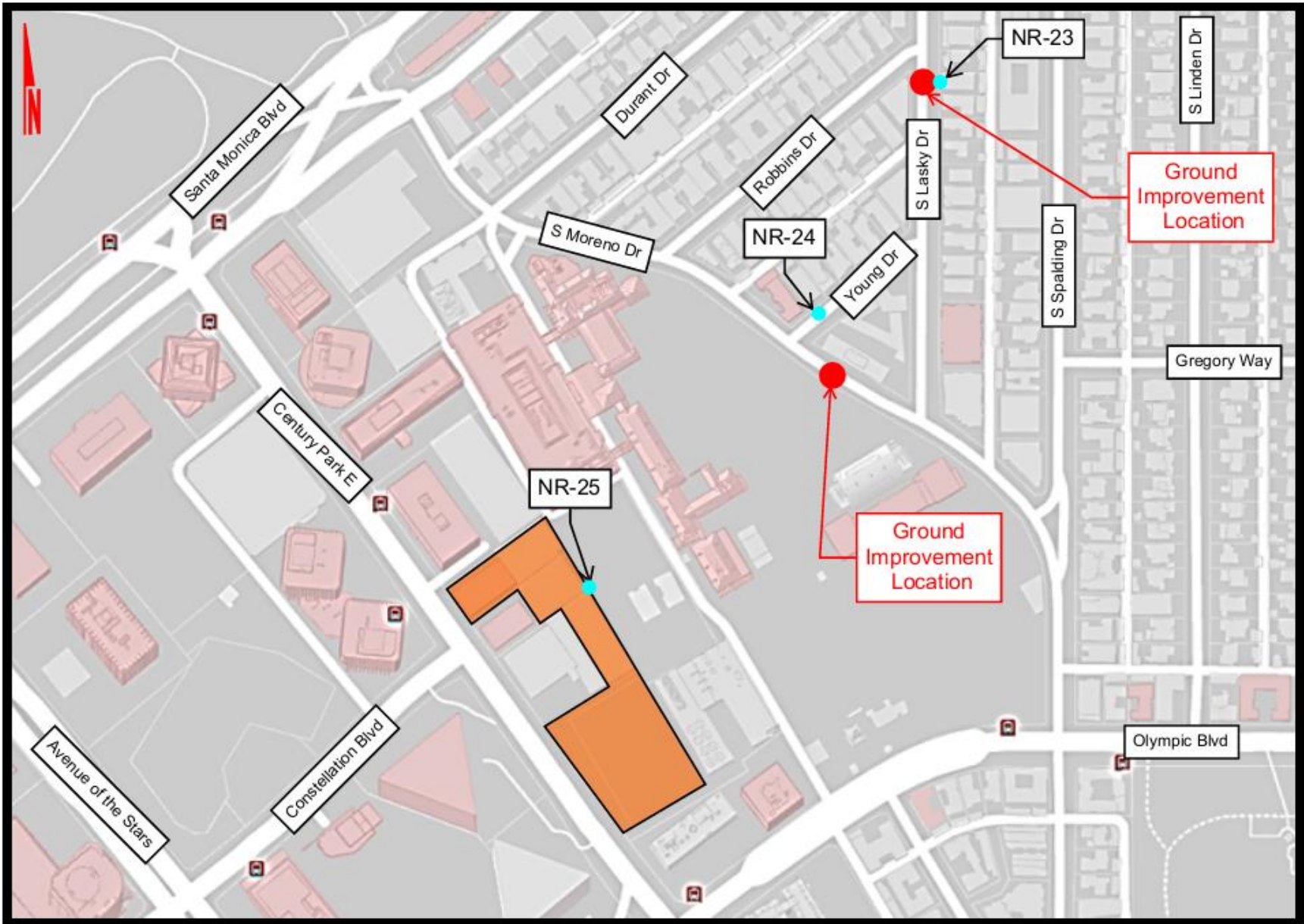


Exhibit G
Public Information Graphics Program

Public Information Graphics Program



Sound Wall



Pedestrian Barrier



Automotive Barrier



Temporary light pole boxes



Wayfinding

Exhibit H
LACMTA Claims Form



Los Angeles County
Metropolitan Transportation Authority

One Gateway Plaza
Los Angeles, CA 90012-2952

213.922.2000 Tel
metro.net

Metro

Dear Claimant:

In order to file a Claim for Damages you must fill out the enclosed form as completely as possible, using blue or black pen. Be sure to include your current address, telephone number and signature in spaces provided. In case of automobile damage, only the registered owner may present a claim for repairs and must sign the form.

Mail your completed form to:

BOARD SECRETARY'S OFFICE – LEGAL SERVICES
Los Angeles County Metropolitan Transportation Authority (Metro)
One Gateway Plaza, M/S 99-3-1
Los Angeles, CA 90012- 2952

After your claim is processed our Insurance Adjuster will contact you in approximately ten days.

NOTE: NO PAYMENT WILL BE MADE UNTIL IT IS DETERMINED THAT METRO IS LEGALLY RESPONSIBLE FOR YOUR DAMAGES.

Thank you for the opportunity to assist you in this matter.

Enclosed: Claim for Damages Form

Claim for Damages

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-3-1, Los Angeles, CA 90012-2952

Please type or print.

CLAIMANT INFORMATION

Last Name _____ First Name _____ Middle Name/Initial _____
Occupation _____ Social Security Number _____ Birth date _____
Street Address _____
City | State | Zip _____ Telephone Number _____

IF CLAIMANT IS A MINOR: PARENT OR GUARDIAN INFORMATION

Last Name _____ First Name _____ Middle Name/Initial _____
Street Address _____
City | State | Zip _____ Telephone Number _____

IF YOU HAVE AN ATTORNEY: ATTORNEY INFORMATION

Last Name _____ First Name _____ Middle Name/Initial _____ Telephone Number _____
Street Address _____ City | State | Zip _____

FOR OFFICE USE ONLY

Claim number & Receipt date

INCIDENT INFORMATION

Please indicate if you were a Metro bus or Metro rail passenger: Yes No

- bus rail platform parking lot bus stop terminal other _____
- Other than bus or rail car, vehicle description _____
- Accident date** _____ Time _____ Location _____
- Direction _____ On which street _____ Cross-street _____
- Speed _____ Weather _____ Bus or Rail Car # _____ Line # _____
- Boarding point _____ Operator Name or Badge # _____

OWNER OF PRIVATE VEHICLE PLEASE COMPLETE THIS SECTION:

- Name _____ Driver License # _____
Address _____
Telephone _____ Vehicle: Year _____ Make _____ Model _____
Insured? Yes No Vehicle Lic. # _____ Injured? Yes No Insurance Tel. # _____
Carrier _____ Policy # _____

CONTINUED

Claim for Damages

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-3-1, Los Angeles, CA 90012-2952

Please print or type.

OWNER OF PRIVATE VEHICLE PLEASE COMPLETE THIS SECTION (CONTINUED):

8. Describe what occurred (if necessary, you may add another page):

9. What property damage or bodily injury do you claim? Give full extent of damage or injury claimed:

10. The amount claimed if under \$10,000 as of the date of presentation together with the basis of computation thereof. Attach medical bills and/or repair estimates.

11. Name(s) and address(es) of witness(es):

12. Name(s) and address(es) of doctor(s):

13. Dates of prior claims against the Los Angeles County Metropolitan Transportation Authority (METRO) or Southern California Rapid Transit District (RTD). If none, write "None".

Signature of Claimant

Date

Claims arising after January 1, 1988 must be filed within 6 months from the date of accident. For Law governing filing of claim and statute of limitations as to filing action see Chapter 201 Statutes 1987 (Sec 900 ET SEQ Government Code). For your protection California Law requires the following to appear on this form: Any person who knowingly presents a false or fraudulent claim for the payment of a loss is guilty of a crime and may be subject to fines and confinement in State Prison. Added by Stats. 1989, c. 1119, S 3.

Please mail your claim to:
Metro Board Secretary's Office – Legal Services
One Gateway Plaza, 99-3-1, Los Angeles, CA 90012-29952



Exhibit I
Design and Construction Plans Provided to City of Beverly Hills

SECTION	DESCRIPTION	COBH	
		FRO	APPROVAL
01 29 76	COST/SCHEDULE INTEGRATION SYSTEM		
01 29 76-1.05.A.06	Current CPM Schedule	x	
01 29 76-1.05.A.13	Three Week Look Ahead Bar Chart Schedule	x	
01 29 76-1.05.A.14	As-Built Schedule	x	
01 31 03	DESIGN MANAGEMENT REQUIREMENTS		
01 31 03-1.05.C-001.00	Design Unit Review Packages and Work Plans	x	
01 31 03-1.05.C-001.01	Design Unit Review Packages and Work Plans	x	
01 31 03-1.05.C-003.00	STV Package 2 60% Design		x
01 31 03-1.05.C-005.00	STV Package 2 85% Design		x
01 31 19	PROJECT MEETINGS		
01 31 19-1.05.B	Meeting Notices and Agendas	x	
01 31 19-1.05.C	Meeting Minutes		x
01 31 31	UTILITY COORDINATION		
01 31 31-1.05.B	Copies of documents, records and minutes from all formal Third Party meetings.		x
01 31 31-1.05.C	Relocate SCG Line at Wilshire		x
01 32 23	GRADES, LINES AND LEVELS		
01 32 23-1.05.C	Additional Survey Control Points including building monitoring		x
01 35 23	WORKSITE SAFETY REQUIREMENTS		
01 35 23-1.05.G.001.00	Injury and Illness Prevention Program	x	
01 35 23-1.05.G-001.02	Heat Illness and Safety First Incentive Plan	x	
01 35 23-1.05.G.01-003.00	Heat Illness Prevention Plan	x	
01 35 23-1.05.G.3	Job Hazard Analysis - Noise	x	
01 35 23-1.05.G.003.00	Job Hazard Analysis	x	
01 35 23-1.05.G.003.01	Job Hazard Analysis	x	
01 35 23-1.05.G.006-001.00	Hazardous Waste Operations and Emergency Response Health and Safety Plan	x	
01 35 23-1.05.G.007-001.00	Excavation Action Plan	x	
01 35 23-1.05.G.016-001.00	Materials Hazards Communication Program	x	
01 35 35	WATER POLLUTION CONTROL		
01 35 35-1.05.C	NPDES Permits		x
01 35 35-1.05.D.2.a-001.00	Stormwater Pollution Prevention Plan (SWPPP)		x
01 35 35-1.05.D.2.c	NOI submittal to State Water Resources Control Board (SWRCB)	x	
01 35 35-1.05.D.2.c.3	Weekly storm water inspection reports required by NPDES permit and SWPPP.	x	
01 35 35-1.05.D.2.c.5	Quarterly non-storm water inspection reports required by NPDES permit and SWPPP.	x	
01 35 35-1.05.D.2.c.6	Annual Report to Metro for review by September 1st or in accordance with permit.	x	
01 35 35-1.05.E .1	Ground Water Pollution Control: Submit to metro all documentation necessary for coverage under RWQCB Dewatering General Permit.	x	

01 35 35-1.05.E .3	Wastewater management plan		x
01 35 35-1.05.F	Post-Construction Permanent Water Pollution Control		x
01 43 10	PROJECT QUALITY PROGRAM REQUIREMENTS – DESIGN/BUILD		
01 43 10-1.05.B.09	Project Instructions, Procedures, and Drawings	x	
01 43 10-1.05.B.10	Source Inspection List	x	
01 43 10-1.05.B.14-001.00	Construction Work Plans	x	
01 50 00	TEMPORARY FACILITIES AND CONTROLS		
01 50 00-1.05.C	Lighting Plan, electrical service location and circuit diagram		x
01 51 23	TEMPORARY CONSTRUCTION VENTILATION		
01 51 23-1.05.B	Project Ventilation Plan		x
01 51 23-1.05.C	Resubmittal of Ventilation Plan as required		x
01 52 13	CONSTRUCTION FACILITIES		
01 52 13-1.05.B	Mobilization Plan		x
01 52 13-1.05.C	Demobilization Plan		x
01 53 05	TEMPORARY DECKING SYSTEMS		
01 53 05-1.05.B	Calculations	x	
01 53 05-1.05.C	Working Drawings		x
01 55 26	CONTROLLING TRAFFIC		
01 55 26-1.05.D-001.1	Traffic Management Plan (TMP)		x
01 55 26-1.05.E	Temporary Traffic Signal Plans (TTSP)		x
01 55 26-1.05.F	Traffic Circulation Plans (TCP) / Traffic Detour Plans (TDP) & Closure		x
01 55 26-1.05.G	Traffic Lane and Sidewalk Closure Plans		x
01 55 26-1.05.H	Access and Haul Plan		x
01 55 26-1.05.I	Construction Duration extension		x
01 55 26-1.05.J	As-Built-Plans		x
01 55 26-3.01.J	Worksite Traffic Control Plans (COBH)		x
01 56 18	OPERATIONAL TRAIN NOISE AND VIBRATION CONTROL		
01 56 18-1.05.C	Operational Train Noise and Vibration Control Plan	x	
01 56 18-1.05.E	List of Installed Groundborne Noise and Vibration Mitigations	x	
01 56 18-3.02.C.2	Noise Measurement Report	x	
01 56 18-3.04.C.2	Vibration Measurement Report	x	
01 56 19	CONSTRUCTION NOISE AND VIBRATION CONTROL		
01 56 19-1.05.B.02	Pre-construction ambient noise level measurement report		x
01 56 19-1.05.B.03-001.00	Contractor's Noise Control Plan		x
01 56 19-1.05.B.04	Noise Monitoring Plan and Noise Measurement Reports		x
01 56 19-1.05.B.05-001.00	Proposed locations		x
01 56 19-1.05.B.06	Pre-construction ambient noise level measurement report.		x
01 56 19-1.05.B.07-001.00	Contractor's Vibration Control Plans and Vibration Monitoring Plan		x
01 56 19-1.05.B.11-002.00	Wilshire Rodeo Station Staging Area Noise Barrier Drawings and Calcs		x

01 56 19-1.05.B.11-003.00	Noise Barrier Panel Construction, Noise Barrier Lumber Material, Noise Barrier Sound Blanket			x
01 56 19-1.05.C	Post-Construction Noise and Vibration Reports			x
01 56 19-1.07.C	Noise Measurement Report			x
01 56 19-1.07.D	Vibration Measurement Report			x
01 56 19-2.04.F	Noise Control Curtain Framework and Support Design			x
01 56 19-3.12.I.3	Haul Route and Staging areas to CoLA, BOE, LADOT, COBH			x
01 56 20	ACOUSTICS, NOISE AND VIBRATION CONTROL FOR STATION ENVIRONMENT			
01 56 20-1.05.C-001.00	Noise and Vibration Testing Plan	x		
01 56 20-1.05.D-001.00	Station Noise Monitoring Plan	x		
01 56 20-1.05.E	Vibration Monitoring Plan	x		
01 56 20-1.05.F-001.00	Acoustical Analysis	x		
01 56 20-1.05.H	Shop and Working Drawings, Calculations, and Material Data	x		
01 56 20-1.05.J	Monitoring Locations and Analysis	x		
01 56 20-1.07.C.2	Noise Measurement Report	x		
01 56 26	CONSTRUCTION FENCING (WOOD)			
01 56 26-1.05.A	Refer to Section 01 33 00 SUBMITTAL PROCEDURES - Product and Material Data			x
01 56 26-1.05.B	Working Drawings and Schedule			x
01 56 39	SHRUB AND TREE PROTECTION			
01 56 39-1.05.B	Location Drawings			x
01 56 39-1.05.C	Test Reports for topsoil	x		
01 56 39-1.05.D	Photographic Documentation	x		
01 57 19	TEMPORARY ENVIRONMENTAL CONTROLS			
01 57 19-1.05.B	Hazardous Waste Management Plan			x
01 57 19-1.05.C	Fugitive Dust Emissions Control Plan			x
01 58 13A	TEMPORARY SIGNS AND BANNERS			
01 58 13A-1.05.C	Safety Signs	x		
01 71 13	MOBILIZATION			
01 71 13-1.05.B	Construction Site Layouts	x		
01 71 24	PRECONSTRUCTION SURVEYS			
01 71 24-1.05.C	Preconstruction Survey Plan	x		
01 71 24-1.05.D	Preconstruction Survey Report	x		
01 71 24-1.05.E	Post Construction Survey Report	x		
01 71 24-1.05.F	Preconstruction Survey Monument Tie Out Notes	x		
01 71 45	NEW UTILITY SERVICES			
01 71 45-1.05.B	Design Documentation			x
01 74 19	WASTE MANAGEMENT AND DISPOSAL			
01 74 19-1.05.B	Waste Management Plan			x
01 74 19-1.05.D	Documentation and Field Reports	x		
01 78 39	AS-BUILT DRAWINGS AND CURRENT STATUS DOCUMENTS			

01 78 39-1.05.D	Milestone As-Builts and Final Project Record Drawings, Updated Files (CAD,PDF, Word, BIM, etc.), As-Built Construction Plans		x
02 41 00	STAGING AREA CLEARING AND DEMOLITION		
02 41 00-1.04.B.1-001.00	Qualifications: Demolition Contractor C-21 License		x
02 41 00-1.05.B.1-001.00	Demolition Plan - 9430 Wilshire Blvd. (Old Ave Gallery Building)		x
02 41 00-1.05.B.1-001.01	Demolition Plan - 9430 Wilshire Blvd. (Old Ave Gallery Building)		x
02 41 00-1.05.B.1-001.02	Demolition Plan - 9430 Wilshire Blvd. (Old Ave Gallery Building)		x
02 41 00-1.05.B.3	Permits		x
02 41 00-1.05.B.4	Letter showing arrangements for disposing of waste at landfill/disposal facility	x	
02 41 00-1.05.B.5	Certificates and Proposed haul route(s)		x
02 41 00-1.05.B.6	Written Releases from owners of private property	x	
02 41 00-1.05.B.8	Permits and Notices authorizing demolition	x	
02 41 00-1.05.C.01	Demolition Permit		x
02 41 00-1.05.C.02	Grading Permit		x
02 41 00-1.05.C.03	SCAQMD / LAFD Underground Tank Removal Permits	x	
02 41 00-1.05.C.04	SCAQMD Hazardous Material Removal Permits	x	
02 41 00-1.05.C.05-001.00	Demolition Plans and Schedules		x
02 41 00-1.05.C.05-001.01	Demolition Plans and Schedules		x
02 41 00-1.05.C.06	List of construction equipment and materials		x
02 41 00-1.05.C.07	Scaffolding/Temporary Support Drawings		x
02 41 00-1.05.C.08	Shoring Permit		x
02 41 00-1.05.D	Final Design Plans		x
02 41 00-1.05.F	Submittals specified in Section 01 35 29 and Section 01 35 43	x	
02 41 00-1.05.G	Record Documentation	x	
02 41 13	SELECTIVE SITE CLEARING & DEMOLITION		
02 41 13-1.05.B.1	Station Site Street Inventory List		x
02 41 13-1.05.B.2	Street Furniture and Equipment condition Survey		x
02 41 13-1.05.B.3	Working Drawings		x
02 41 13-1.05.C.1	As-Built Drawings		x
02 41 13-1.05.C.2	Signed letter of receipt that furniture has been returned to original location		x
03 31 00	PORTLAND CEMENT CONCRETE		
03 31 00-1.05.B	Quality Control Plan describing QA program	x	
03 31 00-1.05.C.1	Concrete Mix Design - Noise Barrier Pile Backfill	x	
03 31 00-1.05.E.1	Test Reports - Mix Design for Each Concrete Class	x	
03 31 00-1.05.E.1.a	Test Reports - Mix Design for Form Removals	x	
03 31 00-1.05.E.1.b	Test Reports - Mix Design Conformance of Ingredients with Specifications	x	
03 31 00-1.05.F.2	Printout of Delivery Tickets	x	
03 33 00	ARCHITECTURAL CONCRETE		
03 33 00-1.05.B	Shop Drawings and Quality Control Plan	x	
03 33 00-1.05.C	Calculations and Mix Design	x	

03 33 00-1.05.D.2	Samples - For CIP Concrete Station Entrance Portal Walls: Aggregate	x	
03 33 00-1.05.G	Mock-Ups	x	
03 35 00	CONCRETE FINISHING		
03 35 00-1.05.B	Shop Drawings	x	
03 35 00-1.05.F	Samples	x	
03 35 00-1.05.G	Mock-Ups	x	
05 12 23	STRUCTURAL STEEL		
05 12 23-1.05.C	Shop and Erection Drawings	x	
05 12 23-1.05.D.1	Specifications, Installation Instructions, and Test Reports for Fasteners	x	
05 12 23-1.05.D.2	Specifications, Installation Instructions, and Test Reports for Washers	x	
05 12 23-1.05.H	Documentation as Specified in Section 05 05 33	x	
05 53 00	GRATINGS		
05 53 00-1.05.C	Shop Drawings		x
07 10 00	WATER AND GAS PROTECTION SYSTEMS		
07 10 00-1.05.B.1	Product and Data Samples		x
07 10 00-1.05.B.3	Test and Evaluation Reports		x
07 10 00-1.05.B.4	Shop Drawings		x
07 10 00-1.05.B.5	Working Drawings		x
07 10 00-1.05.C.2	Record Documentation	x	
07 10 00-1.05.C.3	Operation and Maintenance Manual with Working Drawings	x	
07 80 50	FIREPROOFING AND FIRESTOPPING		
07 80 50-1.05.B	Product Data		x
07 80 50-1.05.C.1	Shop Drawings - each firestop system configuration		x
07 80 50-1.05.C.2	Shop Drawings - where conditions require modification to a qualified agency's illustration		x
07 80 50-1.05.D	Samples		x
07 80 50-1.05.E	Firestop System Schedule		x
07 80 50-1.05.H	Product test reports		x
08 34 80	EQUIPMENT ACCESS HATCHES		
08 34 80-1.05.B	Shop Drawings		x
08 34 92	EMERGENCY EXIT HATCHES		
08 34 92-1.05.B	Shop Drawings		x
08 90 00	LOUVERS AND GRILLES		
08 90 00-1.05.B	Shop Drawings		x
08 90 00-1.05.D	Manufacturer's Product Data	x	
09 96 23	ANTI-GRAFFITI COATING		
09 96 23-1.05.C	Product Data	x	
09 96 23-1.05.D	Certificate of Test	x	
09 96 23-1.05.E	Samples	x	
10 14 00	SIGNAGE		
10 14 00-1.05.C	Shop Drawings	x	

10 14 26	STATION MARKER		
10 14 26-1.05.B	List of required submittals, and date req'd to meet schedule	x	
10 14 26-1.05.E.1.a	Shop Drawings - Sign panels	x	
10 14 26-1.05.E.1.b	Shop Drawings - Post and angle frames	x	
10 14 26-1.05.E.1.c	Shop Drawings - solid state LED fixtures	x	
10 14 26-1.05.E.1.d	Shop Drawings - Structural design calculations	x	
10 14 26-1.05.E.2	Shop Drawings - Crating	x	
10 14 26-1.05.F	Final Artwork and full size patterns for letters and logo-type	x	
10 14 35	ILLUMINATED SIGNS AND EDGE LIGHT		
10 14 35-1.05.C	Shop Drawings	x	
10 14 35-1.05.E	Proposed alignment control and installation procedures	x	
10 14 35-1.05.F	Mock-Ups	x	
10 14 53	TRAFFIC SIGNAGE		
10 14 53-1.05.C	Shop Drawings		x
10 44 13	STAINLESS STEEL CABINETWORK AND FIRE EXTINGUISHERS		
10 44 13-1.05.B	Shop Drawings	x	
10 44 13-1.05.C	Product Data	x	
10 77 00	BICYCLE METAL LOCKERS AND RACKS		
10 77 00-1.05.B	Product Data		x
10 77 00-1.05.C	Shop Drawings		x
10 77 00-1.05.D	Samples		x
10 81 13	BIRD DETERRENT DEVICES		
10 81 13-1.05.B	Product Data, including Installation Instructions	x	
10 81 13-1.05.C	Shop Drawings	x	
12 15 20	ART PROGRAM		
12 15 20-1.05.A	Construction Drawings	x	
12 15 21	STATION ENTRANCE PORTAL		
12 15 21-1.05.B	Design Drawings	x	
12 15 21-1.05.C	Lighting Design	x	
12 15 21-1.05.F	Shop Drawings	x	
12 15 21-1.05.H.1	Mock-up - Glass Enclosure (Wall System)	x	
12 15 21-1.05.H.2	Mock-up - Glass Canopy System	x	
12 15 22	SMOKE PROTECTION DEVICES		
12 15 22-1.05.B	Shop Drawings		x
12 15 22-1.05.C	Calculations		x
12 15 22-1.05.E	Computational Fluid Dynamics analysis, refer to SECTION 23 32 40		x
12 93 14	BICYCLE LOCKERS AND RACKS		
12 93 14-1.05.B	Product Data		x
12 93 14-1.05.C	Shop Drawings		x
12 93 14-1.05.D	Samples		x
21 00 00	FIRE PROTECTION SYSTEMS		
21 00 00-1.05.B	Manufacturer's Literature		x

21 00 00-1.05.C	Shop Drawings		x
21 00 00-1.05.H	As-Built Drawings		x
21 00 00-1.05.I	Calibration Certificates		x
21 00 00-1.05.J	Test Plan, Notification and Report		x
21 00 00-1.05.K	Pipe Flushing Plan		x
21 01 07-1.05.K	Certificate of completion per NFPA 72		x
21 05 00	BASIC FIRE SUPPRESSION REQUIREMENTS		
21 05 00-1.05.B	Materials List		x
21 05 00-1.05.D	Coating Materials		x
21 05 00-1.05.E	Seismic restraint design		x
21 05 00-1.05.F	Factory Test and Inspection Certification		x
21 05 00-1.05.G	Shop and Working Drawings		x
21 05 00-1.05.L	As-Built Drawings		x
21 22 00	CLEAN AGENT FIRE-EXTINGUISHING SYSTEM		
21 22 00-1.05.C	Shop Drawings		x
21 22 00-1.05.D	Calculations		x
21 22 00-1.05.E	Shop Drawings to Fire Marshal		x
21 22 00-1.05.G	Product Data		x
21 22 00-1.05.H	Operation and Maintenance Data		x
21 22 00-1.05.K	As-Built Drawings		x
21 22 00-1.05.N	Pipe Flushing Plan		x
21 30 00	FIRE PUMPS		
21 30 00-1.05.B	Manufacturer's Product Data		x
21 30 00-1.05.C	Shop Drawings		x
21 30 00-1.05.D	Calculations		x
21 30 00-1.05.G	Seismic Restraint Details		x
22 11 00	WATER SUPPLY SYSTEM (PUMPING)		
22 11 00-1.05.B	Manufacturer's Product Data	x	
22 11 00-1.05.C	Shop Drawings	x	
22 11 00-1.05.D	Working Drawings, Hydraulic Calculations and Test Certificates	x	
22 11 00-1.05.F	Schematic Piping Diagram	x	
22 11 00-1.05.H	As-Built Drawings	x	
22 13 00	SANITARY SEWER SYSTEM (PLUMBING)		
22 13 00-1.05.B	Shop Drawings	x	
22 13 00-1.05.F	As-Built Drawings	x	
22 14 00	STORM DRAINAGE SYSTEM (PLUMBING)		
22 14 00-1.05.B	Shop Drawings and Manufacturer's Literature	x	
22 14 00-1.05.E	As-Built Drawings	x	
22 14 29	SUMP PUMPS		
22 14 29-1.05.C	Descriptive Literature	x	
22 14 29-1.05.D	Shop Drawings	x	

23 32 40	EMERGENCY VENTILATION ASSEMBLY		
23 32 40-1.05.A.1	Pre-Construction: Ventilation Report		x
23 32 40-1.05.A.2	Pre-Construction: Computer Simulations		x
23 32 40-1.05.A.3	Pre-Construction: Emergency Ventilation Operating Procedures (EVOP)		x
23 32 40-1.05.A.4	Pre-Construction: Emergency Gas Operating Procedures (EGOP)		x
23 32 40-1.05.B.1	Post-Construction: Testing Procedures to Verify Compliance		x
23 32 40-1.05.B.2	Post-Construction: Testing Procedures for Gas Purging		x
23 32 40-1.05.B.3	Post-Construction: Testing Procedures for Critical and Minimum Velocities		x
23 32 40-1.05.C	Written Test Plan		x
23 32 50	OVERPLATFORM EXHAUST SYSTEM		
23 32 50-1.05.B	Design Drawings		x
23 32 50-1.05.C	Shop Drawings		x
23 32 50-1.05.D	Calculations		x
23 32 50-1.05.E	CFD Analysis, Justification and Documentation		x
26 05 07	ELECTRICAL DEMOLITION		
26 05 07-1.05.B	Notification of Demolition Operations Schedule	x	
26 05 07-1.05.C	Electrical Demolition Phasing Plan	x	
26 05 07-1.05.D	Product Samples and Data Required for Demolition	x	
26 05 07-1.05.E	As-Built Drawing and Detail Modification Plans	x	
26 56 00	EXTERIOR LIGHTING		
26 56 00-1.05.B	Construction Schedules	x	
26 56 00-1.05.C.1	Pre-Construction: Existing Condition Surveys	x	
26 56 00-1.05.C.2	Pre-Construction: Design Submittals	x	
26 56 00-1.05.C.3	Pre-Construction: Samples and Product Data	x	
26 56 00-1.05.C.4	Pre-Construction: Shop Drawings	x	
26 56 00-1.05.C.5	Pre-Construction: Working Drawings	x	
26 56 00-1.05.D.1	Post-Construction: Field QC Submittals	x	
26 56 00-1.05.D.2	Post-Construction: Changed Field Conditions Circuit Diagrams	x	
26 56 00-1.05.D.3	Post-Construction: Redlined As-Builts	x	
26 56 00-1.05.E.1	Closeout: As-Built Drawings	x	
28 23 00	COMMUNICATIONS CLOSED CIRCUIT TELEVISION SYSTEM		
28 23 00-1.05.B	Drawings		x
28 23 00-1.05.C	Additional Estimated Capacity		x
28 23 00-1.05.D	Rack Layouts		x
28 23 00-1.05.E	Fiber Optic Link Loss Budgets		x
28 23 00-1.05.F	Hardware Interface Schematics		x
28 23 00-1.05.G	Internet Protocol (IP) Addressing of All Network Equipment		x
28 23 00-1.05.H	Termination and Interconnection Diagrams		x
28 23 00-1.05.I	Product Data		x
28 23 00-1.05.J	Installation Work Plans and Procedures		x
28 23 00-1.05.O	As-Built Documentation		x

28 23 00-1.05.P	Product Data		x
28 23 00-1.05.Q	Operating and Maintenance Instructions	x	
28 31 00	COMMUNICATIONS FIRE DETECTION SYSTEM		
28 31 00-1.05.B	Floor Plans		x
28 31 00-1.05.C	Standby Battery Calculations		x
28 31 00-1.05.D	Voltage Drop Calculations		x
28 31 00-1.05.E	Sequence Of Operations		x
28 31 00-1.05.F	Single-Line Drawings		x
28 31 00-1.05.G	Interfaces		x
28 31 00-1.05.H	Drawings Signed By California Licensed Fire Safety P.E.		x
28 31 00-1.05.I	Termination and Interconnection Diagrams		x
28 31 00-1.05.J	Product Data		x
28 31 00-1.05.O	As-Built Documentation		x
31 09 13	GEOTECHNICAL INSTRUMENTATION AND MONITORING		
31 09 13-1.05.B.02-001.00	Construction Monitoring Program Plan	x	
31 09 13-1.05.B.03-001-00	Liquid Level Gauge (LG) - Installation WP	x	
31 09 13-1.05.B.03-002.00	Geotechnical Instrumentation and Monitoring	x	
31 09 13-1.05.B.03-002.01	Geotechnical Instrumentation and Monitoring	x	
31 09 13-1.05.B.03-003.00	Geotechnical Instrumentation CWP Load sensing	x	
31 09 13-1.05.B.03-003.01	Geotechnical Instrumentation CWP Load sensing	x	
31 09 13-1.05.B.03-004.00	Geotechnical Instrumentation and Monitoring - Observation Well Work Plan	x	
31 09 13-1.05.B.03-005.00	Geotechnical Instrumentation and Monitoring -Automated Motorized Total Station Work Plan	x	
31 09 13-1.05.B.03-006.00	In-Place Inclinator (IPI) Installation	x	
31 09 13-1.05.B.03-007.00	Multi-Point Borehole Extensometer (MPBX) Installation WP	x	
31 09 13-1.05.B.03-008.00	Liquid Level Gauge (LG) - Installation WP	x	
31 09 13-1.05.B.05	Gas and Groundwater Well Sampling & Reading Procedures	x	
31 09 13-1.05.B.09	Strain Gauges (SG) and Load Cells (LC) WP	x	
31 09 13-1.05.C.2	Soil Boring Logs	x	
31 09 13-1.05.C.3	Field Survey	x	
31 09 13-1.05.C.4	Monthly Monitoring Reports	x	
31 09 13-1.05.D	Post-Construction: Work Plans	x	
31 09 13-1.05.D	Post-Construction: Letter or Certification Document for abandonment of borings	x	
31 09 14	OIL WELL IDENTIFICATION BY HORIZONTAL DIRECTIONAL DRILLING		
31 09 14-1.05.B.4	Pre-Construction: Work Plan	x	
31 09 14-1.05.C.1	Notice for Installation of Geophysical Borehole Sensor Instrumentation	x	

31 09 14-1.05.C.2	Field survey locations of settlement markers	x	
31 09 14-1.05.C.3	As-built records	x	
31 09 14-1.05.C.4	baseline readings	x	
31 09 14-1.05.C.5	calibration reports	x	
31 09 14-1.05.C.7	Weekly Monitoring Reports	x	
31 09 14-1.05.D.1	Post-Construction: Work Plan	x	
31 09 14-1.05.D.2	Post-Construction: Record Documentation	x	
31 09 14-1.05.E	Close-Out: Geophysical Survey and Evaluation Report	x	
31 09 15	GEOTECHNICAL AND ENVIRONMENTAL INVESTIGATION PROGRAM		
31 09 15-1.05.C	Site Investigation Plans	x	
31 09 15-1.05.D	Work Plans for Site Investigation	x	
31 09 15-1.05.D-001	Work Plans for Site Investigation	x	
31 09 15-1.05.D-001	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.D-001	Geotechnical Site Investigation and Groundwater Monitoring Well/Gas Probe Installation	x	
31 09 15-1.05.E	Schedule for Field Investigation	x	
31 09 15-1.05.F-001	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.F-001.00	Health and Safety plan	x	
31 09 15-1.05.G	Records of all work performed	x	
31 09 15-1.05.H-001	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.H-001.01	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.H-001.02	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.H-001.03	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.H-001.00	Noise Reduction Plan	x	
31 09 15-1.05.I-001	Geotechnical Site Investigation COBH	x	
31 09 15-1.05.I-001.00	Spill Response Plan	x	
31 09 15-1.05.I	Spill Response Plan	x	
31 09 15-1.05.J.1	Drafts and Final Geotechnical Design Report	x	
31 09 15-1.05.J.2	Drafts and Final Report of Special Lining Section	x	
31 09 15-1.05.J.3	Drafts and Final Environmental Report	x	
31 20 00	EARTHWORK		
31 20 00-1.05.B.1	Plans and Procedures	x	
31 20 00-1.05.B.2	Haul Route Plan		x
31 20 00-1.05.B.3	Submittals specified in SECTION 01 35 29 and SECTION 01 35 43	x	
31 20 00-1.05.B.4	Excavation and Embankment Plan	x	
31 20 00-1.05.B.5	Structure Excavation and Backfill Plan	x	
31 23 19	DEWATERING		
31 23 19-1.05.B.1	Pre-Construction: Working Drawings (De-watering Design or Launch Box, Access Shaft, Constellation and Wilshire Station)	x	
31 23 19-1.05.D	Closeout : Record Documentation (As-built drawings, physical & functional descriptions)	x	
31 50 00	EXCAVATION SUPPORT SYSTEMS		

31 50 00-1.05.C-002.00	Launch Pit SOE 90% Design Package	x	
31 50 00-1.05.C.1-001.00	SOE Design Approach Report	x	
31 50 00-1.05.C.1-001.00	Wilshire Rodeo Station - Support of Excavation (SOE) 90% Design Package	x	
31 50 00-1.05.C.1-003.00	Wilshire Rodeo Station SOE 100% Design Package	x	
31 50 00-1.05.C.1-004.00	Work Shaft SOE Design	x	
31 50 00-1.05.D.1-001.00	Structural Concrete Mix Design for Soldier Piles	x	
31 50 00-1.05.D.1-001.01	Structural Concrete Mix Design for Soldier Piles	x	
31 50 00-1.05.D.1-002.00	Soldier Pile Lean Mix	x	
31 50 00-1.05.D.3	Preconstruction: Shop Drawings	x	
31 51 00	TIEBACK ANCHORS		
31 51 00-1.05.B.1	Shop Drawings & Design Calculations	x	
31 51 00-1.05.B.2	Working Drawings & Calculations	x	
31 51 00-1.05.D	Post Construction Tieback Final Documentation	x	
31 51 00-1.05.E.1	Closeout: Documentation of tieback removal	x	
31 51 00-1.05.E.2	Closeout: As-Built Report	x	
31 71 16	MINED CROSS PASSAGES		
31 71 16-1.05.C	Shop Drawings and Calculations	x	
31 71 16-1.05.D	Working Drawings	x	
31 71 16-1.05.H	Deformation Measurement Data	x	
31 71 16-1.05.I	Cross-Section Excavation Work Plan	x	
31 71 16-1.05.J	Contingency Plan	x	
31 71 16-1.05.L.1	Final Structure and HCR Lining Layout	x	
31 71 16-1.05.L.2	Final Structure and HCR Lining Work Plans	x	
31 71 16-1.05.L.3	Final Structure and HCR Lining Design Calculations	x	
31 71 19	EXCAVATION BY TUNNEL BORING MACHINE		
31 71 19-1.05.B.1.b	Schedule	x	
31 71 19-1.05.B.2.a	Work Plans, Tunnel Excavation means and methods	x	
31 71 19-1.05.B.3.a	TBM Work Plan	x	
31 71 19-1.05.B.4.b	Building and Utility Settlement Assessment Report	x	
31 71 19-1.05.B.4.c	Action Plan for Tunneling and Settlement Control	x	
31 71 19-1.05.B.4.f	Spill Response Plan	x	
31 71 19-1.05.B.4a	Work Plans	x	
31 71 19-1.05.C.1	Construction Continuous TBM Monitoring	x	
31 71 19-1.05.C.2.e	Test Results (Grout)	x	
31 71 19-1.05.C.2.f	Test Results (Slurry)	x	
31 71 19-1.05.C.2.h	Notice of misalignment	x	
31 71 19-1.05.C.2.i	Notice of slurry or soil spills	x	
31 71 19-1.05.D	Closeout As-Built Survey of Tunnel Bore	x	
31 73 00	TUNNEL GROUTING		
31 73 00-1.05.C.1	General grouting procedures	x	

31 73 00-1.05.C.2	Waste grout and water disposal procedures	x	
31 73 00-1.05.C.3	Acceptance Criteria for completed grouting	x	
31 73 00-1.05.C.4	Method of assurance that grout injection does not damage surroundings	x	
31 74 16	PRECAST CONCRETE SEGMENTAL TUNNEL LINING		
31 74 16-1.05.B	Design Documents	x	
31 74 16-1.05.D.2	Shop Drawings	x	
31 74 17	FABRICATED STEEL TUNNEL LINING		
31 74 17-1.05.B	Design Documents	x	
31 74 17-1.05.B.03	Calculations and Descriptions of Construction Method	x	
31 74 17-1.05.B.04	Calculations and Drawings of Steel Segmental Lining	x	
31 74 17-1.05.B.05	Structural Design Calculations	x	
31 74 17-1.05.C.2	Shop Drawings	x	
31 74 17-1.05.E	Real-Time Seismic Event Detection System	x	
31 81 00	JET GROUTING		
31 81 00-1.05.C	Work Plan		x
31 81 00-1.05.H	Boring Logs and Test Results	x	
31 81 00-1.05.I	Methods for Handling Spoil Return and Spilled Materials	x	
31 81 00-1.05.J	Existing Underground Utilities Protection Program		x
31 82 00	PERMEATION GROUTING		
31 82 00-1.05.C	Working Drawings	x	
31 82 00-1.05.G	Water Quality Monitoring	x	
31 82 00-1.05.I	Schedule of Operations	x	
31 82 00-1.05.J	WTCP and TCP	x	
31 82 00-1.05.N	Records of Grouting Operations	x	
31 82 00-1.05.O	Ground and Facility Monitoring Records	x	
31 82 00-1.05.P	Schedule of Locations and Results of Leakage Monitoring Program	x	
31 82 00-1.05.Q	Contingency plan for TBM excavation operations	x	
32 11 00	(AGGREGATE) BASE COURSE		
32 11 00-1.05.B.1	Product Data		x
32 11 00-1.05.B.3	Working Drawings- Construction Staging Plan		x
32 11 00-1.05.C.1	Post-Construction: Field QC Test and Evaluation Reports		x
32 11 00-1.05.D.1	Closeout: As-built Grading Plans		x
32 12 00	FLEXIBLE PAVING (ASPHALT PAVING)		
32 12 00-1.05.B.2	Street Restoration condition Survey & Impacted Area Survey		x
32 12 00-1.05.B.3	Product Data		x
32 12 00-1.05.B.5	Working Drawings		x
32 12 00-1.05.B.6	Source QC		x
32 12 00-1.05.C.1	Post-Construction: Field QC		x
32 16 00	CURBS, GUTTERS, SIDEWALKS AND DRIVEWAYS		
32 16 00-1.05.B	Designs		x
32 16 00-1.05.C.01	Curbs, Gutters, Sidewalks and Driveways Condition Survey		x

32 16 00-1.05.C.02	Construction schedule		x
32 16 00-1.05.C.03	Product Data, Catalog Cuts, and Certificate of Conformance		x
32 16 00-1.05.C.04	Source QC Samples and Test Reports	x	
32 16 00-1.05.C.05	Test and Evaluation Reports	x	
32 16 00-1.05.C.06	Test Panels	x	
32 16 00-1.05.C.07	Shop drawings		x
32 16 00-1.05.C.08	Working Drawings		x
32 16 00-1.05.D	Field QC Samples and Test Reports	x	
32 17 23	PAVEMENT STRIPING AND MARKINGS		
32 17 23-1.05.B.1	Product Data	x	
32 17 23-1.05.B.2	Shop Drawings		x
32 17 23-1.05.B.3	Test Reports and Certifications	x	
32 17 23-1.05.C	As-Built Drawings		x
32 80 00	IRRIGATION SYSTEMS		
32 80 00-1.05.B.1	Equipment List		x
32 80 00-1.05.B.3	Product Data		x
32 80 00-1.05.B.4	Shop Drawings		x
32 80 00-1.05.C.1	Field QC		x
32 80 00-1.05.D.1	As-Built Drawings		x
32 80 00-1.05.D.2	Operation And Maintenance Data		x
32 80 00-1.05.D.3	Irrigation Controller Charts		x
32 80 00-1.05.D.4	Controller Housing keys		x
32 80 00-1.05.D.5	Special Tools and Spare Parts		x
32 93 00	PLANTING		
32 93 00-1.05.B.1	Tree Removal and Replacement Plan		x
32 93 00-1.05.B.2	List of Materials, Product Data, MSDS		x
32 93 00-1.05.B.2	Shop Drawings		x
32 93 00-1.05.B.6	Photographs at the nursery		x
32 93 00-1.05.C.1	Post-Construction Inspection Certificates		x
32 93 00-1.05.D.1	Warranty Documentation		x
32 93 00-1.05.D.2	As-Built Drawings		x
33 00 01	PIPED UTILITIES		
33 00 01-1.05.C	Product Data		x
33 00 01-1.05.D	Shop Drawings		x
33 00 01-1.05.E	List of Pipe, Fittings, and Appurtenances		x
33 00 01-1.05.G	As-Built Drawings		x
33 11 00	WATER DISTRIBUTION SYSTEM		
33 11 00-1.05.B.1	Project Plan and Schedule		x
33 11 00-1.05.B.2	Product Data		x
33 11 00-1.05.B.3	Shop Drawings		x
33 11 00-1.05.B.4	Working Drawings		x
33 11 00-1.05.B.6	Delegated Design Submittals - Shoring and Traffic Control Plans		x
33 11 00-1.05.C.1.a	Field Quality Control - Hydrostatic test, System test		x
33 11 00-1.05.C.1.b	Field Quality Control - Bacteriological samples (if necessary)		x

33 11 00-1.05.D.2	As-Built Record Drawings and Documents		x
33 11 00-1.05.D.3	Warranty		x
33 17 26-1.07.B	Contractor's/Installer's warranty		x
33 30 00	SANITARY SEWERAGE UTILITIES		
33 30 00-1.05.B.2	Design Submittals		x
33 30 00-1.05.B.3	Bypass and Spill Prevention Plans		x
33 30 00-1.05.B.4	Project Schedule		x
33 30 00-1.05.B.5	Product Data - Manufacturer's product data		x
33 30 00-1.05.B.6	Shop Drawings		x
33 30 00-1.05.B.7	Working Drawings		x
33 30 00-1.05.C.2	High pressure flush test and leakage test results		x
33 30 00-1.05.D.1	As-Built Drawings and Documents		x
33 30 00-1.05.D.2	Final Condition closed circuit television (CCTV) reports		x
33 40 00	STORM DRAINAGE UTILITIES		
33 40 00-1.05.B .2	Project Schedule		x
33 40 00-1.05.B .3	Product Data		x
33 40 00-1.05.B .4	Shop Drawings		x
33 40 00-1.05.B .5	Working Drawings		x
33 40 00-1.05.B .6	Test and Evaluation Reports		x
33 40 00-1.05.B .7	Source Quality Control - Material test results		x
33 40 00-1.05.C.1	Hydrostatic test results		x
33 40 00-1.05.D.2	As-Built Drawings and Documents		x
33 40 00-1.05.D.3	Final Condition closed circuit television (CCTV) reports		x
33 71 19	ELECTRICAL UNDERGROUND DUCTS AND VAULTS		
33 71 19-1.05.B.2	Project Schedule		x
33 71 19-1.05.B.4	Catalog Cuts		x
33 71 19-1.05.B.5	Shop Drawings		x
33 71 19-1.05.B.6	Working Drawings		x
33 71 19-1.05.C.2	As-built drawing and documents		x
34 41 00	ROADWAY SIGNALING AND CONTROL EQUIPMENT		
34 41 00-1.05.B	Pre-Construction (Manufacturer's Product Data, Working Drawings, Shop Drawings, Test and Evaluation Reports)		x
34 41 00-1.05.C	Post-Construction (QA/QC Records)		x
34 41 00-1.05.D	Site Test Results		x
34 41 00-1.05.E	As Built Plans to Metro, City of Beverly Hills and City of Los Angeles		x
34 42 13.97	MARKING AND TAGGING		
34 42 13.97-1.05.B	Tags and Markings Samples		x
34 42 13.97-1.05.C	Tagging and Marking Plans		x
34 42 13.99	SYSTEM TEST PROGRAM		
34 42 13.99-1.05.C	Test Plan (draft and final)		x
	ARCHITECTURAL PLANS		x
	FIRE ALARM SYSTEM PLANS		x

Exhibit J
Noise and Vibration Mitigation Measures

CON-22—Hire or Retain the Services of an Acoustical Engineer

Hire or retain the services of an Acoustical Engineer to be responsible for preparing and overseeing the implementation of the Noise Control and Monitoring Plans. The Noise Control and Monitoring Plan will ensure that noise levels are at or below criteria levels in Metro Baseline Specifications Section 01565, Construction Noise and Vibration Control.

CON-23—Prepare a Noise Control Plan

Prepare a Noise Control Plan that includes an inventory of construction equipment used during daytime and nighttime hours, an estimate of projected construction noise levels, and locations and types of noise abatement measures that may be required to meet the noise limits specified in the Noise Control and Monitoring Plan.

CON-24—Comply with the Provisions of the Nighttime Noise Variance

In the case of nighttime construction, the contractor will comply with the provisions of the nighttime noise variance issued by local jurisdictions. The variance processes for the Cities of Los Angeles and Beverly Hills and the County of Los Angeles require the applicant to provide a noise mitigation plan and to hold additional public meetings before granting the variance to allow work that would be performed outside of the permitted working hours.

CON-25—Noise Monitoring

Conduct periodic noise measurement in accordance with an approved Noise Monitoring Plan, specifying monitoring locations, equipment, procedures, and schedule of measurements and reporting methods to be used.

CON-28—Comply with Local Noise Ordinances

The LPA will comply as applicable with the City of Los Angeles, City of Beverly Hills, and County of Los Angeles noise ordinances during construction hours. Compliance with City of Los Angeles, City of Beverly Hills, and County of Los Angeles standards for short-term operation of mobile equipment and long-term construction operations of stationary equipment, including noise levels and hours of operation, also will occur. Hours of construction activity will be varied to meet special circumstances and restrictions. Municipal and building codes of each city in the Study Area include restrictions on construction hours. The City of Los Angeles limits construction activity to 8 a.m. to p.m. on Monday through Friday and 9 am. to 5 p.m. on Saturdays, with no construction on Sundays and Federal holidays. The City of Beverly Hills identifies general construction hours of 8:00 a.m. to 6:00 p.m. from Monday through Saturday. For all the cities in the Study Area, construction is prohibited on Sundays and city holidays. Construction outside of these working periods will require a variance from the applicable city. The variance processes for the Cities of Los Angeles and Beverly Hills and the County of Los Angeles require the applicant to provide a noise mitigation plan and hold additional public meeting.

CON-29—Signage

Readily visible signs indicating "Noise Control Zone" will be prepared and posted on or near construction equipment operating close to sensitive noise sites.

CON-30—Use of Noise Control Devices

Noise-control devices that meet original specifications and performance will be used.

CON-31—Use of Fixed Noise-Producing Equipment for Compliance

Fixed noise-producing equipment will be used to comply with regulations in the course of LPA-related construction activity.

CON-32—Use of Mobile or Fixed Noise-Producing Equipment

Mobile or fixed noise-producing construction equipment that are equipped to operate within noise levels will be used to the extent practical.

CON-33—Use of Electrically Powered Equipment

Electrically powered equipment will be used to the extent practical

CON-34—Use of Temporary Noise Barriers and Sound-Control Curtains

Temporary noise barriers and sound-control curtains will be erected where LPA related construction activity is unavoidably close to noise-sensitive receivers.

CON-35—Distance from Noise-Sensitive Receivers

Within each construction area, earth-moving equipment, fixed noise-generating equipment, stockpiles, staging areas, and other noise-producing operations will be located as far as practicable from noise-sensitive receivers.

CON-36—Limited Use of Horns, Whistles, Alarms, and Bells

Use of horns, whistles, alarms, and bells will be limited for use as warning devices, as required for safety.

CON-37—Requirements on Project Equipment

All noise-producing project equipment, including vehicles that use internal combustion engines, will be required to be equipped with mufflers and air-inlet silencers, where appropriate, and kept in good operating condition that meets or exceeds original factory specifications. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) will be equipped with shrouds and noise-control features that are readily available for that type of equipment.

CON-38—Limited Audibility of Project Related Public Addresses or Music

Any LPA-related public address or music system will not be audible at any adjacent sensitive receiver.

CON-39—Use of Haul Routes with the Least Overall Noise Impact

To the extent practical, based on traffic flow, designated haul routes for construction-related traffic will be used based on the least overall noise impact. For example, heavily loaded truck will be routed away from residential streets if possible. Where no alternatives are available, haul routes will take into consideration streets with the fewest noise-sensitive receivers.

CON-40—Designated Parking Areas for Construction-Related Traffic

Non-noise-sensitive designated parking areas for LPA-related traffic will be used.

CON-41—Enclosures for Fixed Equipment

Enclosures for fixed equipment, such as TBM slurry processing plants, will be required to reduce noise.

CON-92—Additional Noise Control Measures

If needed to comply with City of Los Angeles or City of Beverly Hills noise ordinances at the Century City Constellation Station construction sites, the Contractor shall be responsible for providing additional noise control measures and/or limiting the equipment and construction activities to reduce the construction noise at these sites to comply with the noise level limits by implementing the following or similar measures:

- Moveable noise barriers that can be located within the construction site in close proximity to the equipment and activities that are exceeded the impact thresholds. The moveable noise barriers shall be constructed in accordance with Metro's Specification Section 01 56 19, Construction Noise and Vibration Control, Article 2.03, Moveable Noise Barriers. The height of the moveable noise barrier shall be a minimum of 14 feet.
- Noise control curtains that can be tented over the area where the noisy equipment is operating. The noise curtain shall be constructed in accordance with Metro's Specification Section 01 56 19, Construction Noise and Vibration Control, Article 2.04, Noise Control Curtains.
- Replacing the standard engine exhaust muffler with a hospital grade engine silencer for stationary cranes, front end loaders, dozers, and any other diesel powered equipment operating during nighttime hours.

CON-93—Backup Alarms

All equipment operating during nighttime hours at all construction sites shall use low impact backup alarms. The low impact back-up alarms shall comply with CCR Title 8, Section 1592, Warning Methods. For equipment that must comply with CCR Title 8, Section 1592(a), equip these vehicles with compliant white sound, broadband and multi-frequency type back-up alarm devices. For equipment subject to the requirements of CCR Title 8, Section 1592(b) the Contractor may choose to equip with automatic back-up audible alarms. Such alarms shall only be of a compliant white sound, broadband or multi-frequency back-up alarm type device.

The compliant white sound, broadband and multi-frequency type back-up alarm device shall be a self-adjusting, "smart" reversing, alarm that continually adjusts to 5 dB above ambient. Acceptable manufacturers are Brigade, ECCO or approved equal. The compliant white sound, broadband and multi-frequency type back-up alarm device shall be rated as medium duty or heavy duty, as the field conditions and/or usage would dictate.

CON-94—Haul Truck Noise Emission Limits

Limit trucks operating off-site between the hours of 12:00 midnight and 5:00 AM to the extent feasible. Trucks that must operate during these hours should be fitted with equipment such as high grade engine exhaust silences and engine casing sound insulation or other equivalent devices.

CON-95—Vibration Control for Tunnel Train

If ground-borne noise limits or ground-borne vibration limits are exceeded, the contractor will be required to take action to reduce noise and/or vibrations to acceptable levels. Such action could include: 1. A durable resilient system to support the tunnel train tracks. Such as system would include: a. Resilient mat under the tracks b. A resilient grommet or bushing under the heads of any track fasteners. 2. The hardness of the resilient mat should be in the 40 to 50 durometer range and be about 1 to 2” thick, depending on how heavily loaded the cars would be. 3. The Contractor shall select the mat thickness so that the rail doesn’t bottom out during a train pass by. 4. Reduce the speed of the tunnel trains. 5. Maintain the tunnel train track and train wheels in good order to reduce potential vibration impacts, including keeping gaps between track sections to a minimum and frequent maintenance to avoid wheel flats.

CON-96—Vibration Monitoring Plan

The Contractor is required to submit a Vibration Monitoring Plan prepared, stamped, and administered by the Contractor's Acoustical Engineer. As part of the implementation of this plan, vibration monitoring will be performed at the historic Sterling Plaza/Bank of California, Union Bank Building, and AAA Building closest to the locations where equipment and/or construction activities generate a substantial amount of ground-borne vibration. Vibration monitoring will consist of continuous measurements at the building façade closest to the construction activities. All vibration monitors used will be equipped with an “alarm” feature to provide notification if the 0.2 PPV vibration damage risk threshold has been approached or exceeded.

Exhibit K
Air Quality Mitigation Measures

CON-6—Meet Mine Safety (MSHA) Standards

Tunnel locomotives (hauling spoils and other equipment to the tunnel heading) will be approved by Metro to meet mine safety (MSHA) standards.

CON-7—Meet SCAQMD Standards

Metro and its contractors will set and maintain work equipment and standards to meet SCAQMD standards, including NOx.

CON-8—Monitoring and Recording of Hazardous Gasses at Worksites

Monitoring and recording of hazardous gas levels at the worksites will be conducted. In areas of gassy soil conditions, hazardous gas levels in the working environment will be continually monitored and recorded. Construction will be altered as required to maintain a safe working atmosphere. The working environment will be kept in compliance with Federal, State, and local regulations, including SCAQMD and Cal/OSHA standards.

CON-9—No Idling of Heavy Equipment

Metro specifications will require that contractors not unnecessarily idle heavy equipment.

CON-10—Maintenance of Construction Equipment

Metro will require its contractors to maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies. Metro will also require periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.

CON-11—Prohibit Tampering of Equipment

Metro will prohibit its contractors from tampering with engines and require continuing adherence to manufacturer's recommendations.

CON-12—Use of Best Available Emissions Control Technologies

Metro will encourage its contractors to lease new, clean equipment meeting the most stringent of applicable Federal or State standards (e.g., Tier 3 or greater engine standards) or best available emissions control technologies on all equipment.

CON-13—Placement of Construction Equipment

Construction equipment and staging zones will be located away from sensitive receptors and fresh air intakes to buildings and air conditioners. In addition, equipment will be placed to minimize dust and exhaust away from outdoor areas where feasible. Refinements to construction mitigation measures may be incorporated during the Final Design phase, prior to the preparation of construction bid documents.

CON-14—Measures to Reduce the Predicted PM10 Levels

Mitigation measures such as watering, the use of soil stabilizers, etc. will be applied to reduce the predicted PM10 levels to below the SCAQMD daily construction threshold levels. A watering schedule will be established to prevent soil stockpiles from drying out.

CON-15—Reduce Street Debris

At truck exit areas, wheel washing equipment will be installed to prevent soil from being tracked onto city streets, and followed by street sweeping as required to clean streets.

CON-16—Dust Control During Transport

Trucks will be covered to control dust during transport of spoils and will have 6” freeboards above the top of the hauled load.

CON-17—Fugitive Dust Control

To control fugitive dust, wind fencing and phase grading operations, where appropriate, will be implemented along with the use of water trucks for stabilization of surfaces under windy conditions.

CON-18—Street Watering

Surrounding streets at construction sites will be watered by trucks as needed to eliminate air-borne dust. In keeping with Metro’s prior policy on the Eastside Gold Line, the contractor will water streets in the station area impacted by dust not less than once a day and more often if needed.

CON-19—Spillage Prevention for Non-Earthmoving Equipment

Provisions will be made to prevent spillage when hauling materials and operating non-earthmoving equipment. Additionally, speed will be limited to 15 mph for these activities at construction sites.

CON-20—Spillage Prevention for Earthmoving Equipment

Provisions will be made to prevent spillage when hauling materials and operating earth-moving equipment. Additionally, speed will be limited to 10 mph for these activities at construction sites.

CON-21—Additional Controls to Reduce Emissions

EPA-registered particulate traps and other appropriate controls will be used where suitable to reduce emissions of particulate matter and other pollutants at the construction site.

CON-90—AERMOD Verification

The estimated maximum localized pollutant levels are based on a series of assumptions made about contractor’s equipment and schedule. These levels will be verified, through additional AERMOD modeling, using the actual equipment and schedule proposed by the contractor prior to start of construction. Based on the results of the verification, the contractor will be mandated to alter operating procedures/schedule/equipment if an exceedance of the applicable standards is predicted. Contractor will be required to keep a log of construction equipment used during construction along with hours of operation of each specific piece of equipment to ensure that modeled assumptions are verifiable based on field activity. It is expected that the contractor will supply plans and field data on a quarterly basis.

CON-97—MERV 16-rated Filters

Install MERV 16-rated filters on the air intakes at the Beverly Hills High School temporary classroom site and the medical rehabilitation facility. As these areas are predicted to potentially

experience air quality levels above the SCAQMD PM10 significance threshold for a limited time period, the installation of these filters is recommended during this time period. MERV 16-rated filters are designed to control particulate contamination in the size range of 0.3 – 1.0 microns, which is expected to reduce PM10 and PM2.5 levels within the buildings by over 95 percent.

CON-53—Oil Well Locations and Abandonment

Pre-construction geophysical surveys will be conducted to screen further for unmapped abandoned oil wells along the tunnel alignment. It is anticipated that the geophysical surveys will be performed along the proposed tunnel alignment prior to construction in the areas of known oil production and mapped or otherwise suspected wells. This survey will incorporate techniques such as ground-penetrating radar and electromagnetic testing procedures to screen for oil well casings and other subsurface obstructions along the tunnel alignment. These procedures could be implemented from the ground surface, using horizontal directional drilling techniques at the tunnel elevation, or a combination of both methods. Shallow excavations may be made to expose and observe anomalies that are detected.

Where the tunnel alignment cannot be adjusted to avoid well casings, the California Department of Conservation (Department of Oil, Gas and Geothermal Resources) and a re-abandonment specialty contractor will be contacted to determine the appropriate method of re-abandoning the well. Oil well abandonment must proceed in accordance with California Laws for Conservation of Petroleum and Gas (1997), Division 3. Oil and gas, Chapter 1. Oil and Gas Conservation, Article 4, Sections 3228, 3229, 3230, and 3232. The requirements include written notification to DOGGR, protection of adjacent property, and before commencing any work to abandon any well, obtaining approval by the DOGGR. Abandonment work, including sealing off oil/gas bearing units, pressure grouting, etc., must be performed by a state-licensed contractor under the regulatory oversight and approval of DOGGR. If an unknown well is encountered during construction, the contractor will notify Metro, Cal/OSHA, and DOGGR and proceed in accordance with state requirements.

CON-89 – Gas Monitoring Assessment

Gas wells were installed along the alignment during the preliminary geotechnical investigations. Additional multi-stage (varying depths) soil gas wells (or probes) will be installed along the alignment in areas where elevated gas has been detected. The probes will be monitored for methane, hydrogen sulfide, oxygen, and carbon dioxide before, during, and after tunneling. Ambient air monitoring will also be performed at the ground surface to screen for indications of soil gas emissions. While elevated gas levels have not been detected at Beverly Hills High School, monitoring will be conducted in response to concerns from the school district. Monitoring will be conducted daily during the tunneling operation beneath Beverly Hills High School and less frequently before and after tunneling. Any instance where methane is detected at or above a concentration of 5,500 ppm (10 percent LEL) or hydrogen sulfide is detected at or above a concentration of 20 ppm (OSHA PEL) in a soil probe (5 feet below the ground surface) will be investigated. Where these levels are exceeded, combustible gas monitoring will be performed in the interior of the closest building. In the unlikely event that elevated gas levels are found—and persist—the affected building(s) will be ventilated to reduce the gas levels.

Exhibit L
Construction Equipment Noise Levels

Equipment Category	Lmax Level (dBA)
All other equipment > 5HP	81
Auger Drill Rig	81
Backhoe	75
Bar Bender	75
Boring Jack Power Unit	80
Chain Saw	81
Compactor	75
Compressor (2)	65
Compressor (other)	75
Concrete Mixer	71
Concrete Pump	77
Concrete Saw	81
Crane	81
Dozer	81
Dump Truck	81
Excavator	81
Flat Bed Truck	81
Front End Loader	75
Generator	77
Gradall	81
Grader	81
Horizontal Boring Hydraulic Jack	80
Jackhammer	81
Paver	81
Pickup Truck	55
Pneumatic Tools	81
Pumps	77
Rock Drill	81
Scraper	81
Soil Mix Drill Rig	80
Tractor	79
Vacuum Excavator (Vac Truck)	81
Vacuum Street Sweeper	80
Welder	73
Notes: (1) Noise emission limits apply to equipment used at surface on the construction site during nighttime hours of 9 pm to 7 am. (2) Portable Air Compressor that is rated at 75 cfm or greater and that operates at greater than 50 psi	

Exhibit M
Vibration Monitoring Locations

Exhibit M - Vibration Monitoring Locations

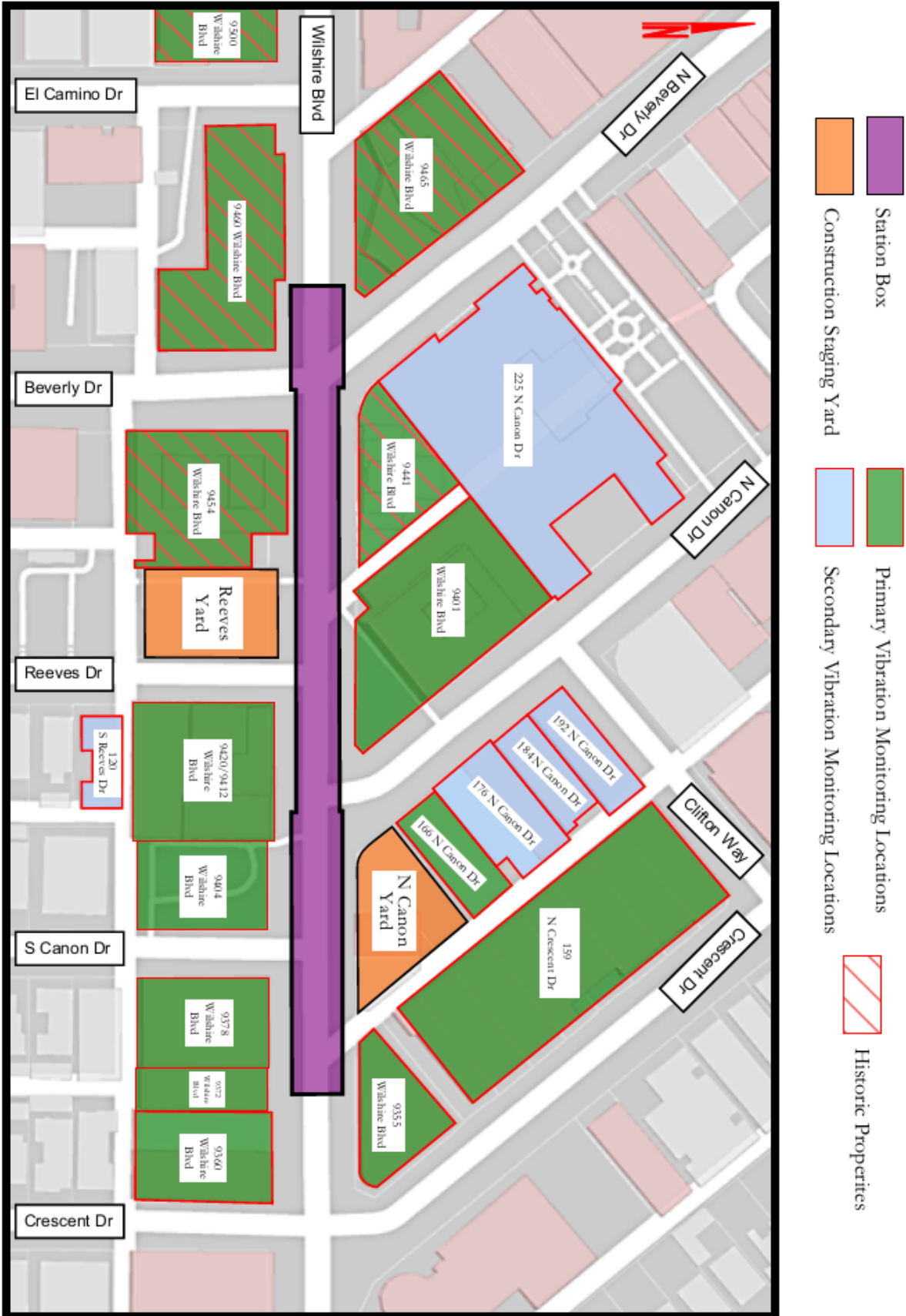






Exhibit N
Pre-Construction Survey Properties

Exhibit N - Pre-Construction Survey Properties

-  Station Box
-  Pre-Construction Survey Properties
-  Construction Staging Yard
-  Pre-Construction Survey Perimeter

