

# **Metro**

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



**Metro**<sup>®</sup>

## **Agenda - Final Revised**

**Thursday, July 16, 2015**

**9:00 AM**

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

### **Construction Committee**

*Don Knabe, Chair*

*Jacquelyn Dupont-Walker, Vice Chair*

*Mike Bonin*

*Diane DuBois*

*Ara Najarian*

*Carrie Bowen, 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.

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.

### **INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD**

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded on CD's and as MP3's and can be made available for a nominal charge.

### **DISCLOSURE OF CONTRIBUTIONS**

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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### **LIMITED ENGLISH PROFICIENCY**

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TDD line (800) 252-9040

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

**CALL TO ORDER****ROLL CALL**

29. RECEIVE report of the Chief Executive Officer. [2015-1059](#)
30. APPROVE Consent Calendar Items: 31 and 32.

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

CONSENT CALENDAR

31. RECEIVE AND FILE status report on the **Project Labor Agreement and Construction Careers Policy programs on the Crenshaw/LAX Transit Corridor and Regional Connector Transit Corridor projects** for activity through the May 2015 reporting period. [2015-0711](#)

Attachments: [PLA CCP Report Board Attachment July 2015 edits](#)

(ALSO ON EXECUTIVE MANAGEMENT COMMITTEE)

32. RECEIVE AND FILE the **monthly report on Transit Program Project Budget & Schedule Status**. [2015-0882](#)

Attachments: [Attachment A - Transit Program Project Budget and Schedule Status](#)

NON-CONSENT

33. RECEIVE report by the **Caltrans District Director on Delivery of Projects on I-5**. [2015-1057](#)

Attachments: [Presentation\\_Handout 0770](#)

34. CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing the Chief Executive Officer to amend the **FY16 budget to add 33 non-contract full-time equivalent (FTE) positions:** [2015-0955](#)

- A. 18 non-contract FTE positions (with 7 non-contract FTE positions already accounted in the FY 16 budget) by converting new Construction Management Support Services(CMSS)/consultant positions to support Measure R transit projects for Engineering & Construction (E&C) Department;

- B. 2 non-contract FTE positions by converting consultant positions to support Environmental Compliance and Sustainability projects for E&C Department (Refer to Appendix 1);
- C. 3 non-contract FTE positions to support capital transit projects for E&C Department (refer to Appendix 2);
- D. 4 non-contract FTE positions by converting new CMSS/consultant positions to support Measure R transit projects for Program Management Office (Refer to Appendix 3);
- E. 4 non-contract FTE positions by converting new CMSS/consultant positions to support Measure R transit projects for Vendor/Contract Management Department (Refer to Appendix 4); and
- F. 2 non-contract FTE positions to support Measure R transit projects for Countywide Planning and Development Department (Refer to Appendix 6).

It should be noted that the positions A through F are project related positions that can be terminated upon completion of the projects.

**Attachments:**

[Attachment A Table A EC \(7-10-15\)](#)

[Attachment A-1 Table A-1 Potential Cost Savings of 5 Metro FTEs 7-10-15](#)

[Attachment B Table B Pilot Project Study \(6JUL15\).pdf](#)

[Attachment C Table C Cost Benefit Analysis 6Jul15.pdf](#)

[Attachment D Table C-1 CMSS Consultant Conversion Cost Savings for FY16](#)

[Attachment E Appendix 1 - Staffing Request for Environmental Compliance](#)

[Attachment F Appendix 2 Capital Projects Support Staff 7 9 15](#)

[Attachment G Appendix 3PMO CMSS Consultant Conversion to Metro Staff re](#)

[Attachment H Appendix 4 Staffing Request for Vendor-Contract Management](#)

[Attachment I Appendix 6 Revised 6 12 15 \(JO Comment 6Jul15\).pdf](#)

**35. CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing:**

[2015-0958](#)

- A. an increase to the total contract value for Contract No. MC069, with Stantec Consulting, Inc., to provide **Construction Management Support Services** in an amount not-to-exceed \$10,953,136 for the FY16 six-month Work Program Funding from \$86,459,000 to \$97,412,136; and
- B. the Chief Executive Officer to execute individual Contract Work Orders and Modifications within the Board approved contract value.

Attachments:     [Attachment A - Procurement Summary](#)  
                          [Attachment B - Contract Work Value Summary](#)  
                          [Attachment C - July 2015 to June 2016 FY16 Work Program Funding](#)

36. CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing the Chief Executive Officer to execute Contract Modification No. 3 to Contract No. MC070, to ARCADIS U.S., Inc., to **continue providing Construction Management Support Services (CMSS) through December 31, 2015 for the Regional Connector Transit Corridor Project**, in the amount of \$5,955,000, increasing the total contract value from \$11,180,690 to \$17,135,690. [2015-0960](#)

Attachments:     [Attachment A - MC070 Procurement Summary](#)  
                          [Attachment B - Contract Modification Log](#)

37. CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing the Chief Executive Officer (CEO) to execute Change Modification No. 2 to Contract No. MC071, Westside Extension Support Team (WEST), to continue providing **Construction Management Support Services (CMSS) for six months of FY16 for the Westside Purple Line Extension Section 1 Project**, in an amount not-to-exceed \$6,487,628, increasing the total contract value from \$14,513,451 to \$21,001,079. [2015-0961](#)

Attachments:     [A - Procurement Summary](#)  
                          [B - Contract Modification Authority/Change Order Log](#)

38. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION: [2015-0848](#)

- A. authorizing an increase to the total authorized funding for Contract No. PS100800-2641 with MARRS Services, Inc., for **pending and future task orders to provide Construction Management Consultant (CMC) Support Services**, in an amount not to exceed \$2,144,000, increasing the total contract value from \$7,744,000 to \$9,888,000; and
- B. authorizing the Chief Executive Officer to execute individual Task Orders (TOs) and Contract Modifications within the Board approved contract funding amount.

Attachments:     [Attachment A - Procurement Summary MARRS July 2015](#)  
                          [Attachment B - Contract Task Order/Modification Log](#)

**39. CONSTRUCTION COMMITTEE RECOMMENDED (5-0):** [2015-0215](#)

A. finding that awarding design-build contracts pursuant to **Public Utilities Code Section 130242 (a)** will achieve private sector efficiencies in the integration of the design, project work, and components related to the construction and installation of energy efficient lights in Metro's Gateway Headquarters Building;

**(REQUIRES TWO-THIRDS VOTE)**

B. authorizing the Chief Executive Officer to award the competitively bid design-build contract to the lowest responsive, responsible bidder, pursuant to Public Utilities Code Section 130051.9 (c); and

C. approving an increase of Contract Modification Authority (CMA) for Contract No. PS07643022 with Control Technologies to provide Building Management System upgrades in the amount of \$1,000,000, increasing the CMA from \$100,000 to \$1,100,000.

**Attachments:** [Attach A -Procurement Summary](#)  
[Attach B -Contract Modification/Change Order Log .docx](#)  
[Attach C -Cost Benefit Analysis for 5,000 2x4 Fixtures .docx](#)

**40. CONSTRUCTION COMMITTEE FORWARDED WITHOUT** [2015-0223](#)

**RECOMMENDATION** authorizing the Chief Executive Officer to award a 28 month firm fixed price contract, under Invitation for Bid No. C1078, with Clark Construction Group, the lowest responsive and responsible bidder for the **final design and construction of the Maintenance of Way/Non-Revenue Vehicle Maintenance Building** to be constructed as part of the Division 20 Yard and Shops expansion for a firm fixed price of \$52,830,310.

**Attachments:** [Attachment A - Procurement Summary](#)  
[Attachment B Motion - 83 by Director Molina October 2014.pdf](#)  
[Attachment C - Summary of Extended Outreach Efforts](#)

**41. CONSTRUCTION COMMITTEE FORWARDED WITHOUT** [2015-0224](#)

**RECOMMENDATION** authorizing the Chief Executive Officer to award and execute a five year contract, Contract No. PS84203243, with Cumming Construction Management, Inc. for **Sustainability Program Assistance Services on Task Orders** for a total amount not-to-exceed \$12,481,230 inclusive of three base years (not to exceed \$7,339,981) with two one-year options (year one = \$2,545,173 and year two = \$2,596,076.)

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**Attachments:**     [Attachment A - Procurement Summary Report - PS84203243 05-June-15 \(2\).dc](#)  
                                 [Attachment B -Types and Total Value Estimates of Projects](#)

42. CONSTRUCTION COMMITTEE FORWARDED WITHOUT [2015-0542](#)  
RECOMMENDATION authorizing the Chief Executive Officer to award  
and execute a five year contract, Contract No. PS84203274, with  
Kleinfelder, Inc. for **Environmental Engineering and Consulting  
services on Task Orders**, inclusive of three base years and two one-year  
option years with a total not-to-exceed amount of \$12,000,000.00. Base  
year contract value is \$7.2 million; Option year one contract value is \$2.4  
million; and Option year two contract value is \$2.4 million.
- Attachments:**     [Attachment A - Procurement Summary](#)  
                                 [Attachment B - Types and Total Value Estimates of Projects FY15 to FY19](#)
43. CONSTRUCTION COMMITTEE FORWARDED WITHOUT [2015-0722](#)  
RECOMMENDATION:
- A. authorizing a Contract Modification No. 40 (a.k.a. Contract Change  
Order, CCO 40) by Caltrans for **Segment 3 construction contract  
of the I-5 North Capacity Enhancements from SR-134 to SR-  
118** under the Funding Agreement No. MOU.P0008355/8501 A/A5,  
in the amount of \$1,000,000 without an increase in the project  
budget or contract value. The contract value of this project remains  
\$405,575,000; and
- B. authorizing a Contract Modification No. 74 (a.k.a. Contract Change  
Order, CCO 74) by Caltrans for Segment 3 construction contract of  
the I-5 North Capacity Enhancements from SR-134 to SR-118  
under the Funding Agreement No. MOU.P0008355/8501 A/A5, in  
the amount of \$1,500,000 without an increase in the project budget  
or contract value. The contract value of this project remains  
\$405,575,000.
44. CONSTRUCTION COMMITTEE FORWARDED WITHOUT [2015-0849](#)  
RECOMMENDATION approving an increase in the Contract Modification  
Authority (CMA) to Contract No. PS0933432406A with STV Incorporated  
(STV) in the amount of \$250,000, increasing the total CMA from \$500,000  
to \$750,000 for the **design support during construction for the  
Patsouras Plaza Busway Station**.
- Attachments:**     [Attachment A - Procurement Summary](#)  
                                 [Attachment B - Contract Modification Authority \(CMA\)/Change Order Log](#)
45. CONSTRUCTION COMMITTEE FORWARDED WITHOUT [2015-0952](#)

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RECOMMENDATION:

- A. authorizing the Chief Executive Officer (CEO) to **continue issuing task orders within the previously Board approved total contract not-to-exceed amount of \$38,000,000 for Contract EN077, with ARCADIS U.S., Inc.**, for the life of the contract, of which only \$21,200,000 the Board had authorized for expenditure in FY12 through FY14; and
- B. authorizing the CEO to exercise Option Year One for FY16.

**Attachments:**      [Attachment A Procurement Summary - EN077 .docx](#)  
                              [Attachment B Contract Modification- Change Log - EN077 .docx](#)  
                              [Attachment C - Current and Proposed EN077 Work C.docx](#)

46. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION approving an increase in the Contract Modification Authority (CMA) to Contract No. OP33402180 with Maintenance Design Group (MDG) in the amount of \$350,000, increasing the total CMA from \$1,350,000 to \$1,700,000 for **design support during construction for the Division 13 Bus Maintenance and Operations Facility.** [2015-0586](#)

**Attachments:**      [Attachment A - Procurement Summary](#)  
                              [Attachment B - Contract Modification History/Change Order Log](#)

47. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer (CEO) to execute Contract Modification No. 39 to Contract No. E0117 with Hatch Mott MacDonald (HMM), to **continue Phase III Design Services During Construction (DSDC) support**, in the amount of \$6,656,000, increasing the total contract value from \$54,414,652 to \$61,070,652. [2015-0851](#)

**Attachments:**      [Attachment A - Procurement Summary](#)  
                              [Attachment B - Contract Modification Authority](#)

48. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the CEO to execute Contract Modification No. 22 to Contract No. E0119 with The Connector Partnership Joint Venture (CPJV) Inc. to continue providing **Design Support Services During Construction through FY16 for the Regional Connector Transit Corridor Project**, in the amount of \$8,283,594, increasing the total contract value from \$54,770,985 to \$63,054,579. This action does not increase Life of Project Budget. [2015-0957](#)



Attachments:     [A - Procurement Summary](#)  
                          [B - Contract Modification Authority \(CMA\) Summary](#)

49. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer to execute a cost-plus-fixed-fee Contract No. PS2415-3412 with STV, Inc. for the **Brighton to Roxford Double Track Project** in the amount of \$12,500,000 inclusive of all design phases. This contract is for three years. [2015-1069](#)

Attachments:     [Attachment A - Brighton to Roxford Procurement Summary](#)  
                          [Attachment B - Brighton to Roxford - Map](#)

50. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION: [2015-0805](#)

- A. adopting Life-of-Project (LOP) budget for Project 205104 (**Metro Blue Line (MBL) Pedestrian Active Grade Crossing Improvements Installation**) of \$30,175,000;
- B. increasing the Fiscal Year 2016 Budget for Project 205104 in Cost Center, 3960 - Rail Transit Engineering, by \$12,897,000 to fund the FY 2016 cash flow for these pedestrian grade crossing safety enhancements; and
- C. authorizing the CEO to negotiate and execute a Public Highway at-Grade Crossing Improvement Agreement with Union Pacific Railroad (UPRR) according to the Term Sheet (Attachment B).

Attachments:     [Attachment A - Funding Expenditure Plan](#)  
                          [Attachment B - UPRR Term Sheet for Public Highway At-Grade Crossing Impro](#)  
                          [Attachment C - Reconciliation of Estimates Related to Projects](#)  
                          [Attachment D - Incremental Costs and Benefits for Improvements](#)

75. CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION amending the FY 16 Budget to add \$800,000 to Project 405556 Systemwide Planning in Cost Center 4330, Countywide Planning and Development to cover the design costs for modifications to the Crenshaw/LAX (C/LAX) station design for consistency with the Systemwide Station Design. [2015-0577](#)

Attachments:     [Attachment A Crenshaw\\_LAX Plaza Ticketing Area.docx](#)

51. RECEIVE AND FILE the **monthly report on Crenshaw/LAX Safety**. [2015-0844](#)

**Attachments:**      [Attachment A - Safety Report on Crenshaw\\_LAX Project - July 2015](#)

52.      RECEIVE AND FILE **Engineering and Construction Executive Director's report.**      [2015-0886](#)

**Attachments:**      [Engineering and Construction Executive Director's report.- July 2015](#)

## **Adjournment**

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.



**Board Report**

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**File #:** 2015-0711, **File Type:** Informational Report

**Agenda Number:** 64.

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**CONSTRUCTION COMMITTEE  
EXECUTIVE MANAGEMENT COMMITTEE  
JULY 16, 2015**

**SUBJECT: PROJECT LABOR AGREEMENT (PLA)/CONSTRUCTION CAREERS POLICY (CCP)  
REPORT ON THE FOLLOWING MEGA PROJECTS:**

**CRENSHAW/LAX TRANSIT CORRIDOR PROJECT**

**REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE status report on the **Project Labor Agreement and Construction Careers Policy programs on the Crenshaw/LAX Transit Corridor and Regional Connector Transit Corridor projects** for activity through the May 2015 reporting period.

**ISSUE**

In January 2012, the Board approved the Project Labor Agreement with the Los Angeles/Orange Counties Building and Construction Trades Council and the Construction Careers Policy. One Benefit of the PLA is to encourage construction employment and training opportunities in economically disadvantaged geographic areas throughout the United States. Another benefit of the PLA is that work stoppages are prohibited.

Consistent with the Board approved PLA/CCP, prime contractors are required to provide monthly reports detailing progress towards meeting the targeted worker hiring goals. Additionally, consistent with Metro's Labor Compliance policy and federal Executive Order 11246, the prime contractors provide Metro with worker utilization data by ethnicity and gender.

The attached report provides the current status on the two mega projects listed above which are subject to the PLA/CCP.

**DISCUSSION**

<b>Project Name</b>	<b>Prime Contractor</b>	<b>Targeted Worker Goal (40%)</b>	<b>Apprentice Worker Goal (20%)</b>	<b>Disadvantaged Worker Goal (10%)</b>
Crenshaw/LAX Transit Corridor	Walsh/Shea Corridor Constructors	59.02%	18.07%	10.84%
Regional Connector Transit Corridor	Regional Connector Constructors, JV	61.99%	16.30%	11.42%
<b>(FINAL)</b> Crenshaw/LAX Advance Utility Relocation	MetroBuilders	61.41%	13.84%	21.08%
<b>(FINAL)</b> Regional Connector Transit Corridor Advanced Utilities Relocation	Pulice Construction	51.61%	21.37%	22.83%

**Crenshaw/LAX Transit Corridor Project**  
**Prime: Walsh/Shea Corridor Constructors**

Major construction for the Crenshaw/LAX Transit Corridor project is underway. The contractor is currently attaining Targeted Worker, Apprentice Worker and Disadvantaged Worker percentages of 59.02%, 18.07% and 10.84% respectively. The attainment for the 20% Apprentice Worker goal is based on total apprentice-able hours. The contractor is currently exceeding the Targeted Worker, Disadvantaged Worker and the minority participation percentage goals, but not meeting the 20% Apprentice Worker goal and the 6.90% Female Participation goal (2.64%). The contractor has submitted a plan and schedule indicating that the apprentice goal for this project should be achieved in January of 2017. Staff will continue to work closely with the contractor towards meeting all worker goals for this project. To date, 22.15% of the estimated construction work hours for this project have been performed. No work stoppages have occurred on this contract.

**Regional Connector Transit Corridor Project**  
**Prime: Regional Connector Constructors, Joint Venture**

The Regional Connector Transit Corridor Project contractor is currently attaining Targeted Worker, Apprentice Worker and Disadvantaged Worker percentages of 61.99%, 16.30% and 11.42% respectively. The attainment for the 20% Apprentice Worker goal is based on total apprentice-able hours. The contractor is currently exceeding the Targeted Worker, Disadvantaged Worker and the minority participation percentage goals, but not meeting the 20% Apprentice Worker goal and the 6.90% Female Participation goal (4.29%). This project is still in the design-phase with limited construction activities and attainment is in line with the contractor's submitted Employment Hiring

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Plan which states that the Apprentice Worker goal will be met in mid-2016. To date, 0.47% of the estimated construction work hours for this project have been performed. No work stoppages or grievances have occurred on this contract.

### **Completed Contracts:**

#### **Crenshaw/LAX Advanced Utility Relocations**

##### **Prime: MetroBuilders**

The Crenshaw Advanced Utility Relocation project contractor attained Targeted Worker, Apprentice Worker and Disadvantaged Worker percentages of 61.41%, 13.84% and 21.08% respectively. The attainment for the 20% Apprentice worker goal is based on total apprentice-able hours. The Crenshaw Advanced Utility Relocation project is 100% complete, as of September 2014. Final reporting shows that the Targeted Worker, Disadvantaged Worker and the minority participation percentage goals were attained with the exception of the Apprentice Worker and the 6.90% Female Participation goal (0.52%). Metro staff met with the contractor in January 2015, and executed a special assessment for not meeting the apprentice goal for this project. The contractor complied with Metro's special assessment and this issue is closed.

#### **Regional Connector Advanced Utilities Relocation Project**

##### **Prime: Pulice Construction**

The Regional Connector Transit Corridor Advanced Utilities Relocation project contractor attained Targeted Worker, Apprentice Worker and Disadvantaged Worker percentages of 51.61%, 21.37% and 22.83%, respectively. This contract was terminated for convenience in April 2015 and is now being closed out. Final reporting shows that the Targeted Worker, Apprentice Worker, Disadvantaged Worker and the minority participation percentage goals were attained with the exception of the 6.90% Female Participation goal (2.57%).

### **OUTREACH**

In effort to attain the highest percentages of Targeted, Apprentice and Disadvantaged Workers on PLA/CCP projects, and to keep the community informed of the opportunities, the contractors and DEOD participates and/or coordinated the following outreach efforts during this reporting period:

- A. Updated Metro's Federal Legislative Programs to request more stringent rules and local enforcement capabilities regarding employment of women and under-represented minorities in construction.
- B. Metro has organized a committee to develop strategies and opportunities for women in the contraction industry. Tentative committee membership includes: Women in Non-Traditional Employment Roles (WINTER), Women Business Owner (NAWBO), National Association of Women in Construction (NAWIC), Prime Constructors, Job Coordinator and others.
- C. County Supervisor Mark Ridley Thomas' Spring Into Summer Event, held on April 15, 2015.
- D. Goodwill Southern California Job Fair held on April 22, 2015.
- E. State Building & Construction Trades Council of California 5<sup>th</sup> National Conference, Women

- Building the Nation help on May 1-3, 2015 (Panelist, Sponsor and Exhibitor)
- F. East Los Angeles College Job Fair held on May 7, 2015.
  - G. 1<sup>st</sup> Annual Veterans & Disadvantaged Worker Resource Fair at L.A. Trade Tech College on May 13, 2015.
  - H. Construction Careers Awareness Day in partnership with LAUSD and Los Angeles Trade Tech College (LATTTC) help on May 14, 2015.
  - I. County Supervisor Hilda Solis Job Fair help on May 28, 2015.
  - J. Daily/Weekly/bi-weekly meetings with outreach team, contractor, elected and/or community representatives.
  - K. Presentation at the Los Angeles County Jail on Metro's PLA/CCP workforce initiatives held on June 2, 2015.
  - L. Coffee and Careers outreach event at Inglewood City Hall, May 28<sup>th</sup>

## **NEXT STEPS**

Staff will continue to monitor the contractor's efforts to increase the participation of apprentices and targeted workers on the Crenshaw/LAX construction and Regional Connector Transit Corridor projects.

## **ATTACHMENTS**

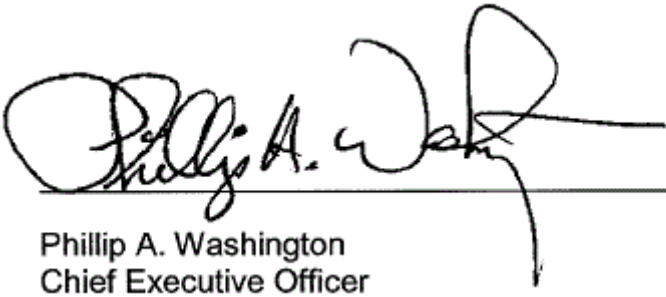
Attachment A - Crenshaw/LAX Transit Corridor project PLA/CCP Report, Data Through May 2015 reporting period.

Regional Connector Transit Corridor Project PLA/CCP Report, Data Through May 2015 reporting period.

Regional Connector Advance Utilities Relocation project Final PLA/CCP Report.

Prepared by: Miguel Cabral, Interim Deputy Executive Officer, Strategic Business,  
Project Labor Agreement & Construction Careers, (213) 922-2232  
Keith Compton, Interim Director, Project Labor Agreement/Construction  
Careers Policy, Compliance & Administration, (213) 922-2406  
Miriam Long, Manager, Strategic Business & Construction Career Resources, (213)  
922-7249

Reviewed by: Ivan Page, Interim Executive Director, Vendor/Contract Management,  
(213) 922-6383



Phillip A. Washington  
Chief Executive Officer

# Crenshaw/LAX Transit Corridor Project

PLA Targeted Worker Attainment: Prime:

Walsh/Shea Report Data Through May 16, 2015

No. of Work Hours*	Targeted Economically Disadvantaged Worker Utilization (%) <b>Goal: 40%</b>	Apprentice Utilization (%) <b>Goal: 20%</b>	Disadvantaged Worker Utilization (%) <b>Goal: 10%</b>
664,567.20	59.02%	18.07%	10.84%
Percentage Project Complete Based on Worker Hours: 22.15%			

Based on Total Apprenticeshipable Work Hours

(rounded)

## Executive Order 11246 Demographic

### Summary

No. of Work Hours*	African American Utilization	Asian/Pacific Islander Utilization	Caucasian Utilization	Hispanic Utilization	Native American Utilization	Other/Declined to state	Minority Utilization Goal: 28.3% (rounded)	Female Utilization Goal: 6.9%
664,567.20	17.05%	0.98%	22.67%	54.60%	1.24%	3.45%	73.87%	2.64%

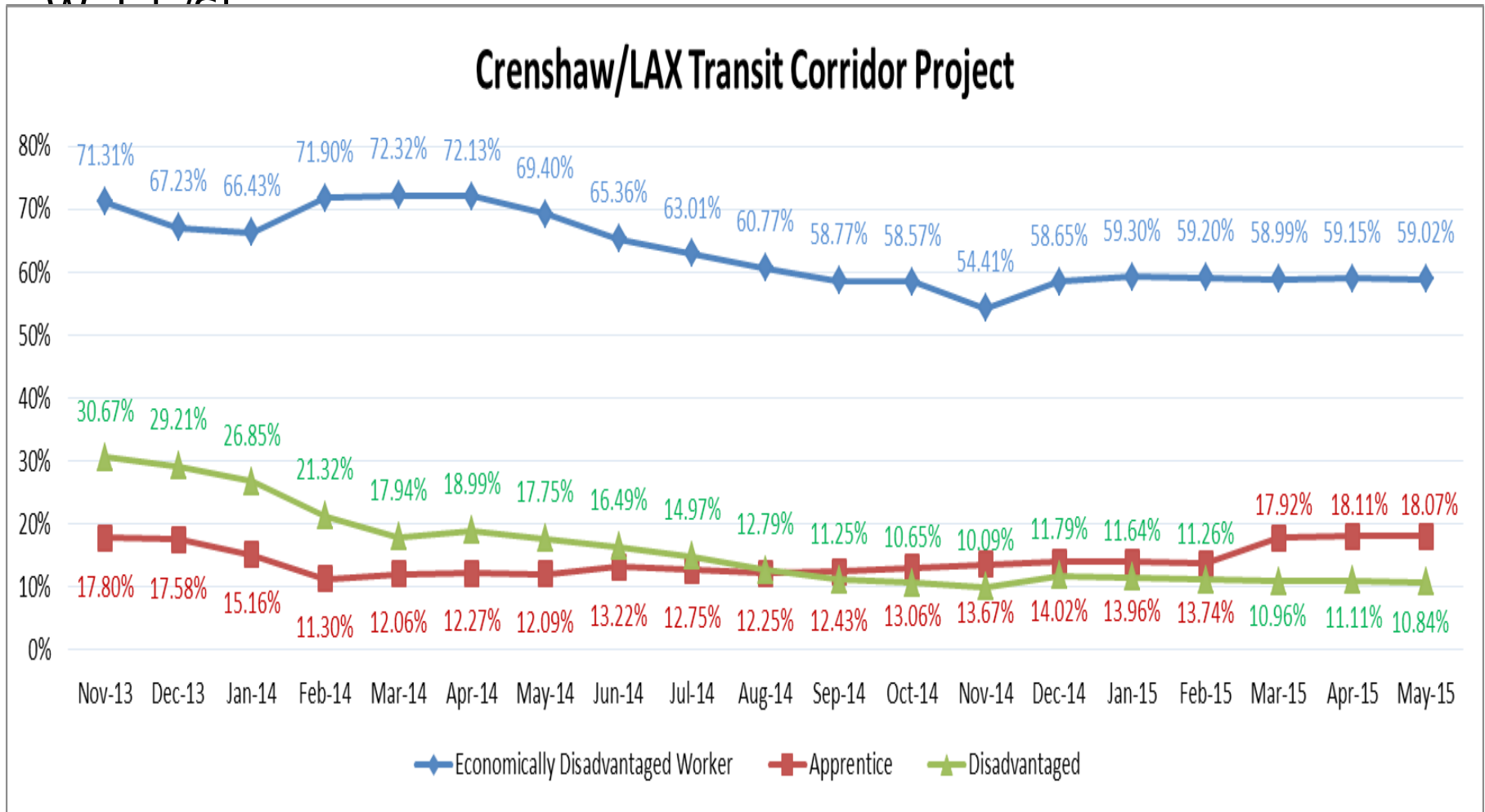


\*Cumulative Hours Through End of Noted Reporting Period - as Reported by Prime Contractor. Data subject to change to reflect updates or audits.



# Crenshaw/LAX Transit Corridor Project

## PLA Targeted Worker Attainment: Prime:



\*As Reported by Walsh/Shea. Data subject to change to reflect updates or audits.  
Data reflects a 19 month period

# Regional Connector Transit Corridor Project PLA Targeted Worker Attainment:

Prime: Regional Connector Constructors, Joint Venture

Report Data Through May 25, 2015

No. of Work Hours*	Targeted Economically Disadvantaged Worker Utilization (%) <b>Goal: 40%</b>	Apprentice Utilization (%) <b>Goal: 20%</b>	Disadvantaged Worker Utilization (%) <b>Goal: 10%</b>
15,323.25	61.99%	16.30%	11.42%
Percentage Project Complete Based on Worker Hours: 0.47% <small>Based on Total Project Hours</small> (rounded)			

## Executive Order 11246 Demographic

### Summary

No. of Work Hours*	African American Utilization	Asian/Pacific Islander Utilization	Caucasian Utilization	Hispanic Utilization	Native American Utilization	Other/ Declined to state	Minority Utilization Goal: 28.3% (rounded)	Female Utilization Goal: 6.9%
15,323.25	10.88%	2.04%	27.78%	53.64%	0.00%	5.65%	66.56%	4.29%

\*Cumulative Hours Through End of Noted Reporting Period - as Reported by Prime Contractor. Data subject to change to reflect updates or audits.

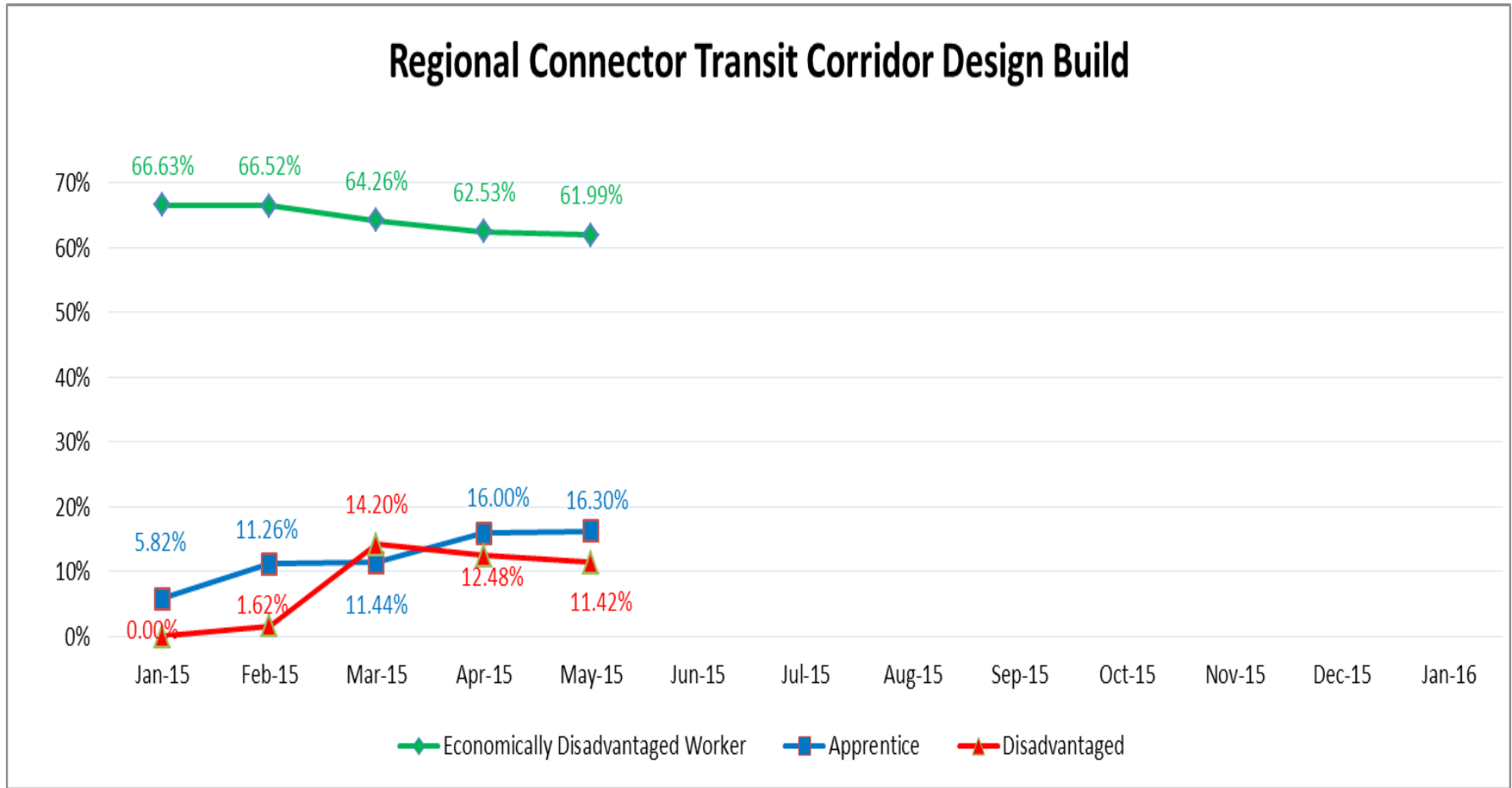


**Metro**

# Regional Connector Transit Corridor Project

## PLA Targeted Worker Attainment:

Prime: Regional Connector Constructors, Joint Venture



\*As Reported by RCC, JV. Data subject to change to reflect updates or audits.

Data reflects a 5 month period

# Regional Connector Advanced Utility Relocations

PLA Targeted Worker Attainment: Prime: Pulice

Construction

**FINAL**

No. of Work Hours*	Targeted Economically Disadvantaged Worker Utilization (%) <b>Goal: 40%</b>	Apprentice Utilization (%) <b>Goal: 20%</b>	Disadvantaged Worker Utilization (%) <b>Goal: 10%</b>
58,903.00	51.61%	21.37%	22.83%
Percentage Project Complete Based on Worker Hours: 100%	(rounded)		

## Executive Order 11246 Demographic

### Summary

No. of Work Hours*	African American Utilization	Asian/Pacific Islander Utilization	Caucasian Utilization	Hispanic Utilization	Native American Utilization	Other/ Declined to state	Minority Utilization Goal: 28.3% (rounded)	Female Utilization Goal: 6.9%
58,900	1.36%	0.41%	17.43%	80.30%	0.00%	0.50%	82.07%	2.57%

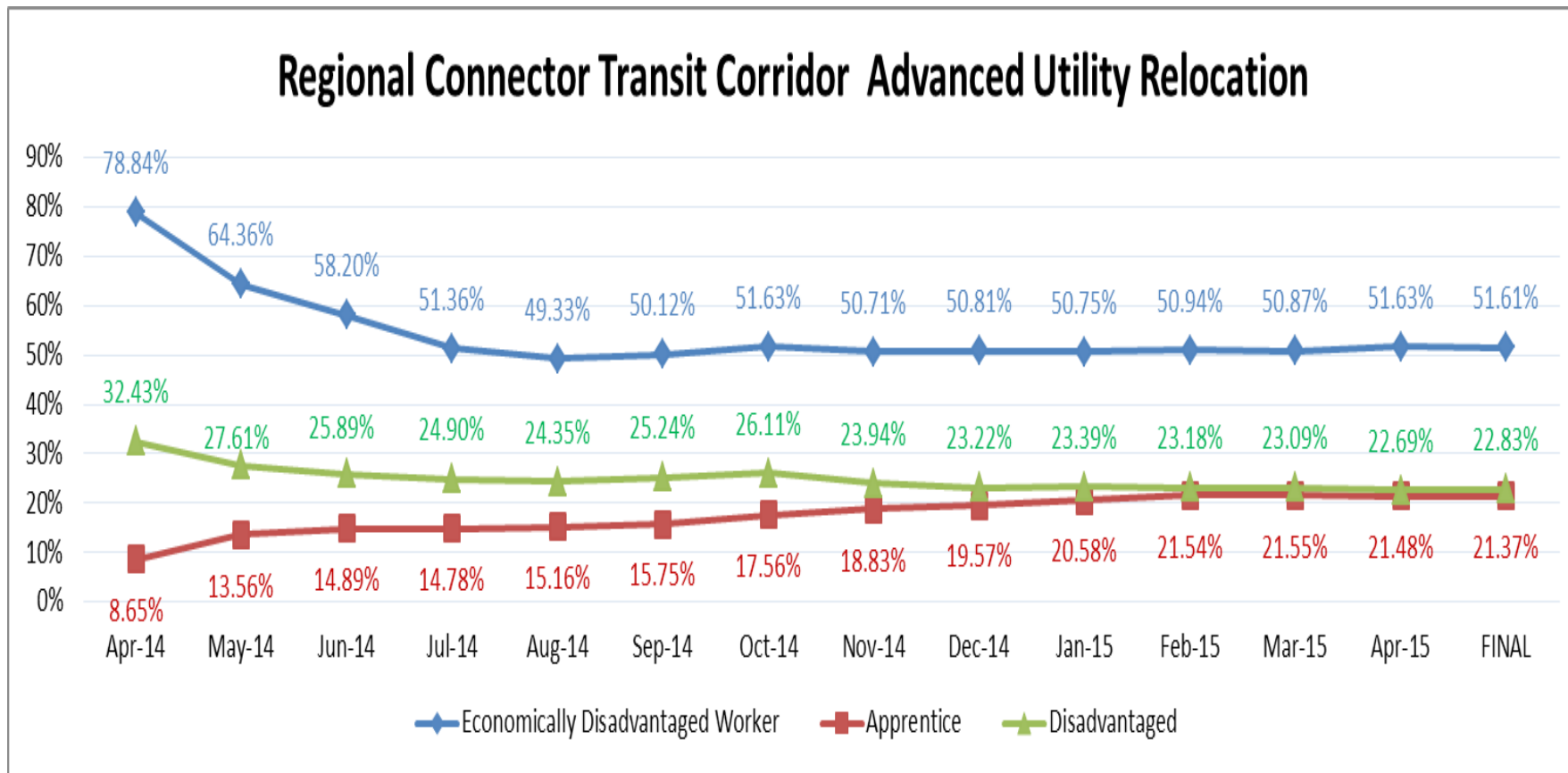
\*Cumulative Hours Through End of Noted Reporting Period - as Reported by Prime Contractor. Data subject to change to reflect updates or audits.



**Metro**

# Regional Connector Advanced Utility Relocations

PLA Targeted Worker Attainment: Prime: Pulice Construction



\*As Reported by Pulice Contractor. Data subject to change to reflect updates or audits.  
Data reflects a 13 month period

# Crenshaw/LAX Advanced Utility Relocations

## PLA Targeted Worker Attainment: Prime: <sup>(FINAL)</sup>

No. of Work Hours*	Targeted Economically Disadvantaged Worker Utilization (%) <b>Goal: 40%</b>	Apprentice Utilization (%) <b>Goal: 20%</b>	Disadvantaged Worker Utilization (%) <b>Goal: 10%</b>
61,708.26	61.41%	13.84%	21.08%

Percentage Project Complete Based on Worker Hours: 100%

Based on Base Apprenticeship Hours

## Executive Order 11246 Demographic

### Summary

No. of Work Hours*	African American Utilization	Asian/Pacific Islander Utilization	Caucasian Utilization	Hispanic Utilization	Native American Utilization	Other/ Declined to state	Minority Utilization Goal: 28.3% (rounded)	Female Utilization Goal: 6.9%
61,708.26	11.66%	0.01%	22.02%	66.29%	0.01%	0.00%	77.97%	0.52%

\*Cumulative Hours Through End of Noted Reporting Period - as Reported by Prime Contractor. Data subject to change to reflect updates or audits.



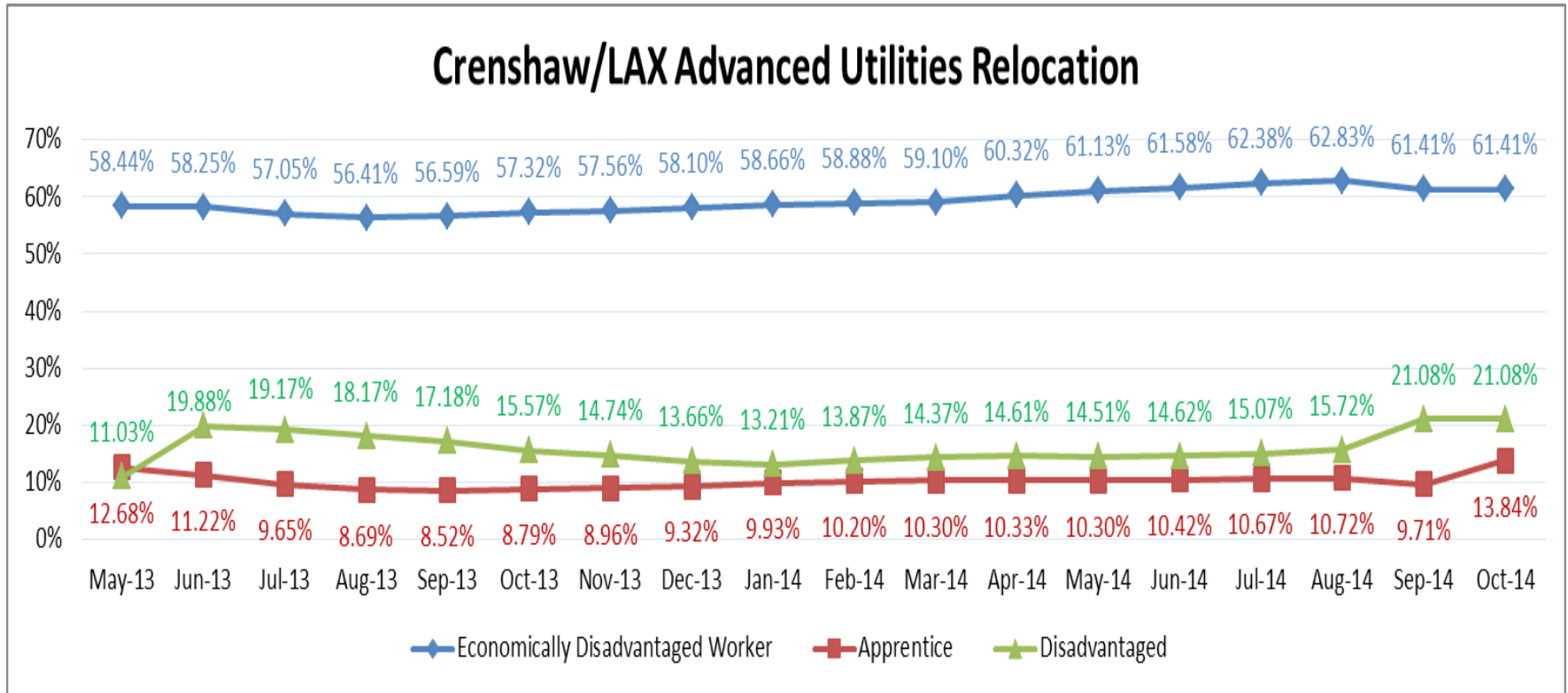
**Metro**

# Crenshaw/LAX Transit Corridor Project

PLA Targeted Worker Attainment: Prime:

Metrobu

(FINAL)



\*As Reported by Metrobuilders. Data subject to change to reflect updates or audits.  
Data reflects a 18 months period.



**Board Report**

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**File #:** 2015-0882, **File Type:** Informational Report

**Agenda Number:** 32.

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**REVISED**  
**CONSTRUCTION COMMITTEE**  
**JULY 16, 2015**

**SUBJECT: TRANSIT PROGRAM BUDGET AND SCHEDULE STATUS**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE the **monthly report on Transit Program Project Budget & Schedule Status.**

**ISSUE**

This monthly report is a summary of the Budget & Schedule Status of Major Rail Measure R projects and Rail Capital Improvements projects.

**DISCUSSION**

The Project Budget & Schedule Status report is presented by the Executive Director of Program Management at the Construction Committee on a monthly basis. This report is intended to update the Board of Directors and the public on the status of the Metro's capital projects, including budget, schedule and potential risks.

**ATTACHMENTS**


Attachment A - Transit Program Project Budget and Schedule Status Report - July 2015

Prepared by: Marla Miller, Cost/Schedule Assistant, (213)922-7630

Brian Boudreau, Executive Director-Program Management Oversight, (213)922-2474



Reviewed by: Stephanie Wiggins, Deputy Chief Executive Officer, (213)922-1023



Phillip A. Washington  
Chief Executive Officer

# Item 32 REVISED Project Budget And Schedule Status Report

























Presented by  
Brian Boudreau  
Executive Director, Program Management

Construction Committee  
July 16, 2015



**Metro**


# Cost & Schedule Performance Summary Chart

Slide #	Project	Cost Performance	Schedule Performance	Comments
3	Crenshaw/LAX			The design-build contractor is currently reporting that they are 123 calendar days behind schedule; however mitigation plans are being developed to reduce this delay.
4	Westside Purple Line Extension-Section 1			
5	Regional Connector			Project cost analysis is being performed to evaluate adequacy of project contingency. Differing site conditions and design review delay leading to resubmittals have impacted scheduled completion of AUR contract.
6	I-405 Sepulveda Pass Improvements Project			Interim forecast increase of \$115 million due to merited provisional sums, settled claims, 3rd Party/MCA, arbitration costs, Caltrans support & other professional services. Does not include Claim 86.
7	Universal City Pedestrian Bridge			Potential schedule delay due to late escalator delivery, structural steel delivery and other requirements.
8	MOL to MRL North Hollywood Connector			
9	Metro Blue Line Station Refurbishments			Currently 3+ months ahead of schedule.
10	Patsaouras Plaza			Change order requested for design error/tunnel conflict and other issues. Negotiations in progress. Schedule delayed due to permitting, environmental, and ROW issues with Caltrans.
11	Division 13			Delays due to issues with the ventilation system and other punch list items.
12	P3010 Rail Car Vehicle Procurement			
13-14	Gold Line Foothill Ext.			
15-16	Expo Phase II			



# Crenshaw/LAX Transit Project








 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	1,749	2,058	2,058

- No issues to report.

 <b>SCHEDULE</b>	Original	Current	Forecast
Rev. Operation	Dec 2018	Oct 2019	Oct 2019

- The design-build contractor is currently reporting that they are 123 days behind schedule, however mitigation plans are being developed to reduce this delay.

## POTENTIAL RISKS

- Design-builder's ability to mitigate schedule delays. (High risk .
- Third party relocations prior to design-builder's construction. (High risk .
- New 96<sup>th</sup> street station cost and schedule potential impacts. (Medium risk .
- Timely future reviews of design-builder's design submittals by City of Los Angeles. (Medium risk .
- LAWA's work window availability for design-builder to construct underground structure in front of LAX runways. (Low risk .

# Westside Purple Line Extension – Section 1

(La Cienega)



<b>BUDGET</b>	Original	Current	Forecast
Total Cost* (\$ mil.)	3,149	3,149	3,149

- No issues to report.

\* Includes Board approved Life-of-Project Budget, plus Planning and Finance costs.

<b>SCHEDULE</b>	Original*	Current	Forecast
Rev. Operation	Oct 2024	Nov 2023	Nov 2023

- Design-Build Contractor has received the necessary permits from the City of Beverly Hills to begin design survey and geotechnical investigations within the Wilshire/La Cienega Station area.

\* FFGA scheduled completion

## POTENTIAL RISKS

- Resolution of stakeholders' issues regarding the Division 20 MOW/NRV Building (Low risk ).
- Adequate staffing (Med risk ).
- CEQA lawsuits have concluded with the Judge's ruling in favor of Metro's position on the Beverly Hills Unified School District and the City of Beverly Hills lawsuits. Beverly Hills Unified School District and the City of Beverly Hills have appealed the ruling. Both petitioners' have filed briefs with the Court of Appeal. Metro filed its opposition briefs on April 13, 2015. Petitioners' reply briefs were filed on May 8, 2015. Court of Appeal to schedule the oral argument. (Low risk ).
- NEPA lawsuits filed by Beverly Hills Unified School District and the City of Beverly Hills are still pending in U.S. District Court. The December 4, 2014 hearing on the parties' cross-motions for summary judgment was taken off calendar and will be rescheduled by the Court. (Low risk ).

On target    Possible problem    Major issue

Risk is Decreasing (Improving)    Risk is Increasing (Worsening)    Risk is Unchanged since last month    New Risk

# Regional Connector



◆ BUDGET	Original	Current	Forecast
Total Cost* (\$ mil.)	1,467	1,467	1,467

- Project cost analysis is being performed to evaluate adequacy of project contingency.

\*Includes Board approved Life-of-Project Budget, plus Planning and Finance costs.

◆ SCHEDULE	Original*	Current	Forecast
Rev. Operation	May 2021	Oct 2020	Nov 2020

- Differing site conditions and re-design leading to resubmittals have impacted AUR scope of work.

\* FFGA scheduled Revenue Service Date (RSD).


## POTENTIAL RISKS

- AUR contract was Terminated for Convenience and Metro Board approved transfer of remaining AUR work to Design-Build contract on April 30, 2015. Mitigation measures and close schedule coordination efforts are being implemented and alternative plans are being evaluated by RCC, DWP and Metro (High risk →).
- NEPA Law suits could potentially delay the construction of Design-Build Contract on Flower Street. MTA and FTA completed SEIS (Supplemental Environmental Impact Status) and issued it for public comments on June 12, 2015. Finalization of SEIS is expected by August 2015, after addressing public comments (Med. Risk →).
- Adequate Staffing (Med risk →).

On target
 
 Possible problem
 
 Major issue
 
  

 Risk is Decreasing (Improving)
 
 Risk is Increasing (Worsening)
 
 Risk is Unchanged since last month
 
 New Risk

# I-405 Sepulveda Pass Improvement Project





 <b>BUDGET</b>	Original	Current	Forecast*
Total Cost (\$ mil.)	1,034	1,141	1,256




- Interim forecast increase of \$115 million reflects increases to the following items:
    - Merited Provisional Sums
    - Merited Claims
    - 3<sup>rd</sup> Party/MCA
    - Arbitration costs
  - Caltrans support & other Professional Services
- \*Does not include Claim 86






 <b>SCHEDULE</b>	Original	Current	Forecast
Project Complete	May 2013	Sep 2015	Sep 2015

- The substantial completion close-out process is taking longer than anticipated due to the complexity of the project and unresolved issues
- Kiewit submitted their Application for Substantial Completion on 6/26/15

## POTENTIAL RISKS

- Wall 1985 design not in conformance with Caltrans Specs (High Risk )
- Forecast does not include non-merited Claim 86 or any new claims yet to be brought forward by contractor (High Risk )
- Slope paving under Bridges (Medium Risk )
- Additional Caltrans and Professional Services costs (Medium Risk )

 On target  
  Possible problem  
  Major issue


 Risk is Decreasing (Improving)  
  Risk is Increasing (Worsening)  
  Risk is Unchanged since last month  
  New Risk

# Universal City Station Pedestrian Bridge



## BUDGET

	Original	Current	Forecast
Total Cost (\$ mil.)	20	27	27

- No issues to report.






## SCHEDULE

	Original	Current	Forecast
Project Complete	Jan 2016	May 2016	May 2016

- Potential schedule delay due to late escalator delivery, structural steel delivery and other requirements.

## POTENTIAL RISKS

- The overall schedule is likely to be delayed slightly due to delay in escalator delivery, delay in structural steel delivery, and the restricted construction periods and the Traffic Control requirements. (High risk )
- Current change order projection is very close to the approved CMA. Any significant change order during the remainder construction could exceed the available CMA (High Risk )
- Contractor's claim for escalator cost compensation has been rejected (Low Risk )



On target



Possible problem



Major issue



Metro



Risk is Decreasing (Improving)



Risk is Increasing (Worsening)



Risk is Unchanged since last month




New Risk



# MOL to MRL North Hollywood Connector

 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	17	23	23




- No issues to report.






 <b>SCHEDULE</b>	Original	Current	Forecast
Project Complete	Jan 2016	May 2016	May 2016

- No issues to report.


## POTENTIAL RISKS

- Unforeseen site conditions during underground construction (Medium risk ).

 On target    Possible problem    Major issue

  Risk is Decreasing (Improving)    Risk is Increasing (Worsening)    Risk is Unchanged since last month    New Risk

# Metro Blue Line Station Refurbishments




 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	33	33	33




 <b>SCHEDULE</b>	Original	Current	Forecast
Project Complete	Mar 2016	Mar 2016	Dec 2015






- No issues to report.

- 18 out of 21 stations completed
- Currently 3+ months ahead of schedule

## POTENTIAL RISKS

- Limited construction window for each station (High risk .
- Bus bridge cost (High risk .
- Contractor lost time claim due to Metro Rail Operations not able to provide the planned work time frame (High risk .

 On target    Possible problem    Major issue


  Risk is Decreasing (Improving)    Risk is Increasing (Worsening)    Risk is Unchanged since last month    New Risk

# Patsaouras Plaza Busway Station









 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	17	31	37.6

- Received request for change (RFC) for cost impacts due to tunnel/foundation conflicts and other issues. Currently under evaluation and negotiation by Metro.

 <b>SCHEDULE</b>	Original	Current	Forecast
Project Complete	June 2014	Mar 2017	Mar 2017

- Schedule for construction start and final completion delayed due to right-of-way, environmental, and permitting issues with Caltrans. Risk high for further delay.

## POTENTIAL RISKS

- Environmental issues with soil and groundwater could lead to additional investigations and delays (High risk ).
- Processing encroachment permit application for CCTV inspections, traffic control within State ROW, and ROW certifications (High risk ).
- Potential budget impacts due to: Preliminary Engineering design errors/omissions and potential change cost exposure. (High risk ).
- Timely approval of final design drawings through Caltrans (Medium risk ).
- Potential unforeseen and difficult underground conditions during construction of bridge foundations (Medium risk ).
- Relocation of fiber optics communication lines prior to construction (Low risk ).

# Division 13 Bus Maintenance Facility






 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	95	120	120

- No issues to report

 <b>SCHEDULE</b>	Original	Current	Forecast
Project Complete	July 2014	July 2015	Sept 2015

- Delays due to issues with ventilation system and other punch list items.

## POTENTIAL RISKS

- Timely closeout of punch list items (Medium risk ).
- Design errors and changes during interior construction (Low risk ).
- Timely installation of new Metro Drive traffic signal (Low risk ).

# P3010 Rail Car Vehicle Procurement



<b>BUDGET</b>	*Original	**Current	**Forecast
Total Cost (\$ mil.)	\$342	\$972	\$972

- \*Budget for 78 Base Order Cars
- \*\*Budget for 97 Options 1 & 4 Cars and 60 Options 2 & 3 Cars
- Board approved an LOP Budget increase of \$263 million in April to exercise Options 2 & 3

<b>SCHEDULE</b>	Original	Current	Forecast
Final Acceptance	Jan 2017	Feb 2019	Feb 2019

- No issues to report.

## POTENTIAL RISKS


- Schedule is very aggressive and any impacts to critical activities could result in delayed deliveries. (Medium risk ).
- Timely conduct of on-site design conformance testing. Coordination meetings are being conducted to mitigate potential issues. (Low risk ).
- Timely execution of Contract Modification (CM). Currently good progress is being made. (Low risk ).

On target    Possible problem    Major issue

Risk is Decreasing (Improving)    Risk is Increasing (Worsening)    Risk is Unchanged since last month    New Risk

# Gold Line Foothill Extension (Phase 2A)




 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	690	741	741




- No issues to report.






 <b>SCHEDULE</b>	Original	Current	Forecast
Rev. Operation	Nov 2016	May 2016	Mar 2016

- Metro has agreed to early acceptance of Maintenance & Operating Facility.

## POTENTIAL RISKS

- Metro is assessing operational scenarios related to opening of this project by March 2016 (Low risk ).

 On target  
  Possible problem  
  Major issue


 Risk is Decreasing (Improving)  
  Risk is Increasing (Worsening)  
  Risk is Unchanged since last month  
  New Risk

# Gold Line Foothill Extension (Phase 2A)



## RECENT ACTIVITIES/ISSUES


- Construction is approximately 96% complete
- Civil work complete
- Track installation complete
- Architectural work at stations near complete
- Systems
  - OCS complete
  - Train control system complete
  - Communications system complete
- Maintenance Facility
  - Obtained certificate of occupancy
  - Began turnover process
- Testing
  - Continue systems integration testing (SIT)
  - Continue communications local field acceptance testing (LFAT)
- Continue punch list development

# Exposition Phase II






 <b>BUDGET</b>	Original	Current	Forecast
Total Cost (\$ mil.)	1,511	1,511	1,511




- No issues to report.






 <b>SCHEDULE</b>	Original	Current	Forecast
Rev. Operation	Nov 2016	Apr 2016	Apr 2016

- No issues to report.

## POTENTIAL RISKS

- Delays associated with Trackwork, systems installation and testing, Maintenance Facility) (Med risk .
- Delay in energizing the Traction Power Substation at the OMF(Low risk .
- Metro is assessing operational scenarios related to opening this project by April 2016 (Low risk .

 On target  
  Possible problem  
  Major issue


 Risk is Decreasing (Improving)  
  Risk is Increasing (Worsening)  
  Risk is Unchanged since last month  
  New Risk



# Exposition Phase II



## RECENT ACTIVITIES/ISSUES

- Design is 99% complete and construction 93% complete
- The mainline and OMF contracts are forecasting Substantial Completion dates of Dec 1 and Nov 4 respectively.
- The contractors, Metro and Expo are working to develop interim milestones that will allow for Pre-Revenue operations to begin in the Fall 2015 timeframe.
- The contractor experienced larger than expected settlement at one of the MSE wall locations due to an extensive clay layer.
  - The contractor is initializing stabilization measures to halt the settlement.
  - This work can be done concurrently with the systems installation and is not anticipated to affect the current schedule.
  - There have been no issues with the wall panels due to the settlement.


# Project Status Sheets



<b>LOCATION:</b> Crenshaw Blvd at Exposition to Green Line <b>DESIGN/CONSULTANT:</b> Hatch Mott MacDonald				<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> Stantec <b>CONTRACTOR:</b> Walsh-Shea Corridor Constructors (WSCC)			
<b>PROJECT PHOTO:</b> Vernon Station – Overall view of the decking operation looking south				<b>WORK COMPLETED PAST MONTH:</b>			
				<ul style="list-style-type: none"> <li>o Continued final design.</li> <li>o Completed pile installation for UG#1 near LAX airport runways.</li> <li>o Continued falsework installation for bridge decking at Century Station.</li> <li>o Completed decking for 104th Street grade separation at underground guideway No. 1 near LAX runways.</li> <li>o Continued pile installation at UG#4 on Crenshaw Blvd.</li> <li>o Completed decking operation on Crenshaw Blvd at Vernon Station.</li> <li>o Completed utility support under deck at MLK Station.</li> <li>o Continued tier two strut installation and began excavation to tier three level at Expo Station.</li> <li>o Issued notice to proceed for Division 16: Southwestern Yard.</li> <li>o Completed real estate acquisitions with emphasis on remaining partial-takes and temporary construction easements.</li> </ul>			
<b>EXPENDITURE STATUS</b> (\$ In Millions)				<b>SCHEDULE ASSESSMENT</b>			
ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PLAN	CURRENT PLAN	VARIANCE WEEKS
<b>DESIGN</b>	\$ 136.7	\$ 103.9	76.0%	<b>Environmental</b>			
				FIS/FEIR	Sep-11	Sep-11	Complete
<b>RIGHT-OF-WAY</b>	\$ 127.4	\$ 108.8	85.4%	Record of Decision	Dec-11	Dec-11	Complete
				<b>Design</b>			
<b>CONSTRUCTION</b>	\$ 1,353.1	\$ 341.8	25.3%	Preliminary Engineering	Nov-11	Nov-11	Complete
				Final Design	Sep-15	Nov-15	2.9 months behind
<b>OTHER</b>	\$ 440.8	\$ 110.1	25.0%	<b>Right-of-Way</b>			
				Full-take parcels available	Jan-15	Jan-15	Complete
<b>TOTAL</b>	<b>\$ 2,058.0</b>	<b>\$ 664.5</b>	<b>32.3%</b>	Part-take and TCE parcels	Sep-15	Sep-15	On schedule
Note: cost expended as of May 30, 2015.				<b>Construction</b>			
<b>AREAS OF CONCERN</b>  o Third party relocations prior to design-builder's construction. o Design-builder's ability to mitigate schedule delays. o Timely review of WSCC's design submittals by City of Los Angeles. o 96th street station cost and schedule potential impacts.				D-B Notice to Proceed	Sep-13	Sep-13	Complete
				D-B Substantial Complete	Oct-18	Feb-19	4.2 months behind
				Revenue Service Date	Oct-19	Oct-19	On schedule*
				The D-B Substantial Complete prior plan was modified by a 35 day concurrent delay contract modification in March 2015.			
				*Note: Current Revenue Service Date includes a reduction in contingency.			
ROW ACQUISITION	PLAN	ACQUIRED	REMAINING	<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>			
FULL TAKES	35	35	0	<ul style="list-style-type: none"> <li>o Continue excavation to next levels at Expo and MLK Stations.</li> <li>o Commence support of utilities and excavation at Vernon Station.</li> <li>o Continue working on Century, Imperial, La Brea and Manchester aerial structures.</li> <li>o Continue pile installation at UG#4 on Crenshaw Blvd</li> <li>o Commence pile installation for UG#3 on Crenshaw Blvd</li> <li>o Continue excavation of UG#1 near airport runway.</li> </ul>			
PARTIAL TAKES	27	16	11				
TEMPORARY EASEMENTS	12	11	1				
<b>TOTAL PARCELS</b>	<b>74</b>	<b>62</b>	<b>12</b>				

**WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT**

**As of June 2015**

<b>LOCATION:</b> Los Angeles / Beverly Hills				<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> WEST, a Joint Venture			
<b>DESIGN CONSULTANT:</b> Parsons / Brinckerhoff				<b>CONTRACTOR:</b> Skanska, Traylor and Shea, a Joint Venture			
<b>Duct Bank Wilshire West of Ogdan</b>				<b>WORK COMPLETED PAST MONTH</b>			
				<ul style="list-style-type: none"> <li>- Continuing real estate acquisitions</li> <li>- C1045 Design/Build: Final design underway for five of six design units</li> <li>- C1045 Design/Build: Final stages of Baseline Schedule development</li> <li>- C1045 Design Build: Wilshire/Western TBM shaft 85% design underway</li> <li>- C1045 Design/Build: Wilshire/La Brea SOE 85% design package revisions underway</li> <li>- C1045 Design/Build: Wilshire/La Brea utility relocation design 100% complete</li> <li>- C1045 Design/Build: Wilshire/La Brea Station 60% design underway</li> <li>- C1045 Design/Build: Tunnel &amp; systems 60% design underway</li> <li>- C1055 Wilshire/Fairfax AUR: Waterline and power work continues</li> <li>- C1056 Wilshire/La Cienega AUR: Power utility and sanitary sewer relocations on Wilshire continues</li> </ul>			
<b>EXPENDITURE STATUS (\$ In Millions)</b>				<b>SCHEDULE ASSESSMENT</b>			
<b>ACTIVITIES</b>	<b>CURRENT BUDGET</b>	<b>EXPENDED AMOUNT</b>	<b>PERCENT EXPENDED</b>	<b>MAJOR SCHEDULE ACTIVITIES</b>	<b>PRIOR PLAN</b>	<b>CURRENT PLAN</b>	<b>VARIANCE WEEKS</b>
<b>DESIGN</b>	\$157.7	\$79.0	50.1%	<b>Environmental</b>			
				FIS / FER	N/A	05/31/12	Complete
<b>RIGHT-OF-WAY</b>	\$175.6	\$109.8	62.5%	<b>Design</b>			
<b>CONSTRUCTION</b>	\$1,737.4	\$181.7	10.5%	PE Notice to Proceed	N/A	01/12/11	Complete
				Final Design complete	03/22/17	03/22/17	0
<b>OTHER</b>	\$1,078.7	\$82.2	7.6%	<b>Right-of-Way</b>			
<b>TOTAL</b>	<b>\$3,149.4</b>	<b>\$452.7</b>	<b>14.4%</b>	All parcels available	12/31/15	12/31/15	0
Current Budget includes Environmental/Planning and Finance Costs.				<b>Construction - Main Design / Build Contract</b>			
<b>AREAS OF CONCERN</b>				Notice to Proceed	01/12/15	01/12/15	Complete
Timely resolution of the CEQA and NEPA law suits. CEQA Judge ruled in favor of Metro's position on the Beverly Hills Unified School District and City of Beverly Hills law suits, and both petitioners have appealed the ruling. Judge to schedule oral argument. U.S. District Court Judge has taken the December 2014 hearing for summary judgment off the calendar and has yet set a new date.				Construction complete	11/08/23	11/08/23	0
<b>ROW ACQUISITION</b>	<b>PLAN</b>	<b>AVAILABLE</b>	<b>REMAINING</b>	<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>			
PERMANENT PARCELS	15	4	11	<ul style="list-style-type: none"> <li>- C1045 Design/Build: Final design continuing</li> <li>- C1045 Design/Build: TBM procurement</li> <li>- C1045 Design/Build: Wilshire/La Brea utility work to begin</li> <li>- C1045 Design/Build: Wilshire/La Brea North site preparation and demo</li> <li>- C1055 Wilshire/Fairfax AUR: Power work complete MS#2</li> <li>- C1055 Wilshire/Fairfax AUR: Water line construction continuing</li> <li>- C1056 Wilshire/La Cienega AUR: Power relocation work continuing</li> </ul>			
TEMPORARY PARCELS	4	2	2				
<b>TOTAL PARCELS</b>	<b>19</b>	<b>6</b>	<b>13</b>				

<b>LOCATION:</b> Downtown Los Angeles	<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> ARCADIS
<b>DESIGN CONSULTANT:</b> Connector Partnership JV	<b>CONTRACTORS:</b> Regional Connector Constructors, Joint Venture

<b>Soldier Pile installation at Mangrove Yard by RCC</b>	<b>WORK/ACTIVITY COMPLETED PAST MONTH</b>
--	---



- SEIS was issued for public comments on June 12, 2015.
- DB overall contract is 21 % complete as of the end of June 2015
- The overall final design is 72% complete as of the end of June 2015.
- AFC Design for Shoofly has been approved.
- RCC completed pile installation for TBM Launch Pit at the Mangrove Yard.

<b>EXPENDITURE STATUS (\$ In Millions)</b>	<b>SCHEDULE ASSESSMENT</b>
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ACTIVITIES	CURRENT BUDGET	EXPENDED AMOUNT	PERCENT EXPENDED	MAJOR SCHEDULE ACTIVITIES	PRIOR PERIOD	CURRENT PLAN	VARIANCE WEEKS
<b>DESIGN</b>	\$119.1	\$90.6	76.1%	<b>Environmental</b>			
				FES / FEIR	NA	04/26/12	Complete
				SEIS Flower St.	NA	08/31/15	In Progress
<b>RIGHT-OF-WAY</b>	\$102.0	\$47.5	46.6%	<b>Design</b>			
				PE Notice to Proceed	NA	01/04/11	Complete
<b>CONSTRUCTION</b>	\$1,010.3	\$204.9	20.3%	Final Design complete	04/07/16	05/23/16	7
<b>OTHER</b>	\$228.6	\$63.6	27.8%	Note: Based on the latest approved D/B Contractor's schedule, The Systems Design Package was delayed by seven weeks.			
<b>TOTAL</b>	\$1,460.0	\$406.6	27.9%	<b>Right-of-Way</b>			
				All parcels available	06/01/16	06/01/16	0

Current Budget reflects Board approved Life-of-Project Budget and does not include Finance Charges.  
 Note: Expended amount is through May 2015.

Note: ROW dates are adjusted to reflect the latest D/B Contractor's coordinated need Dates.

<b>Construction - Design / Build Contract</b>			
Notice to Proceed	07/07/14	07/07/14	Complete
Construction complete	08/28/20	9/23/20*	4
Revenue Service Date	10/27/20	11/22/20*	4

**AREAS OF CONCERN**

- NEPA Law suits could potentially delay the construction of Design-Build Contract on Flower Street. MTA and FTA completed SEIS (Supplemental Environmental Impact Statement) and issued it for public comments on June 12, 2015. Finalization of SEIS is expected by August 2015, after addressing public comments.
- Advanced Utility Relocation (AUR) work have been delayed. Metro Board approved transfer of remaining AUR work to C0980 on April 30, 2015. Mitigation measures and close schedule coordination efforts are being implemented and alternative plans are being evaluated by RCC, DWP and Metro. Utility relocations plans are being developed at all locations to mitigate schedule delays.

Note : \* Based on the Board Meeting in April 2015, the project is reflecting six months potential delay due to additional AUR work transferred to C0980 Contract.


ROW ACQUISITION	PLAN	ACQUIRED	REMAINING
<b>PERMANENT PARCELS</b>	5	2	3
<b>TEMPORARY PARCELS</b>	29	12	17
<b>TOTAL PARCELS</b>	34	14	20

**CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD**

- RCC will continue Potholing - Wye Structure at 1st/Alameda.
- RCC started 12" and 16" DWP waterline relocation at 1st/Central.
- RCC continues potholing for a 24" water line alignment on Flower.
- RCC will begin preparation for AT&T and MCI communication lowering at 2nd/Broadway.
- RCC continues preparation of submittals and traffic control plans, including weekly meetings with LADOT and City Council District 14.
- RCC continues with pre-trenching and utility potholing at 2nd/Broadway and Flower St. to identify existing utilities corridors for the remaining ductbank work.
- Level 3 and Verizon Business/MCI are planning to complete remaining work, cable pulling and splicing on Flower St.
- RCC started installation of electrical vault on 5th/Flower.

**I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT**


**As of June 2015**

<b>LOCATION:</b> I-405 Sepulveda Pass Improvements Project				<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> Stantec			
<b>DESIGN/CONSULTANT:</b> Kiewit (D/B)				<b>CONTRACTOR:</b> Kiewit (D/B)			
<b>PROJECT PHOTO</b>				<b>WORK COMPLETED PAST MONTH</b>			
<p><b>Aerial View of Sunset Interchange &amp; Walls 1730 &amp; 1720</b></p> 				<ul style="list-style-type: none"> <li>- Contractor Correcting Non-Conforming work on Barriers and Walls</li> <li>- Performed SWPPP related activities</li> <li>- Cleaned Caltrans purchased houses along right-of-way which were used by the Contractor during construction.</li> <li>- Work on NB Getty On-ramp to remove demarcation cabinet and 2 pull boxes.</li> <li>- Removed and replaced LED light from mast arm on SB Santa Monica On-ramp.</li> <li>- Removed demarcation foundation and poured back sidewalk at Skirball Center Drive and Mulholland Drive.</li> <li>- Hand graded, watered, and compacted the slope under Bridges 7 and 8 at GSA.</li> <li>- Application for Substantial Completion June 26, 2015.</li> </ul>			
<b>EXPENDITURE STATUS</b> (\$ In Millions)				<b>SCHEDULE ASSESSMENT</b>			
<b>ACTIVITIES</b>	<b>CURRENT BUDGET</b>	<b>EXPENDED AMOUNT</b>	<b>PERCENT EXPENDED</b>	<b>MAJOR SCHEDULE ACTIVITIES</b>	<b>PRIOR PLAN</b>	<b>CURRENT PLAN</b>	<b>VARIANCE WEEKS</b>
<b>DESIGN (Preliminary)</b> (PA&ED/PS&E)	\$47.0	\$47.0	100.0%	<b>Environmental</b>			
<b>RIGHT-OF-WAY</b> (Capital/Support/3rd Party)	\$78.4	\$71.9	91.7%	End Environmental Phase (PA&ED)	Mar-08	Mar-08	Complete
<b>CONSTRUCTION</b> (Construction Support/Construction)	\$1,013.4	\$994.2	98.1%	<b>Design</b>			
<b>Reversible Lane</b>	\$2.6	\$1.5	57.7%	End Design Support Phase (D/B)	Sep-15	Sep-15	0
<b>TOTAL</b>	<b>\$1,141.4</b>	<b>\$1,114.6</b>	<b>97.7%</b>	<b>Right-of-Way</b>			
				ROW Certification	Sep-15	Sep-15	0
<b>AREAS OF CONCERN</b>				<b>Construction</b>			
Cracks in Retaining Walls/Soil Nail Walls (Case 1 and Case 2)				Opening of SB I-405 Realignment	May-14	May-14	Complete
				Substantial Completion	Sep-15	Sep-15	0
<b>ROW ACQUISITION (Caltrans)</b>				<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>			
PARCELS AQUIRED	66			Project Wide Substantial Completion Acceptance - End of September 2015			
PARCELS NOT AQUIRED (Salvation Army-Litigation Pending)	1						
DECERTIFIED PARCELS	12						
PAST DUE WITH NO APPARENT SCHEDULE IMPACT	0						
ADDITIONAL IMPACTS REQUIRING APPRAISAL MAPS	0						
<b>TOTAL REQUIRED PARCELS</b>	<b>79</b>						

**METRO DIVISION 13**

**Bus Maintenance and CNG Fueling Facility**

**As of June 2015**

<b>LOCATION:</b> Los Angeles <b>DESIGN CONSULTANT:</b> MDG		<b>CONSTRUCTION MANAGEMENT CONSULTANT:</b> MARRS <b>CONTRACTOR:</b> McCarthy					
<b>PHOTO Artwork Lantern backlite at night</b>		<b>WORK COMPLETED PAST MONTH</b>					
		<ul style="list-style-type: none"> <li>Completed installation of Artwork Lantern lights</li> <li>Continued work commissioning elevators 3 of 3 accepted</li> <li>Continue testing fire alarm systems through buildings</li> <li>Continue interior build out of dry wall, sprinklers and MEP</li> <li>Continue sack and patch of concrete at upper levels</li> <li>Received trees for Vignes Street</li> <li>Completed installation of roofing membrane system Bld B</li> <li>Continue installation of permanent maintenance equipment</li> <li>Completed installation of City C&amp;G, sidewalks along Cesar &amp; Lyon</li> <li>Continue interior finishes in Transportation Building</li> <li>Completed installation of Artwork Lantern bird deterrent</li> </ul>					
<b>EXPENDITURE STATUS (\$ In Millions)</b>		<b>SCHEDULE ASSESSMENT</b>					
<b>ACTIVITIES</b>	<b>CURRENT BUDGET</b>	<b>EXPENDED AMOUNT</b>	<b>PERCENT EXPENDED</b>	<b>MAJOR SCHEDULE ACTIVITIES</b>	<b>PRIOR PLAN</b>	<b>CURRENT PLAN</b>	<b>VARIANCE (WEEKS)</b>
<b>DESIGN</b>	6.593	6.593	100.0%	<b>Environmental</b>			
				Categorical Exemption	Dec-09 A	Dec-09 A	Complete
<b>RIGHT-OF-WAY</b>	0	0	n/a	<b>Design</b>			
				Final Design	Oct-09 A	Oct-09 A	Complete
<b>CONSTRUCTION</b>	88.8	82.63	93.1%	<b>Right-of-Way</b>			
				Not Applicable	n/a	n/a	n/a
<b>OTHER</b>	24.95	20.77	83.2%	<b>Construction</b>			
<b>TOTAL</b>	<b>120.34</b>	<b>109.99</b>	<b>91.4%</b>	Notice to Proceed	Jul-12 A	Jul-12 A	Complete
Expenses as of 5/31/2015				Construction Complete	Oct-15	Jan-16	13
<b>AREAS OF CONCERN</b>		<b>CRITICAL ACTIVITIES / 3 MONTH LOOK AHEAD</b>					
<ul style="list-style-type: none"> <li>Commissioning of MEP systems</li> <li>Lighting leveles in low er level of parking garage Bld B</li> <li>Procure and install revised low er level Exhaust Fans for Bld B</li> <li>Low voltage, ITS, communication, etc. installation by Metro</li> <li>Approval of Fire Marshall to accept MEP systems</li> <li>Time to procure and install critical HVAC compenents</li> </ul>		<ul style="list-style-type: none"> <li>Installation of owner supplied fumature</li> <li>Grind &amp; overlay AC pavment plus stripping of Cesa Chavez Ave by City</li> <li>Punch list entire project after Substantial Completion</li> <li>Procure &amp; install VFD and Exhaust Fan lower level Bld B</li> <li>Complete State inspection punch list for 1 of 3 elevators</li> <li>Complete permanent stripping/loops on Cesar &amp; Vignes Streets</li> <li>Have Fire Marshall punch list project</li> <li>Obtain Fire Marshall approval to place fluid products in lube tanks</li> <li>Obtain Fire Marshall approval to fuel emergency generator</li> <li>Obtain Fire Marshall approval for systems to fuel CNG buses</li> <li>Continue commissioning of the MEP s systems</li> <li>Continue installaion of the communication/ ITS systems by Metro</li> <li>Commission photovoltaic panels</li> </ul>					
<b>ROW ACQUISITION</b>	<b>PLAN</b>	<b>ACQUIRED</b>	<b>REMAINING</b>				
PERMANENT PARCELS	0	n/a	0				
TEMPORARY PARCELS	0	n/a	0				
<b>TOTAL PARCELS</b>	<b>0</b>	<b>n/a</b>	<b>0</b>				

Metro

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



**Metro**

## Board Report

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**File #:** 2015-1057, **File Type:** Oral Report / Presentation

**Agenda Number:** 33.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015**

RECEIVE report by the **Caltrans District Director on Delivery of Projects on I-5.**



# Caltrans District 7 - Corridor Report for I-5 North Projects

June 2015 @ Metro Construction Committee by Shirley Choate, Chief Deputy Director



- Four projects, Segments 1-4, from SR 134 to SR 118, a total of ≈ 12 miles.
- Four lanes each direction. The freeway is being widened to add one HOV lane in each direction.
- Total I-5 North corridor budget is about \$884 million , \$434 million for Const Cap. Construction is within budget.
- All four segments are in the construction phase.

**Segments 1 and 2 are substantially complete, and the NB HOV lane has been opened in March 2015 and the SB HOV lane has been opened on May 27, 2015.**

Segments 3 and 4 will be open to traffic Winter 2018.

- Ribbon cutting for Segments 1 and 2 was held on June 11.
- Empire IC Segment 3 and Southernmost Segment 4 HOV lane open-to-traffic target dates are for Winter 2018.
- Empire project has incentive provisions for the contractor to finish early.
- On Segment 3 and 4, on-going outreach and coordination efforts is continuing to lessen the impacts on the neighboring business and residents.

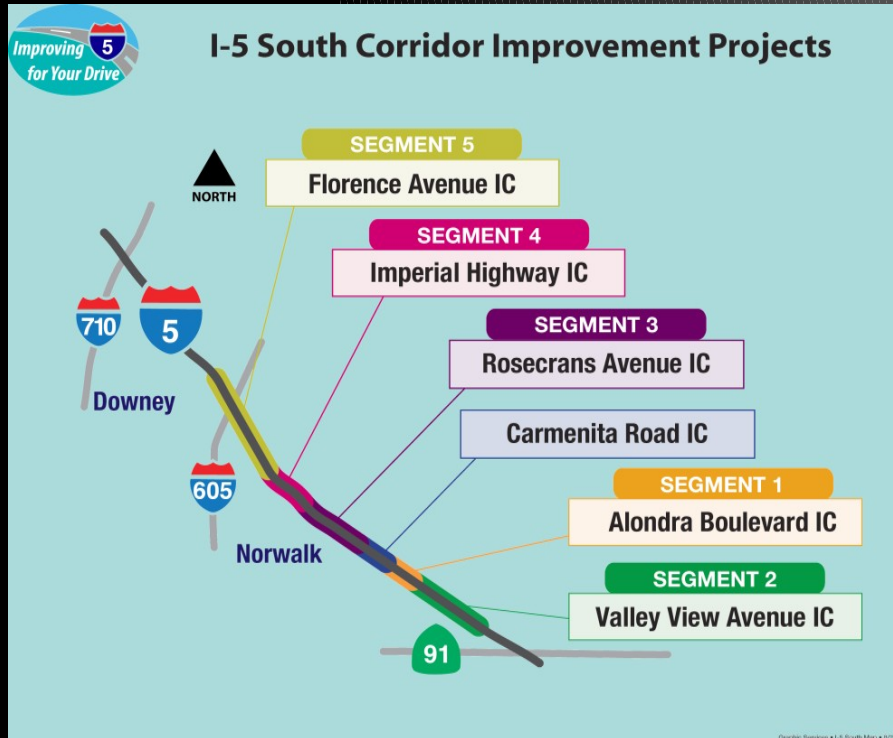
## North I-5 Corridor

Segment	EA	Phase	Phase % Complete	Description	Project Length/ Miles	Construction Award Amount	Contract Start Date	Open to Traffic
1	1219U	Const	91%	Add HOV from Route 170 to Route 118	3.4mi	\$121 M	5/06/2010A	2015
2	1218V	Const	96%	Add HOV lanes from Buena Vista Street to Route 170	4.4mi	\$59 M	10/14/2010A	2015
3	1218W	Const	23%	Empire Interchange from south of Magnolia Blvd. to just north of Buena Vista Street	2.2mi	\$196 M	12/20/2012A	Winter 2018*
4	12184	Const	64%	Add HOV lane from Route 134 to south of Magnolia Blvd.	2.7mi	\$58 M	12/6/2010A	Winter 2018 *

\*These will be opened jointly

# Caltrans District 7 - Corridor Report for I-5 South Projects

June 2015 @ Metro Construction Committee by Shirley Choate, Chief Deputy District Director



- Six projects including Carmenita Interchange and Segments 1 through 5, from OC County line to Interstate 605 and makes a total of approximately 7 miles.
- Three lanes in each direction. The freeway is being widened to add one general purpose lane and one HOV lane in each direction.
- The total I-5 South corridor budget is about \$1.8 billion with construction capital budget at \$649 million.
- 5 of 6 projects are in the construction phase, including Carmenita Interchange and Segments 1, 3, 4 and 5. (Segment 5 utility relocations are underway).
- Segment 1, Contractor is working on the final electrical items.
- Segment 2, is expected to start construction in Summer 2016.
- Segment 3, Rosecrans southbound on and offramps will be opened in 2 weeks.
- Segment 4, preparing for southbound lane shift to match segment 3.
- Segment 5, preparing for railroad bridge work.
- Carmenita, preparing for partial bridge opening in July.
- HOV lane will not be opened until all segments are complete in Winter 2019.

## South I-5 Corridor

Segment	EA	Phase	Phase % Complete	Description	Project Length/Miles	Construction Award Amount	Contract Start Date	Open to Traffic
1	21591	Const	94%	Add HOV and mix flow lanes, Alondra Blvd. Interchange	0.9mi	\$45 M	12/21/2011A	Winter 2019
2	21592	Design	100%	Add HOV and mix flow lanes, Valley View Ave. Interchange	1.4mi	N/A	Summer 2016	Winter 2019
3	21593	Const	58%	Widen and Realign Freeway, Rosecrans Ave. Interchange	1.3mi	89 M	9/18/2012A	Winter 2019
4	21594	Const	52%	Add HOV and mix flow lanes, Imperial Highway Interchange	1.8mi	\$142 M	9/18/2012A	Winter 2019
5	21595	Const	6%	Add HOV and mix flow lanes, Florence Ave. Interchange	1.7mi	\$96 M	5/13/2014A	Winter 2019
Carmenita	2159C	Const	65%	Carmenita Interchange	1.2mi	\$102 M	9/13/2011A	Winter 2019



**Board Report**

**File #:** 2015-0955, **File Type:** Contract

**Agenda Number:** 34.

**REVISED**  
**CONSTRUCTION COMMITTEE**  
**JULY 16, 2015**

**SUBJECT: STAFFING REQUEST FOR ENGINEERING & CONSTRUCTION DEPARTMENT'S TRANSIT PROJECTS**

**ACTION: APPROVE RECOMMENDATIONS**

**RECOMMENDATION**

CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing the Chief Executive Officer to amend the **FY16 budget to add 33 non-contract full-time equivalent (FTE) positions:**

- A. 18 non-contract FTE positions (with 7 non-contract FTE positions already accounted in the FY 16 budget) by converting new Construction Management Support Services(CMSS)/consultant positions to support Measure R transit projects for Engineering & Construction (E&C) Department;
- B. 2 non-contract FTE positions by converting consultant positions to support Environmental Compliance and Sustainability projects for E&C Department (Refer to Appendix 1);
- C. 3 non-contract FTE positions to support capital transit projects for E&C Department (refer to Appendix 2);
- D. 4 non-contract FTE positions by converting new CMSS/consultant positions to support Measure R transit projects for Program Management Office (Refer to Appendix 3);
- E. 4 non-contract FTE positions by converting new CMSS/consultant positions to support Measure R transit projects for Vendor/Contract Management Department (Refer to Appendix 4); and
- F. 2 non-contract FTE positions to support Measure R transit projects for Countywide Planning and Development Department (Refer to Appendix 6).

It should be noted that the positions A through F are project related positions that can be terminated upon completion of the projects.

**ISSUE**

In recent quarterly meetings with the Federal Transit Authority (FTA), FTA has expressed repeated concerns over Metro's staffing levels. There were also discussions over Metro's succession planning. With the on-going construction of the three main transit projects, Crenshaw/LAX, Regional Connector and Westside Purple Line Extension Section 1 and initiating preliminary engineering design for Westside Purple Line Extension Section 2 in addition to numerous smaller transit capital and state of repair projects, FY 16 represents a year of tremendous growth for E&C department and all the other supporting departments such as Program Management Office, Vendor/Contract Management, Communications and Countywide Planning and Development who provide critical support to these projects. The total capital budget for these four main transit projects alone in FY 15 is approximately \$710 million with a total current staffing of 201 Metro and CMSS/consultant positions. With a proposed capital budget of \$1.150 billion for the four major transit projects in FY 16 (an increase of approximately 25 percent) the total Metro FTE and CMSS/consultant positions will need to increase from 201 positions to approximately 276 positions as the projects ramp up and come on stream.

For the FY 16 budget process, it was agreed to include 10 non-contract Metro positions as seed positions in order to allow staff to commence recruitment by advertising these positions. It was further agreed that the remaining request for 33 positions will go through a separate process via the Board as a direct response to previous Board motions. Last month, as part of the FY16 Budget, the Board approved 7 out of the 10 non-contract Metro positions for E&C. These Board approved positions are highlighted in Table A.

In order to support the main transit projects currently under construction, E&C and supporting departments are requesting a total of 33 non-contract FTE positions. These new non-contract FTE positions may be terminated upon completion of the projects.

- 23 positions for Engineering & Construction (Refer to Table A).
- 4 non-contract Metro FTEs for Program Management Office.
- 4 non-contract Metro FTEs for Vendor/Contract Management.
- 2 non-contract Metro FTEs for Countywide Planning and Development.

Based on the results of the pilot project and cost benefit analysis performed by E&C on the CMSS/consultant model to determine which functions should be brought in-house, staff has determined that partial conversion of the approximately 28 (of the 33) new staffing positions from private to public sector will save up to \$21 million through the life of project for the main transit projects:

- 18 non-contract Metro FTEs (with 7 non-contract FTE positions already accounted in the FY 16 budget) for Engineering & Construction for the main transit projects.

- 2 non-contract Metro FTEs for Engineering & Construction for Environmental Compliance and Sustainability.
- 4 non-contract Metro FTEs for Program Management Office.
- 4 non-contract Metro FTEs for Vendor/Contract Management.

## **INTRODUCTION**

Metro's construction management and consulting services commonly referred to as construction management support services (CMSS) is a concept that began in the mid 1990's in response to a Board-directed investigation to research more effective and innovative approaches to project delivery. At the same time, the Metro Board approved the adoption of a Joint Project Office now called the Integrated Project Management Office (IPMO). The CMSS concept under the IPMO supplements Metro staff with consultants in managing Metro projects. The consultant staff members are an extension of Metro staff and under the direction of Metro.

The scope of the CMSS contract includes a variety of project management and construction management staffing disciplines that may be required during the course of construction. The consultants provide an extension of staff to various Metro Departments represented in the project team or supported by the project team - example Departments are Engineering and Construction, Program Management Office, Vendor/Contract Management, Communications, Enterprise Risk and Safety, and Countywide Planning and Development.

The vast majority of CMSS/consultant staff (used as an extension of Metro staff) are utilized on the main transit projects presently underway - Crenshaw/LAX, Regional Connector, Westside Section 1, with Westside Section 2 imminent. However, consultants are used to a lesser extent to supplement Metro staff for other project areas - Highways, Regional Rail, Capital and Environmental. The need for, and the pattern of usage, varies by project type and is dependent upon the specific needs of the various projects. On a typical transit project, the CMSS/consultant staff comprises of approximately 50 percent of the total staffing with the remaining 50 percent staffed by Metro personnel.

## **DISCUSSION**

In response to several board motions, staff examined the cost of outsourcing construction management and consulting services and completed a pilot project study and a preliminary cost benefit analysis. The key goals and objectives of the pilot project study and preliminary cost benefit analysis were to:

- a. Deliver transportation infrastructure projects safely, on time, and within budget;

- b. Manage resources effectively and efficiently resulting in tangible cost savings;
- c. Build bench strength in the Metro work force and create a succession plan for the future; and
- d. Support Metro's commitment to Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)

Due to the voter-approved Measure R program, Metro is undertaking one of the largest capital improvement programs in the nation which is an unprecedented challenge for project delivery. The successful project delivery of these transit projects is highly dependent on providing sufficient staffing resources in order to lower cost, exercise fiscal responsibility, enhance our safety-conscious culture and increase quality and efficiency.

### Staffing Assumptions

The staffing assumptions used in the staffing analysis, pilot project study and cost benefit analysis consisted of the following:

1. All existing CMSS/consultant and Disadvantage Business Enterprise (DBE) and Small Business Enterprise (SBE) positions in FY 15 shall remain.
2. Highly specialized technical areas of expertise (tunneling resident engineer, noise/vibration engineer, land surveyor, etc.) shall remain as consultants.
3. In order to address peak fluctuations in the work including construction work that requires swing and night shifts, staff shall continue to use CMSS/consultant positions on an as-needed basis.
4. To honor Metro's commitment to DBE and SBE, existing CMSS/consultant positions in these categories shall remain as consultants.
5. The new non-contract Metro positions may be terminated upon completion of the projects.

### Staffing Analysis

In preparation for the Metro FY16 budget process that establishes the Metro headcount for each subsequent fiscal year, staff assessed the project work for the coming year and, based on the projected annual capital expenditure per project, the project team established the overall staffing requirements consistent with the overall project management plans submitted to the Federal Transit Administration (FTA) for each project. From this capital budget information, the overall total monthly staffing requirements are estimated for each project using a variety of scenarios dependent on assumed levels of future capital funding. The staffing is broken down by Metro department(s) and divided between the public and private sector. The monthly staffing requirements are reviewed to ascertain the optimal split between public sector and private sector which is typically a 50/50 ratio. Additionally, staff considered a number of potential funding scenarios for potential longer term

projects to assist in providing an understanding of what the staffing requirements might be over an extended period of time.

In order to adequately staff the main transit projects for the first six months of FY16 and effectuate a cost savings of at least 25 percent, staff is requesting a total of 33 new non-contract Metro positions for the first six month of FY 16 to support Measure R transit and capital projects of which 28 CMSS/consultant positions will be converted to new Metro non-contract positions:

1. 23 non-contract positions for Engineering & Construction of which 20 non-contract positions are CMSS/consultant conversions.
  - a. 18 non-contract positions are CMSS/consultant conversions for the main transit projects.
  - b. 2 non-contract positions are consultant conversions for Environmental Compliance and Sustainability.
2. 4 non-contract positions for Program Management Office; all 4 positions are CMSS/consultant conversions.
3. 2 non-contract positions for Countywide Planning and Development.
4. 4 non-contract positions for Vendor/Contract Management; all 4 positions are CMSS/consultant conversions.

Most of the new staffing proposed for E&C for the first six months of FY16 to support two of the main transit projects, Crenshaw/LAX and Regional Connector, approximately 82 percent which is equivalent to 23 of the 28 positions. Approximately 18 percent of new staffing (equivalent to 5 positions of the 28 positions) proposed for E&C for the first 5 months of FY16 support Westside Purple Line Extension Section 1.

The intent is to fully staff the Crenshaw/LAX and Regional Connector Transit Corridor projects so that these new non-contract Metro positions will gradually phase into staffing for Westside Purple Line Extension Sections 1 and 2 by the end of 2017 once the Crenshaw/LAX and Regional Connector Transit Corridor projects start to ramp down. This will mean that Westside Purple Line Section 1 will have a heavier reliance on CMSS/consultant staff for FY 16 and FY17 compared with Crenshaw/LAX and Regional Connector Transit Corridor projects. Staff carefully and conscientiously determined the appropriate staffing levels to ensure that all these new non-contract Metro positions will have work for the next 10 years or more.

Furthermore, attrition plays a significant influence in the staffing analysis of 23 new non-contract E&C positions in FY16. Currently, there are a total of 127 existing staffing positions for Transit in E&C. In the next five to ten years, it is estimated that approximately 44 percent (56 out of 127) of the existing E&C staff in Transit are expected to retire.

There are significant tangible benefits in converting CMSS/consultant functions to new Metro positions such as:

- Providing a cost savings for the life of the project as the average cost of consultants is significantly more than the average cost of Metro positions.
- Preserving the intellectual, political and commercial capital of the organization by maintaining a trained and experienced work force.
- Creating flexibility, career advancement and build a succession plan for the organization.

As for the five (out of 33) new non-contract Metro positions that are not CMSS/consultant conversions, there is a strong business case to use in-house Metro personnel versus consultant positions to support the four main transit corridor projects and the capital improvement projects.

Based on our preliminary calculations, the potential annual cost savings of using five in-house Metro personnel in lieu of CMSS/consultant positions is approximately \$447,000 with up to \$3.1 million in potential savings for the life of projects as outlined in Table A-1.

#### Pilot Project Study

The pilot project study was initiated in November 2014 for the Crenshaw/LAX Transit Corridor project. For the pilot project study, staff transitioned certain new CMSS/consultant positions with non-contract Metro positions by either using existing “vacant” and/or “borrowed” Metro positions. A total of seven new CMSS/consultant positions were converted to non-contract Metro positions with annual cost savings of approximately \$1.27 million (with a 10 percent discount factor applied to account for market conditions). Two of the seven positions, specifically the Sr. Community Relations Officer and Community Relations Officers, were “borrowed” positions provided by Human Resources Department on a temporary basis only. Therefore, in order to make these two “borrowed” positions permanent, they are included as part of the seven non-contract positions CMSS/consultant conversions under Communications.

As shown in Table B, the total annual cost for these seven positions under the CMSS/consultant contract is approximately \$3.2 million. By converting these seven CMSS/consultant positions to new Metro positions, the total cost for these seven new Metro functions was reduced to \$1.8 million. Since these seven positions were recruited within the mid-point salary ranges of Metro’s pay scale, a 10 percent (in lieu of 30 percent) discount was applied against the cost savings of \$1.4 million to account for current market conditions and salary variations which yielded a total potential cost savings of approximately \$1.27 million.

#### Cost Benefit Analysis

Due to the successful results of the pilot project study, staff performed a cost benefit analysis that



identified the capital budget, monthly costs and staffing needs of all individual projects underway, including those that may be undertaken in the next five to ten years. In addition, total costs and total staffing needs were compiled over that period. The projected staffing numbers and costs were compared against industry norms and compared to the details provided to and approved by the FTA as part of Full Funding Grant Agreement related submittals for the respective projects.

The cost benefit analysis focused on the four main transit corridor projects such as Crenshaw/LAX, Regional Connector, and Westside Purple Line Extension Sections 1 and 2 and Environmental Compliance and Sustainability division. Based on the staffing assumptions described above, the results of the analysis indicate that a potential cost savings of \$21 million can be achieved by converting 28 new CMSS/consultant positions to new non-contract Metro positions. Refer to Table C and Table C-1.

- 18 positions for Engineering & Construction for the main transit projects.
- 2 positions for Engineering & Construction for Environmental Compliance & Sustainability.
- 4 non-contract Metro FTEs for Program Management Office.
- 4 non-contract Metro FTEs for Vendor/Contract Management.

The total projected budgeted value of the CMSS/consultant contracts for the main transit projects and Environmental Compliance and Sustainability is approximately \$282 million. Refer to the Table D below. The total cost for approximately 28 CMSS/consultant positions for the life of projects for the four main transit projects including Environmental Compliance & Sustainability is approximately \$73 million. By converting these 28 CMSS/consultant positions to non-contract Metro positions, the total cost for these Metro functions is reduced to approximately \$43 million. This results in a potential cost savings of \$30 million. However, by applying a 30 percent discount against \$30 million to account for market conditions, salary variations, and other staffing considerations, the total potential cost savings is approximately \$21 million.

The cost benefit analysis has to be tempered by a number of staffing considerations including but not be limited to, actual market conditions (and associated salaries) for professional staff, availability of staff with approximate qualifications and experience, staffing procurement lead-in times, SBE/DBE, flexibility of using consultant staff on as-needed basis, long term human resource costs related to Metro staff benefits such as pension, obligations, etc.

TABLE E- PROJECT NAME	CMSS/CONSULTANTS	ESTIMATED CONTRACT VALUE (Life of Project)
Crenshaw/LAX Transit Corridor Project	Stantec, PMA, CRSS & Hill International	\$67 million

Regional Connector Transit Corridor Project	Arcadis, CPVJ, Hill International	\$45 million
Westside Purple Line Extension Section 1	Westside Extension Support team, J.V. & Hill International	\$69 million
Westside Purple Line Extension Section 2	TBD*	\$63 million
Environmental Compliance and Sustainability	Arcadis	\$38 million
<b>TOTAL</b>	<b>\$282 million</b>	

\*CMSS contracts have not yet been awarded to Westside Purple Line Extension Section2.

**DETERMINATION OF SAFETY IMPACT**

This Board action will not have an impact on established safety standards.

**FINANCIAL IMPACTS**

The following funds are included in the FY 16 budget for this action:

- Project no. 865512 and 860003 Crenshaw/LAX Transit Corridor Project in Cost Centers 6810, 6940, 7160, 8110, 8410, 8420, 8510 and 8610.
- Project no. 860228 Regional Connector Transit Corridor Project in Cost Centers 6810, 6940, 7160, 8110, 8410, 8420, 8510 and 8610.
- Project no. 865518 Westside Purple Line Extension Section 1 in Cost Centers 8010 and 8510.

The conversion of the CMSS/Consultant positions to new Metro non-contract positions effectuates a cost savings of up to \$21 million throughout the life of project for the main transit projects including Environmental Compliance and Sustainability. This potential cost savings incurred will be reallocated to project contingency. Since this is a multi-year project, the Executive Director of Engineering and Construction will be responsible for allocating the costs in future years.

**ALTERNATIVES CONSIDERED**

The Board may choose not to authorize the conversion of CMSS/Consultant positions to non-contract FTEs. This is not recommended since the impacts of insufficient staffing at appropriate levels include:

- Heavier reliance on CMSS/consultant positions.
- Loss of potential cost savings of up to \$21 million for these positions for life of project.
- Inability to preserve the intellectual and commercial capital of the organization.
- Inability to cross-train in the most effective and efficient manner to provide a wider diversity of

skills and create flexibility in the workforce.

- Inability to create a succession plan for the future.

Furthermore, if the five non-contract Metro positions listed in Table A-1 are not approved by the Board, staff will have to outsource and use CMSS/consultant positions with a loss of potential cost savings of up to \$3.1 million for life of projects.

### **NEXT STEPS**

1. Staff will submit their FY 16 CMSS Contract budget to the Board for approval in July 2015.
2. Staff will report back by December 2015 on the actual number of non-contract Metro positions hired and placed on the projects. This report will include the cost impacts effectuated by the conversion of positions affecting the CMSS, Metro Admin and Contingency line items by project.

### **ATTACHMENTS**

- A. Table A Engineering & Construction FY16 Staffing
- A-1 Table A-1 Potential Cost Savings of 9 Metro FTEs
- B. Table B - Pilot Project Study
- C. Table C - Cost Benefit Analysis
- D. Table C-1 -FY16 CMSS/Consultant Conversion Cost Savings
- E. Appendix 1 - Environmental Compliance & Sustainability
- F. Appendix 2 - Transit Capital Projects
- G. Appendix 3 - Program Management Office
- H. Appendix 4 - Vendor/Contract Management
- I. Appendix 6 - Countywide Planning and Development

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Phillip A. Washington  
Chief Executive Officer

<b>TABLE A-1 Potential Cost Savings of 9.5 Metro FTEs</b>	<b>Annual CMSS Burdened Rate</b>	<b>CMSS Hourly</b>	<b>Metro Annual Burdened Rate</b>	<b>Metro Hourly</b>	<b>Difference in Salary</b>	<b>Cost Savings</b>	<b>Potential Savings</b>
Director, Construction Management	\$ 462,560	\$ 245	\$ 280,218	\$ 148	61%	39%	\$ 182,342
Sr. Engineering Manager	\$ 462,560	\$ 245	\$ 252,213	\$ 134	55%	45%	\$ 210,347
Sr. Engineer	\$ 262,432	\$ 139	\$ 207,680	\$ 110	79%	21%	\$ 54,752
Signage Design Manager	\$ 294,528	\$ 156	\$ 207,680	\$ 110	70%	30%	\$ 86,848
Sr. Graphic Designer	\$ 262,432	\$ 139	\$ 158,592	\$ 84	60%	40%	\$ 103,840
					<b>TOTAL POTENTIAL COST SAVINGS</b>		<b>\$ 638,139</b>
					<b>30% Discount</b>		<b>\$ 446,690</b>
					<b>LIFE OF PROJECTS (7 years)</b>		<b>\$ 3,126,832</b>

ATTACHMENT A-1

**Table A**  
**Engineering & Construction**  
**FY16 FTE Request for Consultant Conversion Positions**

No. FTE	Cost Center	Project No.	Position Title	Job Description	Justification	QTR Needed
3	8410	860228 -- RC	Construction Inspector	To inspect each stage of construction of Regional Connector; track, tunnel and stations as well as all contractors activities, to be in accordance with plans and specs. Prepares non-conformance reports; maintains daily logs; monitor contractor testing activities; support construction safety functions; coordinates Metro test lab activities; and oversee DB inspection activities.	Construction Management Department does not have the personnel to assign to these activities at this point in time.	Q1
1	8410	860228 -- RC	* Senior Construction Manager	Senior Construction Manager: This position oversees and manages rail facilities Regional Rail construction project, ensures work is accomplished according to specification and plans, and is on schedule and within budget. Sets priorities for staff and ensures that staff are accomplishing assigned tasks.	Construction Management Department does not have the personnel to assign to these activities at this point in time. Metro does not want to use consultants at this time due to the higher cost of consultants.	Q1
1	8320	860228 -- RC	Sr. Engineer (Geotechnical)	To supervise geotechnical activities on the Regional Connector project.	The Regional Connector has several geotechnical elements that would require geotechnical engineering reviews. Metro Engineering is expecting to receive a very large number of submittals that require our review. With the Design Builder already on board on two of these projects and their his aggressive schedule to start construction in the summer, a new position is needed in order to assist the project in review of the geotechnical items on these projects.	Q1
1	8330	860228 -- RC	Sr. Engineer (Systems)	Supervise and manage all activities related to Systems Integration on the Regional Connector project.	An experienced Systems Integration Engineer is needed to support the Regional Connector project during design & construction. The Sr. Systems Integration Engineer is vital to ensure a seamless integration from existing systems to New Systems, New Systems to Facilities and Integrated Testing (Test Plans, Field Testing etc.). An integrated Rail System is vital for Metro's Operational needs.	Q1
1	8110	860228 -- RC	Quality Assurance Manager	Performs quality audits, surveillances, field inspection and monitoring of design, new construction modifications, as required, including monitoring of laboratory and manufacturers audits, surveillance and data analysis as directed. Coordinate with Director of Quality Management in the establishment, implementation and maintenance of Project Quality related goals; and determination and management of budgetary and staffing requirements; implementation of Quality Program requirements for assigned projects, and supervision of subordinate Quality Management staff assigned to the project.	The Quality Management Group is responsible for the establishment, auditing and surveillance of quality programs and inspection and testing of in-place construction by constructors for all Major Capital construction projects, smaller capital projects, and Measure R Projects during the design, construction, testing and startup activities prior to eventual turnover of systems and structures to Metro Operations. The large amount of QA/QC activities (establishment, auditing and surveillance of quality programs and inspection and testing of in-place construction by constructors for all our 3 Major rail projects, plus Regional Rail and several smaller Capital projects is such that our quality management resources need to be augmented. The resources we have at this time are insufficient to handle all the activities in FY' 16.	Q1
1	8420	860228 -- RC	* Sr. Environmental Specialist Principal Environmental Specialist	Assist in the execution of environmental compliance and sustainability-related project of the Regional Connector Project.	Currently using consultant staff full-time for Measure R project, environmental compliance, and the sustainability-related program. This is a conversion of full-time seconded staff to regular Metro staff to reduce overall project delivery cost. Loaded per unit labor cost difference between seconded consulting staff and equivalent Metro position is up to 350%, depending on position.	Q1
<b>8 Subtotal</b>						

**Table A**  
**Engineering & Construction**  
**FY16 FTE Request for Consultant Conversion Positions**

No. FTE	Cost Center	Project No.	Position Title	Job Description	Justification	QTR Needed
3	8410	865512 -- C/LAX	Sr. Construction Inspector	<b>Sr. Inspector, Southwest Yard (1):</b> This position is for Southwestern Yard Project. The Inspector will support the R.E. and be required to inspect and monitor installation of the work; review and prepare reports; review and interpret plans and specifications; ensure compliance with codes, standards and contract documents; assist in resolving problems in the field; coordinate work with other agencies. <b>Sr. Inspector, Systems :</b> This position is for Crenshaw/LAX Transit Project. The Systems Inspector will support the project R.E. and be required to inspect and monitor installation of the systems work; review and prepare reports; review and interpret plans and specifications; ensure compliance with codes, standards and contract documents; assist in resolving problems in the field; coordinate work with other agencies. <b>Sr. Inspector, MEP:</b> This position is for Crenshaw/LAX Transit Project. The MEP Inspector will support the project R.E. and be required to inspect and monitor installation of the mechanical, electrical and plumbing work; review and prepare reports; review and interpret plans and specifications; ensure compliance with codes, standards and contract documents; assist in resolving problems in the field; coordinate work with other agencies.	Construction Management Department does not have the personnel to assign to these activities at this point in time.	Q1
1	8410	865512 -- C/LAX	Director of Construction Management	<b>Dir. Construction Management:</b> This position is for Crenshaw/LAX Transit Project, Segment B. This individual will oversee and manage construction, development of workplans, schedules and estimates; administer and monitor work for compliance with contract documents; coordinate with Metro staff and outside agencies; review change requests and prepare change notice justifications.	Construction Management Department does not have the personnel to assign to these activities at this point in time.	Q1
1	8410	865512 -- C/LAX	Sr Construction Manager (SPECIALIST: SYSTEMS)	<u>This position is for Crenshaw/LAX Transit Project. The Senior Construction Manager will act as Systems Resident Engineer and be required to oversee and manage construction, development of workplans, schedules, estimates and specifications; administer and monitor work for compliance with contract documents; coordinate with Metro staff and outside agencies; review change requests and prepare change notice justifications. This position reports to the Director Construction Management through a matrix organization.</u>	<u>This position requires a Systems specialist to support the Resident Engineers for the Mainline Crenshaw/LAX Project.</u>	Q1
1	8410	865512 -- C/LAX	Construction Manager	The Construction Manager will analyze data, specifications, and drawings; assist in monitoring work for compliance with schedule, budget, technical and legal requirements; prepare technical reports and correspondence; assist in coordination with outside agencies; maintain projects records; monitor status of submittal and design reviews. This position reports to the Director Construction Management.	The position is required to support the Office Engineer role for Crenshaw/LAX project.	Q2
1	8420	865512 -- C/LAX	* Sr. Environmental Specialist Principal Environmental Specialist	Assist in the execution of environmental compliance and sustainability for the Crenshaw/LAX Project.	Current staff is a full-time consultant supporting Measure R project, environmental, and the sustainability-related program. This request is for a conversion of full-time secunded staff to regular Metro staff to reduce overall project delivery cost. Loaded per unit labor cost difference between secunded consulting staff and equivalent Metro position is up to 350%, depending on position.	Q1
1	8110	865512 -- C/LAX	* Sr. Quality Engineer Quality Assurance Manager	The <del>Sr. Quality Engineer</del> Quality Assurance Manager is required to coordinate with construction inspectors and monitor field construction activities; coordinate verification testing; evaluate quality performance.	Performs design document review, construction contract review, design and construction quality audits and surveillances, field inspection for the project as required, including laboratory and manufacturer audits and surveillances. Arranges for Metro's verification test laboratory and coordinates the tests with Inspection and Construction Management.	Q1

**Table A**  
**Engineering & Construction**  
**FY16 FTE Request for Consultant Conversion Positions**

No. FTE	Cost Center	Project No.	Position Title	Job Description	Justification	QTR Needed
<b>8 Subtotal</b>						
1	8420	865518 -- WPL1, 865522 -- WPL2	* Principal Environmental Specialist	Assist in the execution of environmental compliance and sustainability-related projects of the Purple Line Extension.	Current staff is a full-time consultant supporting Measure R project, environmental, and the sustainability-related program. This request is for a conversion of full-time secunded staff to regular Metro staff to reduce overall project delivery cost. Loaded per unit labor cost difference between secunded consulting staff and equivalent Metro position is up to 350%, depending on position.	Q1
1	8110	865518 -- WPL1	Sr. Construction Inspector	Perform quality audits, surveillances, field inspection and monitoring of design, new construction, modifications, as required, including monitoring of laboratory and manufacturer audits, surveillance and data analysis as directed.	The large amount of quality activities (establishment, auditing and surveillance of quality programs and inspection and testing of in-place construction by constructors for all our 3 Major rail projects, plus several smaller capital projects is such that our QA/ QC resources need to be augmented. The resources we have at this time are insufficient to handle all the activities in FY' 16.	Q1
1	8410	865518 -- WPL1	* Senior Construction Manager	This position oversees and manages rail facilities Westside Purple Line Section 1 construction project, ensures work is accomplished according to specification, plans and is on schedule and within budget. Sets priorities for staff and ensures that staff are accomplishing assigned tasks.	Construction Management Department does not have the personnel to assign to these activities at this point in time.	Q1
1	8010	865522 -- WPL2	*Sr. Engineering Manager	This position is for Section 2 of the Westside Purple Line Extension Project. The position is required to provide direction for the engineering of the Project. The Senior Engineering Manager will provide day-to-day management and interaction with the Engineering Management Services Consultant. This position reports directly to the Director Engineering.	This position is required to deliver quality capital projects on-time and within budget. On December 31, 2014, The Federal Transit Administration (FTA) approved Metro's request for Section 2 of the Westside Purple Line Extension Project to enter the New Starts Engineering Phase of the FTA Capital Investment Grant Program. This is one of the major steps towards obtaining a Fund Funding Grant Agreement (FFGA) for the Project, which is planned for mid-2016. Another major step in obtaining an FFGA is to provide adequate staff to meet FTA's expectations on technical capacity and capabilities to bring the Project on-time and within budget. It is expected that the Advanced Preliminary Engineering will complete in FY16 to support the issuance of the Design/Build RFP procurement.	Q1
<b>2 Subtotal</b>						
<b>18 Grand Total</b>						

\* Positions approved by the Board at the May 28, 2015 Special Board Meeting - FY 16 Budget .



<b>TABLE B- PILOT PROJECT STUDY</b>	<b>Annual CMSS Burdened Rate</b>	<b>CMSS Hourly</b>	<b>Metro Annual Burdened Rate</b>	<b>Metro Hourly</b>	<b>Difference in Salary</b>	<b>Cost Savings</b>	<b>Difference</b>
DEO, Project Mmgt	\$617,376	\$327	\$335,996	\$178	54%	46%	\$281,380
Director, Construction Management	\$462,560	\$245	\$280,218	\$148	61%	39%	\$182,342
Director, Construction Management	\$462,560	\$245	\$280,218	\$148	61%	39%	\$182,342
Director, Construction Management	\$462,560	\$245	\$280,218	\$148	61%	39%	\$182,342
Director, Construction Management	\$462,560	\$245	\$280,218	\$148	61%	39%	\$182,342
Sr. Construction Relations Officer	\$396,480	\$210	\$158,592	\$84	40%	60%	\$237,888
Community Relations Officer	\$319,072	\$169	\$158,592	\$84	50%	50%	\$160,480
<b>TOTAL</b>	<b>\$3,183,168</b>		<b>\$1,774,052</b>			<b>45%</b>	<b>\$1,409,116</b>
					<b>With 10% DISCOUNT</b>	<b>41%</b>	<b>\$1,268,204</b>

TABLE C- COST BENEFIT ANALYSIS	FY 16			TOTAL		
	BURDENED COST	CMSS/Consultant	Metro	Potential Cost Savings	CMSS/Consultant	Metro
Crenshaw/LAX	\$ 3,795,441	\$ 2,355,379	\$ 1,440,084	\$14,139,945	\$ 8,603,616	\$ 5,536,329
Regional Connector	\$ 3,376,713	\$ 2,133,057	\$1,243,656	\$ 13,035,390	\$ 7,736,037	\$ 5,299,353
Westside PLE 1	\$ 1,561,529	\$ 945,272	\$ 616,258	\$ 19,563,375	\$ 12,394,266	\$ 7,169,109
Westside PLE 2	\$ -	\$ -	\$ -	\$ 22,309,702	\$ 12,428,160	\$ 9,881,542
Environmental & Sustainability	\$ 627,382	\$ 345,526	\$ 281,856	\$ 4,517,155	\$ 2,239,008	\$ 2,278,147
<b>TOTAL</b>	<b>\$9,361,065</b>	<b>\$ 5,779,234</b>	<b>\$ 3,581,854</b>	<b>\$ 73,565,567</b>	<b>\$ 43,401,087</b>	<b>\$ 30,164,480</b>
		<b>30% Discount</b>	<b>\$ 4,958,916</b>		<b>30% Discount</b>	<b>\$ 21,115,136</b>

**TABLE C-1**  
**CMSS/Consultant Conversion Cost Savings for FY2016**

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT						
PROJECTED COST OF CMSS/CONSULTANT			METRO			YEARLY COST SAVINGS FY16
POSITION	HOURLY BURDENED RATE CY2016	YEARLY BURDENED SALARY	EQUIVALENT POSITION	HOURLY BURDENED RATE	YEARLY BURDENED SALARY	
Sr. Configuration Management Analyst	\$87	\$163,368	Sr Configuration Management Analyst	\$84	\$158,858	\$4,510
Lead Inspector	\$199	\$375,302	Sr Construction Inspector (Quality)	\$92	\$172,764	\$202,538
Sr. Environmental Specialist	\$128	\$241,664	Principal Environmental	\$92	\$172,763	\$68,901
Construction Claims Analyst	\$240	\$453,646	Sr. Construction Claims Analyst	\$134	\$252,225	\$201,421
Sr. Contract Administrator	\$173	\$327,550	Sr Contract Administrator	\$100	\$188,661	\$138,888

REGIONAL CONNECTOR PROJECT						
PROJECTED COST OF CMSS/CONSULTANT			METRO			YEARLY COST SAVINGS FY16
POSITION	HOURLY BURDENED RATE CY2016	YEARLY BURDENED SALARY	EQUIVALENT POSITION	HOURLY BURDENED RATE	YEARLY BURDENED SALARY	
Inspector (Senior) Structural	\$157	\$297,150	Construction Inspector	\$84	\$158,858	\$138,292
Inspector (Senior) Mechanical	\$166	\$314,017	Construction Inspector	\$84	\$158,858	\$155,159
Inspector (Senior) Trackwork	\$197	\$371,487	Construction Inspector	\$84	\$158,858	\$212,629
Construction Manager (Sr.)	\$303	\$571,420	Quality Assurance Manager	\$110	\$206,981	\$364,440
Rail Activation Engineer	\$189	\$356,214	Sr. Construction Manager	\$134	\$252,212	\$104,001
Lead Tunnel/Geotechnical Engineer	\$154	\$290,701	Sr. Geotechnical Engineers	\$143	\$269,456	\$21,245
Systems Engineer	\$152	\$287,514	Sr. Systems Engineers	\$143	\$269,456	\$18,058
Environmental Compliance	\$143	\$270,851	Sr. Environmental Specialist	\$84	\$158,859	\$111,992
Deputy Director Project Controls	\$230	\$433,988	DEO Project Controls	\$173	\$326,755	\$107,233
Configuration Management/Document Control Supervisor	\$97	\$183,370	Configuration Management Supervisor	\$92	\$172,763	\$10,607

CRENSHAW/LAX & SOUTHWESTERN YARD PROJECT						
PROJECTED COST OF CMSS/CONSULTANT			METRO			YEARLY COST SAVINGS FY16
POSITION	HOURLY BURDENED RATE CY2016	YEARLY BURDENED SALARY	EQUIVALENT POSITION	HOURLY BURDENED RATE	YEARLY BURDENED SALARY	
Systems RE	\$245	\$462,560	Sr Construction Mgr	\$135	\$254,090	\$208,472
Sr Environmtl Spclst	\$171	\$322,414	Sr Env Specialist	\$84	\$158,858	\$163,557
Sr Quality Engr	\$141	\$266,208	Sr Quality Engineer	\$92	\$172,764	\$93,446
Inspector	\$141	\$266,208	Sr Construction Inspector	\$92	\$172,764	\$93,446
Inspector	\$141	\$266,208	Sr Construction Inspector	\$92	\$172,764	\$93,446
Inspector	\$141	\$266,208	Sr Construction Inspector	\$92	\$172,764	\$93,446
Dir, Construction Mgmt	\$245	\$462,560	Dir Construction Mgmt	\$148	\$280,219	\$182,344
Office Engineer	\$133	\$251,104	Construction Mgr	\$110	\$206,981	\$44,125
Sr Contract Admnstr	\$209	\$394,781	Sr Contract Administrator	\$100	\$188,661	\$206,121
DEO Claims Avoidance	\$287	\$541,856	Deputy Exec Officer	\$171	\$323,302	\$218,557
Sr Project Control Manager	\$156	\$295,335	Sr Project Control Mgr	\$134	\$252,212	\$43,124

ENVIRONMENTAL COMPLIANCE & SUSTAINABILITY						
PROJECTED COST OF CMSS/CONSULTANT			METRO			YEARLY COST SAVINGS FY16
POSITION	HOURLY BURDENED RATE CY2016	YEARLY BURDENED SALARY	EQUIVALENT POSITION	HOURLY BURDENED RATE	YEARLY BURDENED SALARY	
Principal Environmental Specialist	\$166	\$313,691	Principal Environmental	\$92	\$172,763	\$140,928
Principal Environmental Specialist	\$166	\$313,691	Principal Environmental	\$92	\$172,763	\$140,928

Note: Total may not add due to rounding.

TABLE C-1  
CMSS/Consulting Conversion Cost Savings for FY2016

Summary	Westside Purple Line	Regional Connector	Crenshaw LAX &	Environmental	Total
Total CMSS/Consulting	<del>6</del> <u>5</u>	<del>13</del> <u>10</u>	11	2	32
<i>in Engineering &amp; Construction</i>	2	8	8	2	20
<i>in Support Departments</i>	<del>4</del> <u>3</u>	<del>5</del> <u>2</u>	3	0	12
<b>TOTAL CMSS/Consultant</b>	<b>\$616,258</b>	<b>\$1, 243,656</b>	<b>\$1,440,084</b>	<b>\$281,856</b>	<b>\$3,581,853</b>

**APPENDIX 1: STAFFING REQUEST FOR ENVIRONMENTAL COMPLIANCE AND SUSTAINABILITY SERVICES**

**BACKGROUND**

The Environmental Compliance & Sustainability division (ECSD) provides cross functional environmental, sustainability, and technological support to all of Metro's core business units. ECSD consists of staff credentialed and professionally licensed to oversee environmental clearance, environmental compliance and remediation, energy management, resource conservation, environmental management system, climate change management, and environmental liabilities reduction. The department uses internal staff to manage and oversee services and construction contracts; and requires complementary expertise from consulting firms. This cross functional effort aligns with an integrated approach to producing cost-effective, cost-saving, and technologically advanced and most efficient solutions to environmental regulatory compliance and resource management to achieve procedural and process efficiencies and deliver successful support to accomplish Metro's mission, goals and objectives.

**ISSUE**

LA Metro has formally incorporated sustainable principles, specifically climate, energy, water and resource conservation and management, into its organizational values and core business goals. These principles express the agency's commitment to "reduce, re-use, and recycle all internal resources and reduce greenhouse gas emissions." Operational and construction-related sustainability principles have been formally implemented throughout our agency since 2007, and have been extensively incorporated into major capital projects as early as 2003. Over the past few years, the number of initiatives and projects related to these themes have significantly increased resulting from new statutes, regulations, and ordinances at all levels of government as well as the increasing mandate from our Board to look for cost-effective ways to plan, construct, operate infrastructure and procure for goods and services. These efforts have resulted in significant cost savings and operational efficiencies (up to \$3M per year), while simultaneously providing fresh sources of potential revenue (from the generation of environmental commodities resulting from these efforts) and increasing the health and welfare of our employees and the people we serve through a safe working and customer focused environment.

As we increase our transit and transportation infrastructure, staff's internal ability to oversee these sustainability-related operational and capital projects become more challenging on two fronts: our ability to properly manage the implementation of the cost-saving and environmentally protective projects as well as our ability to ensure that we develop and implement new ideas to ensure continual improvement.

The number of ECSD staff supporting all of these activities has not grown at a pace required to adequately support and oversee these projects. In the past few years, consultants were used to supplement efforts through environmental and sustainability related professional services contracts. The existing number of staff is insufficient to address the increasing number of requirements that need to be implemented for the Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Segments 1/2 projects based on current workload factors. As these projects go into full construction, ECSD must meet all current and construction projects needs to reduce our environmental liabilities over the whole life cycle of an asset: that is from planning, design, construction, and operations and maintenance of the project.

While we can continue to use specialized seconded staff through our consultants to execute these time sensitive and board mandated projects, ECSD proposes to instead procure for two new permanent staff to ensure the consistency of project implementation and reduce risk of losing institutional knowledge as Metro continues to implement its growing environmental and sustainability initiatives to ensure statutory and regulatory compliance, organizational resiliency to evolving extreme weather conditions and climate change, and reduce business continuity risk. These positions will be assisting in the implementation of our agency-wide Environmental Management System, water and resource conservation projects, as well as our climate change and energy programs. Staff will also be assigned to oversee our agency's transition to more stringent requirements as a result of recent industrial wastewater and stormwater regulatory changes as well as new climate change-related statutes and directives (at the Federal, State, and Local levels). Specifically on the climate change-related efforts, the FTA expects climate change related issues and solutions to be incorporated into an agency's Transit Asset Management Program to ensure a continual state of good repair. These two new positions will take on this additional responsibility, related to their climate change functions in our agency.

## DISCUSSION

Through a series of Board actions since 2007, Metro's environmental and sustainability function is now fully incorporated into the fabric of all of our planning, construction, operations, and procurement business units and significantly positively affects Metro's bottom line. The programs and initiatives have been proven to lower operational costs (currently up to \$3M per year), improve safety, increase quality and efficiency, and enhance our system's overall reputation among our customers, elected officials, and the public. In fact, Metro's environmental and sustainability program has been recognized as the highest environmental and programmatic standard by the American Public Transportation Association and has been cited several times by the Federal Transit Administration as an example program for other transit agencies in the country.

By transitioning consultant support to FTEs, Metro will generate continuing benefits of consistency of project implementation and reduce risk of losing institutional knowledge as Metro continues to implement its growing environmental and sustainability initiatives to ensure statutory and regulatory compliance, organizational resiliency to evolving extreme weather

conditions and climate change, and reduce business continuity risk. Procuring for permanent staff increases the pool of skilled staff to build a succession plan for the future.

### ALTERNATIVE

The Board may decide not to approve the transition of consultant functions to Metro staff for ECSD. This is not recommended because it would perpetuate heavy reliance on consultants, where specialized staff is necessary to execute these time sensitive and board mandated projects, to fulfill critical needs in the areas of environmental compliance and sustainability. The number of staff requested for ECSD is a compromise to ensuring that we achieve both environmental and sustainability goals, reduce our liabilities, and remain sound in achieving our efficiency and cost-savings goals.

**ATTACHMENT A - TRANSITION FROM CMSS/CONSULTANT TO METRO STAFF  
ENVIRONMENTAL COMPLIANCE/SERVICES DEPARTMENT**

<b>Priority</b>	<b>Funding</b>	<b>Position Title</b>	<b>Job Description (currently performed by consultant)</b>	<b>Justification</b>	<b>Required By</b>
1	860228 -- RC, 202211 -- FUEL STORAGE TANK	Principal Environmental Specialist	Assist in the execution of environmental compliance and sustainability-related projects . Assist in the oversight of the Underground Storage Program.	This is a conversion of full-time secured staff to regular Metro staff to reduce overall project delivery cost. Staff will be required (part time) to assist in the implementation of backlogged compliance efforts associated with most recent underground and aboveground storage tank regulations. Loaded per unit labor cost difference between secured consulting staff and equivalent Metro position is up to 350%, depending on position.	1st Q FY16
1	300012 -- SOIL REMEDICATION and various projects overseen by ECSD	Principal Environmental Specialist	Assist in the execution of environmental compliance and sustainability-related projects. Assist in the oversight of the Hazardous Waste Program.	This is a conversion of full-time secured staff to regular Metro staff to reduce overall project delivery cost. Staff will be required (part time) to assist in the oversight of hazardous waste program associated with current and new (currently or about to be built) operating facilities programmed to reduce agency environmental liabilities. Loaded per unit labor cost difference between secured consulting staff and equivalent Metro position is up to 350%, depending on position.	1st Q FY16



## **APPENDIX 2: REQUEST FOR ENGINEERING & CONSTRUCTION CAPITAL PROJECTS STAFFING**

### **BACKGROUND**

In addition to the design, engineering, and construction of the major Measure R rail projects, Engineering and Construction manages a capital program in excess of \$1.0 Billion which is comprised of more than 25 different capital projects, many of which are broken into several separate design and construction contracts. Example projects currently in various stages of design and construction development include the Division 13 Bus Operations and Maintenance (O & M) facility, the Expo Santa Monica O & M facility, the Southwestern Yard O & M facility, the Rosa Parks Station improvements, Patsaouras Plaza Busway Station, the Emergency Security Operations Center (ESOC), and soundwall projects. Additionally, the capital support departments provide management and coordination of all joint development projects at Metro stations, engineering support and design work for Facilities Maintenance and General Services at our facilities and headquarters, and technical support for sustainability projects, highway projects, and regional rail.

### **ISSUE**

The work effort for the capital projects which includes design, engineering, and construction management is done primarily by in-house staff. For larger and more complicated design projects, the services of design consultants are retained. When engineering assistance is needed to supplement staff or specific engineering capabilities are required, a task order contract with Maintenance Design Group is initiated. This contract is used for engineering task orders that are project-based, and may not be used to supplement or second Metro engineering staff.

For construction management (CM) Marris, Inc. and Jackie Patterson Engineering (both SBE's) provide CM services when required. Currently, Marris and JL Patterson are used to support the Division 13, Patsaouras Plaza, the North Hollywood Pedestrian Underpass, and the Universal City Pedestrian Bridge. These contracts are set to expire this year, and will be re-procured competitively to have on-call CM assistance when required.

Due to the expanding workload, new FY16 capital projects, and the number of new building projects such as the Rosa Parks Station and the AMC, the departments supporting the capital projects are currently short on resources and new resources are required to meet the goals and objectives of the departments. Also, interdepartmental resources have been reallocated from the capital projects resources to make sure the major rail projects have adequate management oversight. Therefore, existing staff is not sufficient based on the current workload to efficiently and effectively implement the work effort.

The resource allocation of staff for Capital Projects has not grown at a pace required to adequately support and oversee the engineering and construction of the dynamic and expanding capital program. This situation has created an over dependency on costly consultants to provide technical support.

### DISCUSSION

Engineering and Construction is requesting three (3) additional positions to support the Capital Projects Program. These new non-contract positions may be terminated upon completion of the projects. Additional support staff is integral to the success of the Capital Program and new resources are required to meet the goals and objectives of the Division. In order to meet the challenges of the work effort, continue providing high-level and accurate construction and engineering support, and complete work within the schedules required, it is imperative that we increase our Capital Projects support staff as follows:

<b>No.</b>	<b>Position Title</b>
<b>1</b>	Director, Construction Management
<b>1</b>	Sr. Engineering Manager
<b>1</b>	Sr. Engineer
<b>3</b>	<b>Total</b>

### ALTERNATIVE

The Board may decide not to approve the request for additional resources to support the Capital Projects Program. This is not recommended since history has proven that not having proper oversight on any project causes disruptions in the project development with a loss of potential cost savings of \$3.1 million. It is critical that additional resources be added to facilitate the effective and efficient engineering and construction of the projects.

**APPENDIX 2 – ENGINEERING & CONSTRUCTION  
FY16 FTE Request for Capital Projects Support Staff**

No. FTE	Cost Center	Project No.	Position Title	Job Description	Justification	QTR Needed
1	8410	204071 -- MBL_REFUR, 205063 -- MBL PEDESTRIAN , 211005 -- MBL Signal System, 460323&460324 -- Soundwall	Director of Construction Management	<b>Director of Construction Managers:</b> This position develops and Implement polices and procedures for planning. Organizing, coordinating and controlling major Capital construction projects as well as large number of smaller projects. Plans and assigns work to subordinates, ensures that assignments are being accomplished and that Metro and Contractor staffs are following appropriate policies, plans and specifications. One (1) position is requested. The position will support Minor Capital Projects in support of the Rail Facilities Improvements, Rail Rehabilitation Projects, and Wayside Systems Projects, specifically Metro Blue Line Refurbishments, Blue Line Signal System Rehabilitation, and Pedestrian Swing Gates projects.	Construction Management Department does not have the personnel to assign to these activities at this point in time. Metro does not want to use consultants at this time due to the higher cost of consultants.	Q1
2	8410	<del>204071 -- MBL_REFUR, 205063 -- MBL PEDESTRIAN , 211005 -- MBL Signal System, 460323&amp;460324 -- Soundwall</del>	<del>Senior Construction Manager</del>	<del><b>Senior Construction Managers:</b> This position oversees and manages rail facilities construction projects and ensures work is done according to specifications, within schedule and within budget. One position is requested. The position will support Minor Capital Projects in support of the Rail Facilities Improvements, Rail Rehabilitation Projects and Wayside Systems Projects, specifically Metro Blue Line Refurbishments, Blue Line Signal System Rehabilitation, and Pedestrian Swing Gates projects.</del>	<del>Construction Management Department does not have the personnel to assign to these activities at this point in time. Metro does not want to use consultants at this time due to the higher cost of consultants.</del>	<del>Q1</del>
1	8380	202317 -- PATSAOURAS, 202324 -- Div 1, 460303 -- Green Line, 405555 --ROSA PARKS	Sr Engineer Manager (Structural))	This is an engineering position required to provide design and construction support services for the Rail and Bus Facilities Capital Program. The specific engineering discipline required is a Senior Structural Engineer. The senior engineer duties will include design and engineering of structures for bus and rail facility projects, including all building projects. In addition, the position will manage design and engineering work conducted by outside design professionals, and will also support active construction projects with structural engineering requirements. The position will also support the design of the Rosa Parks and Airport Metro Connector (AMC) projects for the Planning Department, which was not previously budgeted.	There is currently no position available in the department to support the structural building projects and upcoming work related to the Airport Metro Connector (AMC) and Rosa Parks Station projects. This position is required to provide efficient, timely, and high quality engineering services for the \$550 million facilities program portfolio.	Q1

**APPENDIX 2 – ENGINEERING & CONSTRUCTION  
FY16 FTE Request for Capital Projects Support Staff**

No. FTE	Cost Center	Project No.	Position Title	Job Description	Justification	QTR Needed
1	8320	860228 -- RC, 865518 -- WPL1, 865522 -- WPL2	Supervising Engineer (Mechanical ventilation)	To supervise structural items on the Regional and Purple Line Extension Sections 1 and 3 Projects and support upper management on miscellaneous Metro Operation tasks.	The Regional Connector and Purple Line Extension Section 1 and 2 projects have several structural elements that would require structural engineering reviews. Metro Engineering is expecting to receives a very large number of submittals that require our review. With the Design Builder already on board on two of these projects and their aggressive schedule to start construction in the summer, a new position is needed in order to assist the project in review of the structural items on these projects.	Q1
1	8010	212121 -- EOC/ROC/BOC	SR. ENGINEER	Project Management support for major capital projects for the Operations Control Center and others, as required. Duties include performing project management support and technical and administrative functions such as overseeing & administering design, procurement, construction and installation of rail and bus facilities and systems; Development of scope of work; Administers and monitors work and contract for compliance with schedule and budget; Evaluation of design proposals, bids & change orders; Conducting field & technical investigations; Manage engineering activities to ensure compliance with design criteria and applicable codes; Interface and coordinates with various Metro depts. and other agencies; and facilitates resolution of design, construction and operational issues.	The OCC Project estimated at over \$125 million is a significant and very complex project entailing integration of the Rail Operations Center (ROC), Bus Operations Center (BOC) and Emergency Operations Center (EOC) functions into a single facility to facilitate a more efficient and coordinated response to normal traffic activities and special events, as well as unexpected emergencies.	Q2

## APPENDIX 3: STAFFING REQUEST FOR THE PROGRAM MANAGEMENT OFFICE (PMO)

### BACKGROUND

The Program Management Office (PMO), created by the Board in September 2010, primarily in response to voter-approved Measure R, provides oversight on Measure R and other on-going projects agency-wide. The PMO is responsible for project controls and oversight, cost estimating, configuration management, and program control management agency-wide. These functions are critical to the successful delivery of the Measure R program. When managed successfully, PMO can help lower project cost, prevent and mitigate project budget cost overrun and schedule delays.

### ISSUE

Since 2010 the number of Metro staff in the PMO has not grown at a pace that is required to adequately support and oversee the fast-growing transit construction and capital program at Metro. In effort to meet project needs, consultants have been brought in to supplement PMO staff to fulfill project controls and oversight, cost estimation, and configuration management functions. To increase greater project controls and to maintain continuous oversight of the Measure R program, staff recommends transitioning four (4) positions (1 Crenshaw/LAX, 2 Regional Connector, and 1 Westside Purple Line Extension Section 1) to Metro equivalent staff positions. See Attachment 3-A for job description and justification detailed for each proposed Metro staffing position. These positions may be terminated upon completion of the transit projects.

### DISCUSSION

In addition to effecting cost savings, staff has determined by transitioning certain consultant functions in-house to new Metro staff may generate other potential benefits, including, 1) decrease reliance on consultants will increase Metro's control of its project; and 2) increase a pool of skilled work force to build a succession plan for the future. Transition to Metro staff positions on the Regional Connector and Westside Purple Line Extension Section 2 Project will directly address the FTA and their Project Management Oversight Contractor's (PMOC) concerns of Metro not having adequate staff for the effort required for Regional Connector and Westside Purple Line Extension Section 1 projects. Also, approval of staffing request will allow Metro to add developed human capital to the Metro's work force to maintain continuity of technical expertise and knowledge on the project.

### ALTERNATIVE

The Board may decide not to approve the transition of consultant functions to Metro staff for the Program Management Office (PMO). This is not recommended because it would perpetuate heavy reliance on consultants to fulfill critical project controls and oversight, cost estimating, and configuration management required to support the major transit construction program. Positions continued to be filled by existing consultants instead of Metro staff positions will present a greater cost to the projects, Metro, and public tax payers.

**ATTACHMENT 3A – DESCRIPTION & JUSTIFICATION BY METRO STAFF POSITION  
PROGRAM MANAGEMENT OFFICE (PMO) DEPARTMENT**

Priority	Funding	Position Title	Job Description	Justification	Required by
1	860228 Regional Connector	Deputy Executive Officer, Program Management	Deputy Executive Officer, Program Management provides direction for managing project budgets, schedules and project risks on the Regional Connector Project. This position ensures that the project management team interfaces effectively with Countywide Planning and Development (including Real Estate), Procurement, Operations and various departments with Engineering and Construction to establish and adhere to project budget and schedule.	Deputy Executive Officer, Program Management position is critical delivering the Regional Connector project on-time and within budget. Approval of a FTE position will allow elimination and transition of this function from a consultant to a Metro FTE assigned to the project. If this position is not approved, Metro must continue to retain a consultant to fulfill the responsibilities at greater cost. Creation of this position addresses the FTA and their PMOC's concerns of Metro not having adequate staff for the effort required for the Regional Connector project.	July 2015
2	860228 Regional Connector	Configuration Management Supervisor	Configuration Management Supervisor oversees, supervises, trains Configuration Management Analysts, supports related database systems and technical system support, and coordinates document and change control activities required on the Regional Connector Project. This position manages the processing of contractual documentation regarding request for information, change notices, contract modifications, submittals, drawings, claims, and project correspondence for compliance with laws, regulations and requirements.	Configuration Management Supervisor is critical to ensure the document control role and change control function is fulfilled on the Regional Connector Project. Approval of a FTE position will allow elimination and transition of this function from a consultant to a Metro FTE assigned to the project. If this FTE position is not approved, Metro must retain a consultant to perform this work at a greater cost. Creation of this position addresses the FTA and their PMOC's concerns of Metro not having adequate staff for the effort required for the Regional Connector project.	July 2015
3	865518 Westside Purple Line Section 1	Senior Configuration Management Analyst	Senior Configuration Management Analyst supports related database systems and technical system support, and coordinates document and change control activities required on the Westside Purple Line Extension Section 1 Project. This position manages the processing of contractual documentation regarding request for information, change notices, contract modifications, submittals, drawings, claims, and project correspondence for compliance with laws, regulations and requirements.	Senior Configuration Management Analyst is critical to ensure document control and change control functions are fulfilled on the Westside Purple Line Extension Section 1 Project. Approval of a FTE position will allow elimination and transition of this function from a consultant to a Metro FTE assigned to the project. If this position is not approved, Metro must retain a consultant to perform this work at a greater cost to the project. Creation of this position addresses the FTA and their PMOC's concerns of Metro not having adequate staff for the effort required for the project.	July 2015
4	865512 Crenshaw/ LAX	Senior Project Control Manager	Senior Project Control Manager develops and oversees all budgeting, schedule development and performance measurement, cost management and control, and reporting activities required on the Crenshaw/LAX Transit Project. This position is required to maintain the life-of-project budget and manage the master schedule.	Senior Project Control Manager is critical to the project control and oversight responsibilities on the Crenshaw/LAX project. Approval of a FTE position will allow for elimination and transition of this function from a consultant to a Metro FTE assigned to the project. If this position is not approved, Metro must retain a consultant to perform this work at a greater cost.	August 2015

## **APPENDIX 4: STAFFING REQUEST FOR VENDOR/CONTRACT MANAGEMENT**

### **BACKGROUND**

The Vendor/Contract Management (V/CM) Department provides cross functional administrative and technological support to Metro's core business units. V/CM is comprised of the Diversity and Economic Opportunity, Procurement, Supply Chain Management, Administration and Policy and Project Management organized as functional units with integrated processes to achieve procedural and process efficiencies and deliver successful support to accomplish Metro's mission, goals and objectives.

### **ISSUE**

The successful delivery of the voter approved Measure R program is highly dependent on a strong V/CM team that utilizes industry-best practices to fulfill Metro's Mission as the agency responsible for the continuous improvement of an efficient and effective transportation system for Los Angeles County.

The number of V/CM staff supporting Engineering and Construction has not grown at a pace required to adequately support and oversee the rapidly developing transit construction and capital program. Therefore, existing staff is not sufficient for the Crenshaw/LAX, Regional Connector and Westside Purple Line Extension Section 1 projects based on current workload factors. To meet project needs, the Projects have utilized consultants to supplement V/CM in the areas of contract administration management and senior contract administration. However, specialized staff is necessary to execute these time sensitive and board mandated project in order to increase continuity of the process and prevent risk. In an effort to remedy the current shortage of V/CM staff support, four Senior Contract Administrator positions, with the possibility of reclassifying any of these positions to create Claims Avoidance Specialists for Crenshaw/LAX, Regional Connector and Westside Purple Line Extension Section 1 were submitted and discussed with the Engineering and Construction department. They have acknowledged their need of this support and included the positions in their staffing plans for FY16. These positions may be terminated upon completion of the transit projects.

### **DISCUSSION**

The procurement function and contract management is an important factor for Metro's bottom line. When managed successfully, it can lower costs, improve safety, increase quality and efficiency, and enhance our system's overall reputation among our customers, elected officials, and the public. In addition, by transitioning consultant to FTEs Metro may generate other potential benefits such as continuity within the process, prevention of risk of disruption for our customer and an increase in the pool of skilled staff to build a succession plan for the future.

## ALTERNATIVE

The Board may decide not to approve the transition of consultant functions to Metro staff for V/CM. This is not recommended because it would perpetuate heavy reliance on consultants, where specialized staff is necessary to execute these time sensitive and board mandated projects, to fulfill critical needs in the areas of acquisition planning, coordination of pre-award actions to produce executable contracts, price and cost analysis, value engineering review, contract price negotiations and claims management, change order processing, post-award contract administration, and contract close-out.



**ATTACHMENT 4A - TRANSITION FROM CMSS/CONSULTANT TO METRO STAFF  
VENDOR/CONTRACT MANAGEMENT (V/CM) DEPARTMENT**

<b>Priority</b>	<b>Funding</b>	<b>Position Title</b>	<b>Job Description (currently performed by consultant)</b>	<b>Justification</b>	<b>Required By</b>
1	Crenshaw/LAX (2 FTEs) Westside PLE section 2 (2 FTE)	Sr. Contract Administrator	The Sr. CA is responsible for the efficient and effective acquisition of goods and services in support of assigned clients. The Sr. CA leads a Contract Administration Team that supports assigned client departments, and performs senior level, complex procurements for major projects and services to ensure timely, efficient support in compliance with Authority, local, state, and federal laws, rules and regulations. Prepares and reviews solicitation documents, evaluates bid results, chairs source selection committees, establishes and enforces evaluation criteria, sets schedules, and makes award recommendation on contract procurements. Selects vendors, obtains and compares price quotations, completes cost/price analysis process, negotiates price, terms and conditions. Evaluates contractor performance to determine compliance with contract obligations. SR CA works with contractor and client department to ensure timely contract completion and/or renewal; timely submission of scopes, technical descriptions, Board reports, and the submission of work product specified in the contract. Responds to award protests and holds debriefings with unsuccessful proposers. Completes final draft of contract documents, negotiates change orders and amendments. Prepares Board reports for contract approval. Prepares status reports, summaries and correspondence.	Positions will support projects in the areas of Crenshaw/LAX, and Westside/Purple Line Extension 1. These positions were submitted and discussed with the Engineering and Construction Dept. and they have acknowledged their need of this support and included in their staffing plans for FY16. Specialized staff is needed to execute these time sensitive and board mandated projects. Existing staff is not sufficient for these types of projects based on current workload factors.	1st Q FY16

## APPENDIX 6: STAFFING REQUEST FOR SIGNAGE AND GRAPHIC DESIGN TO SUPPORT CRENSHAW/LAX, REGIONAL CONNECTOR, AND PURPLE LINE EXTENSION CONSTRUCTION PROJECTS

### BACKGROUND

The Signage and Graphic Design unit improves customer navigation and environmental graphic design consistency through the development of essential system-wide signage and way-finding design standards and guidelines. The unit staff is at capacity responding to day to day requests for new signage and backlog of required modifications at the existing 100 plus operating stations (including the 13 new stations opening next year) and multiple vehicle types resulting from new safety, security, gating, fare enforcement, code of conduct, Civil Rights/ADA updates and other growing and ongoing operational needs.

The 2010 Measure R Strategic Advisor Report cited “one of the largest capital improvement programs ever undertaken by a single transportation agency in the US [and] an unprecedented challenge for project delivery” and called for the agency “to significantly increase the capacity and improve skill sets throughout construction functions...and allocate resources to improving wayfinding/signage.”

In order to adequately meet the demands of the Crenshaw/LAX, Regional Connector, and Purple Line Extension, while also meeting increasing agency operational needs not related to the construction program, it is necessary to increase staffing resources. Each of these corridor projects includes multiple stations, facilities, parking areas, and vehicles which will require significant signage, wayfinding and overall environmental graphic design support, reviews, unique design solutions, and site visits in order to ensure the safety and movement of future riders. The Regional Connector alone will have a major impact on existing signage throughout the system.

### ISSUE

Signage and way-finding are core elements of project delivery. Without functional signage in place the project will not meet safety, accessibility or operational requirements for Revenue Operations. The incorporation of functional signage into the project requires numerous submittals, reviews, and appropriate management and oversight.

Funds for Construction Management Support Services (CMSS) to provide signage and wayfinding support have been included in life-of-project budgets and the FY16 budget and are forecasted for inclusion in individual project-based Contract Work Orders (CWO) within the overall Board approved CMSS Contract Values. There are no impacts to the current CMSS contracts as the consultant positions have not been included in current CWOs pending Board approval of the new Metro positions.

Because these positions are core to the agency, and there is an ongoing need to improve signage and maintain consistency across projects, as well as the desire to build in-house

capacity, the recommendation make these Metro positions rather than multiple CMSS consultant positions. These positions may also be terminated upon completion of the projects. See Attachment 6-A for job descriptions and justifications.

### DISCUSSION

The new staff positions will ensure that 1) over 4,000 signs and related Design/Builder submittals for the three corridor projects are reviewed and coordinated; 2) requests for information, over the shoulder reviews, approval of samples/finishes/mock-ups, fabrication shop drawings are fulfilled; 3) construction site visits and punch listing for quality control and compliance through resolution are conducted; and 4) signage needs during corridor start-up phase operations are accomplished. The positions being requested are not short term. While signage and wayfinding is installed prior to line opening, Metro has historically experienced an average “break-in” period of 18 months when actual customer usage generates modification requests from various departments to address operations, safety and accessibility concerns. It is envisioned that these FTEs will move to new Measure R projects including Purple Line Extension Section 2 and other corridor projects.

In addition to effective cost savings, staff determined that by not having multiple consultants do this work on a project by project basis, but rather with Metro staff, it will support the agency’s strategy to: 1) build-in house capacity; 2) decrease reliance on consultants; 3) maintain a trained and experienced workforce; and 4) maintain institutional knowledge and continuity across projects. Signage requests are growing, not diminishing and it is increasingly important to develop and maintain the continuity of our signage system.

### ALTERNATIVE

The Board may decide not to approve new Metro staff positions in which case the work will be completed by individual corridor consultants through CWO requests to the CMSS contracts for each project utilizing the hourly rates set forth in these Contracts. This is not recommended because: 1) it would require multiple consultants for each project rather than consolidated in-house staff; 2) signage is a core ongoing agency function which should be done by in-house Metro staff in order to ensure continuity across projects; 3) consultant dependency results in loss of institutional knowledge; and 4) application of lessons learned and long term success and effectiveness will be compromised.

## ATTACHMENT 6-A – SIGNAGE &amp; GRAPHIC DESIGN (Cost Center 7121)

Funding	Position Title	Job Description	Justification	Required by
865512 Crenshaw/ LAX, 860228 Regional Connector, 865518 Purple Line Section 1	Signage & Graphic Design Manager	Position will provide signage and graphic design management for Crenshaw/LAX, the highly complex Regional Connector project (which will impact dozens of stations throughout the Metro system) as well as support the Purple Line Extension project. The position will ensure that the latest signage standards, drawings and specifications are included in contract documents and will review and respond to contractor RFIs, signage criteria clarifications, review and approve all contractor signage submittals and shop drawings, and develop and resolve punch lists. This position will participate in design resolution processes and address new station architectural design conditions requiring unique signage design solutions. It will also develop and implement lessons learned and update the design criteria for corridors. The position will coordinate with ADA, engineers, safety personnel and others to ensure uniformity and consistency of customer signage and wayfinding.	2/18/15 Board Box on construction project delivery and consultant services included this FTE to support the FY16 corridor construction projects and outlined the need for staffing as projects enter into active construction. The 2010 Measure R Strategic Advisor Report called the Measure R program “one of the largest capital improvement programs ever undertaken by a single transportation agency in the US” and recommended “increasing the capacity and improving skill sets...and allocating resources to improving wayfinding/signage.” Currently, there are no in-house agency staff reviewing contractor signage submittals, RFIs, etc for the 3 major corridor projects. This position is required to provide day-to-day management, coordination, reviews, site visits & support to the projects as well as coordinate with Operations and others on the many station signs in the existing system that will be impacted by these projects, especially the Regional Connector. There is an immediate need for signage management on these projects as without adequate in-house oversight, criteria updates & design reviews, costly corrections & retrofits will be necessary & signage will not be consistent across projects. Upon completion of these corridor projects, the FTE will be transitioned to address Section 2 and other future construction projects requiring new and/or modified signage management and coordination.	July 2015
865512 Crenshaw/ LAX, 860228 Regional Connector, 865518 Purple Line Section 1	Senior Signage & Graphic Designer	Position will develop conceptual signage and graphic design solutions from concept to final design for Crenshaw/LAX, Regional Connector and Purple Line Extension; they will provide ADA, safety and signage design support to addresses issues that arise during construction. They will also ensure that the latest standards and requirements for gating, fare enforcement, and other signs are used to design signage correctly. Signs often require specialized in-house designs for a range of unique station configurations or needs. This position will investigate and resolve signage design problems to arrive at best technical solutions in a wide range of mediums including static and digital signage. This position will also prepare visual presentations of proposed signage solutions for management level staff using variety of software, mockups and samples.	2/18/15 Board Box on construction project delivery and consultant services included this FTE to support the FY16 corridor construction projects and outlined the need for staffing in core agency functions as projects enter into active construction. The 2010 Measure R Strategic Advisor Report called the Measure R program “one of the largest capital improvement programs ever undertaken by a single transportation agency in the US” and recommended “increasing the capacity and improving skill sets...and allocating resources to improving wayfinding/signage.” Currently, there are no in-house agency staff providing design support for the Crenshaw/LAX, Regional Connector or Purple Line Extension corridor construction projects. The Crenshaw/LAX stations have multiple configurations (underground, above ground, split platform, side platform) which require unique signage design solutions and the Regional Connector will impact stations throughout the system. Upon completion of these corridor projects, the FTE will be transitioned to address Section 2 and other future construction projects requiring signage design solutions.	July 2015





## Board Report

File #: 2015-0958, File Type: Contract

Agenda Number: 35.

### CONSTRUCTION COMMITTEE JULY 16, 2015

**SUBJECT: CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACT**

**ACTION: INCREASE CONTRACT VALUE FOR FY16 6-MONTH WORK PROGRAM FUNDING FOR STANTEC CONSULTING, INC**

#### RECOMMENDATION

CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing:

- A. an increase to the total contract value for Contract No. MC069, with Stantec Consulting, Inc., to provide **Construction Management Support Services** in an amount not-to-exceed \$10,953,136 for the FY16 six-month Work Program Funding from \$86,459,000 to \$97,412,136; and
- B. the Chief Executive Officer to execute individual Contract Work Orders and Modifications within the Board approved contract value.

#### ISSUE

On February 19, 2009, the Board approved the Construction Management Support Services (CMSS) contract to support Board adopted capital projects. The recommended action is for FY16 six-month Work Program funding to continue the construction management support services for capital projects pending the CEO's mid-year cost-budgeting exercise. The services being provided are for the closeout of the I-405 Sepulveda Pass Widening and continuing construction management of the Crenshaw/LAX Transit Project and the Patsaouras Plaza Bus Station.

#### DISCUSSION

The primary role of the CMSS is to provide skilled and qualified staff to support Metro with construction management of Metro's construction contracts. Both Metro and CMSS consultant staff, in most cases, work side-by-side in an integrated project management offices (IPMO). The CMSS contract funds are authorized by issuing separate contract work orders (CWOs) for various projects for labor classifications and rates set forth in the contract. Modifications to existing CWOs are issued

as additional work is identified.

In February 2009, the Metro Board authorized the Chief Executive Officer to award CMSS to Stantec Consulting, Inc., and execute individual CWOs and modifications within the Board approved contract value. The CMSS contract is an indefinite delivery/indefinite quantity labor-hour contract for a term of seven years, inclusive of two one-year options. The Contract was executed on March 18, 2009, and the expiration date of the five-year base contract was March 18, 2014. In FY14, based on prior board approvals, Metro exercised both one year options on March 10, 2014 to extend the contract period of performance through March 18, 2016. This CMSS contract allows the continuation of funding of existing CWO's beyond the contract end date of March 18, 2016 to June 30, 2016 in order to ensure continuity of the staffing for these projects to the end of the fiscal year.

The request for six months of FY16 funding has been reduced compared to previous fiscal years as the I-405 Sepulveda Pass Widening is closing out. In addition, some of the CMSS consultant positions were converted and supported by new non-contract Metro positions as in the case for Crenshaw/LAX Transit Corridor Project where a pilot project study was initiated in November 2014. The pilot project study consisted of converting seven new CMSS/consultant positions with non-contract Metro positions that generated a potential annual cost savings of \$1.27 million. As a result of the pilot project study for Crenshaw/LAX, staff performed a cost benefit analysis that focused on the four main transit corridor projects such as Crenshaw/LAX, Regional Connector, and Westside Purple Line Extension Sections 1 and 2 and Environmental Compliance and Sustainability division. The results of the analysis indicate that a potential cost savings can be achieved by converting new CMSS/consultant positions to new non-contract Metro positions.

Therefore, in a parallel process under a separate board report, staff is recommending a total of 33 new non-contract Metro positions for FY 16 by converting 28 new Construction Management Support Services (CMSS)/Consultant positions. Eleven of the 28 CMSS/Consultant positions proposed for conversion to new Metro non-contract positions fall under Stantec Consulting, Inc.'s scope of work under CWO No. 16 and CWO No. 27. If the Board approves the new non-contract Metro positions, a reduction of up to \$1,970,898 (for 8 CMSS consultant positions) may be deducted from CWO No. 16 and a reduction of up to \$685,910 (for 3 CMSS positions) may be deducted from CWO No. 27 for these eleven new non-contract Metro positions. A prorated rate of \$20,530 per month (per position) may be deducted from CWO No. 16 and prorated rate of \$19,053 per month (per position) may be deducted from CWO No. 27 for every CMSS/consultant position that is converted to new non-contract Metro position and placed on the project.

For the Crenshaw/LAX Project, the FY16 funding for the CMSS contract is intended to fund the existing CMSS staff currently on the project and eleven additional new CMSS positions for FY 16. Staff is proposing to convert eleven new CMSS positions to new non-contract Metro positions. However, due to the uncertainty of the hiring of new Metro positions in a timely manner, CMSS staff will be added as an interim measure.

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**CWO No. 16 - Crenshaw/LAX Transit Corridor Project Support**

At the present time, staff is intending to initiate a new three-year CMSS solicitation for the Crenshaw/LAX Transit Project. This new solicitation would be needed to complement the existing Metro staff and provide SBE/DBE participation and specialty services on an as-needed basis. The solicitation for a new CMSS contract would be initiated as early as October 2015 with a projected award in the spring of 2016. Metro would then have the new CMSS staff on board prior to March 2016 which is when the Stantec Consulting, Inc. CMSS contract period of performance for the recommended action is complete.

**CWO No. 2 - I-405 HOV Sepulveda Pass Widening**

The continuation of the CMSS Contract with the same consultants is critical to the continuity and completion of closeout of the contract. In addition, these consultants know the history of the remaining claims to be negotiated and closed.

**CWO No. 15 - Projects Contract Administration Support-** The recommended action does not include funding for this effort but for continuity of the project, if additional work is required Metro would like to use the same CMSS staff support.

**CWO No. 27 - Southwestern Yard**

The recommended action provides 5 new CMSS consultants as described above for this project.

**CWO No. 29 - Patsaouras Plaza Busway Station**

Currently there is one CMSS consultant working as the Resident Engineer. It is critical that this person stay in this position to carry on the continuity of the job and to be able to relay the history to any Metro employee beginning to work on the project.

**DETERMINATION OF SAFETY IMPACT**

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

**FINANCIAL IMPACT**

The funding of \$10,953,136 for these services is included in the proposed FY16 budget in various capital projects. CWOs will be modified or issued and funded from the associated life-of-project budgets. The funding source differs depending on the individual project. These activities will remain within the approved life-of-project budget for each project.

Since this is a multi-year contract, the cost center managers and Executive Director, Engineering and Construction, will be accountable for budgeting the cost of the annual work program for each fiscal year for the term of the contract including any option exercised.



Impact to Budget

The funding will come from various sources of funds. Funding allocations planned for the Crenshaw /LAX and the I-405 Project will have no impact to Bus and Rail Operation funding sources. However, FY16 local funding sources eligible for Bus and Rail Operations will be utilized due to planned allocations for Patsaouras Plaza. FY16 Bus and Rail eligible funding impacts can potentially total \$489,005 with approval of this action.

**ALTERNATIVES CONSIDERED**

The Board may elect to discontinue using Stantec Consulting, Inc., for CMSS in FY16. Staff does not recommend this alternative as the construction projects they are assigned are in various degrees of completion and loss of experienced staff would be a detriment to the completion of these projects. There is insufficient time to hire all staff required or to solicit a new CMSS consultant by July 31, 2015. This alternative would also seriously impact the near and long term businesses of the local, DBE firms that make up the Stantec Consulting, Inc., team's nearly 30% DBE percentage.

**NEXT STEPS**

1. Staff will proceed with processing the required CWOs for FY16.
2. At the present time, staff is intending to initiate a new three-year CMSS solicitation for the Crenshaw/LAX Transit Project.

**ATTACHMENTS**

- A. Procurement Summary
- B. Contract Work Value Summary
- C. FY16 Six-Month Work Program (July 2015 to December 2015) Funding

**Prepared by:**

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Frederick Origel, Director Contract Administration (213) 922-7331


**Reviewed by:**

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Nalini Ahuja, Executive Director, Finance and Budget (213) 922-3088

Bryan Pennington, Executive Director, Engineering and Construction (213) 922-7449



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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

## CONSTRUCTION MANAGEMENT SUPPORT SERVICES

1	<b>Contract Number:</b> MC069			
2	<b>Contractor:</b> Stantec, Inc.			
3	<b>Mod. Work Description:</b> 6-Month_Funding			
4	<b>Work Description:</b> Construction Management Support Services			
5	<b>The following data is current as of:</b>			
6	<b>Contract Completion Status:</b>		<b>Financial Status:</b>	
	<b>Award Date:</b>	2/19/09	<b>Prior Board Approved Contract Annual Work Program Funding</b>	\$86,459,000
	<b>Notice to Proceed (NTP):</b>	3/18/09	<b>Increased Annual Work Program Funding for this recommended action</b>	\$10,953,136
	<b>Original Completion Date:</b>	3/18/16	<b>Total Annual Work Program Funding including this action</b>	\$97,412,136
	<b>Current Est. Complete Date:</b>	06/30/16		
7	<b>Contract Administrator:</b> Valerie Dean		<b>Telephone Number:</b> 323-903-4123	
8	<b>Project Manager:</b> Michael Barbour		<b>Telephone Number:</b> 213-922-2261	

**A. Contract Action Summary**

This Board Action is to approve an increase in 6-month work program funding to provide construction management support services. Any contract modifications required for this work will be processed in accordance with Metro's Acquisition Policy.

In February 2009, Metro Board authorized the Chief Executive Officer to award Contract No. MC069 to Stantec Consulting, Inc., (Stantec) and execute individual Contract Work Orders (CWOs) and Modifications within the Board approved annual work program funding.

The recommended actions will provide funding for the FY16 6-month Work Program. The funding amount requested is calculated based on the forecasted construction management support needs of the capital projects.

Metro staff continuously monitors Stantec’s performance and cost for each CWO. Stantec provides a separate invoice for each CWO. Each invoice submitted by Stantec is reviewed by the respective project manager, contract administrator and project control manager before payment is authorized.

See Attachment B for the Contract Work Value Summary.

**B. Cost/Price Analysis**

In accordance with Metro’s Acquisition Policies and Procedures, a cost analysis will be performed prior to issuing a CWO modification that increases the value of the existing CWO. Metro will negotiate the cost for each CWO based on the cost analysis, which will consider estimated level of effort required to perform the work, an independent cost estimate and evaluated or provisional contract labor rates, overheads and other direct costs determined to be fair and reasonable.

Stantec Consulting Services has been audited by Metro’s Management Audit Services Department (MASD). The audit was done in accordance with the standard as established by the American Institute of Certified Public Accountant, applicable Government Auditing Standards issued by the Comptroller General of the United States and the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing. The MASD audited rate will be used for future task orders.

**c. Small Business Participation**

**Stantec Consulting Services made a 17.89% Disadvantaged Business Enterprise (DBE) Anticipated Level of Participation (DALP) commitment. The current DBE participation is 29.01% Stantec is exceeding its DALP commitment.**

<b>Small Business Goal</b>	<b>DALP 17.89%</b>	<b>Small Business Commitment</b>	<b>DALP 29.01%</b>	
	<b>DBE Subcontractors</b>	<b>Status</b>	<b>% Commitment</b>	<b>Current % Participation</b>
1.	Arellano Associates	Performing	0.20%	0.17%
2.	Diaz Yourman & Associates	Performing	0.03%	0.09%
3.	Kal Krishnan Consulting	Performing	12.02%	13.52%
4.	Lenax Construction Services	Performing	2.02%	5.47%
5.	LKG-CMC	Performing	0.99%	1.17%
6.	Safework	Performing	2.63%	8.15%
7.	Power-Tech Engineers	Added	0.00%	0.44%
<b>Total Commitment</b>			<b>17.89%</b>	<b>29.01%</b>

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

**D. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification. Existing Prevailing Wage requirements still apply.

**ATTACHMENT B  
CONTRACT WORK VALUE SUMMARY**

<b>Contract Work Order (CWO)</b>	<b>Description</b>	<b>Value</b>	<b>Status</b>
0	Contract Award	\$0.00	Complete
1	Metro Orange Line Extension	\$4,399,025	Complete
2	I-405 HOV Sepulveda Pass Widening	\$41,811,761	Open
3	Union Division (Division 13) Contract Administration Support	\$1,300,899	Open
4	I-405 HOV Partnering Sessions	\$244,433	Complete
5	I-405 HOV Performance Assessment	\$171,379	Complete
6	MRL Station Canopy Support	\$212,252	Complete
7	Express Lanes Support	\$7,722,319	Complete
8	Cancelled	\$0	Cancelled
9	I-10 & I-110 Express Toll Lanes Constructability Review	\$210,170	Complete
10	I-710 Value Engineering Analysis	\$33,838	Complete
11	LA Congestion Reduction Demonstration Program- El Monte Transit Center and Patsaouras Plaza	\$3,174,572	Complete
12	Design & Implement PMIS - Measure R	\$1,341,932	Complete
13	Document Control Support	\$15,000	Complete
14	Soundwall Package # 4 Support	\$540,698	Complete
15	Multiple projects Contract Administration Support	\$982,056	Open
16	Crenshaw/LAX Transit Corridor Project Support	\$19,189,116	Open
17	Bauchet Street Storage Project Support	\$25,000	Complete
18	ATMS Upgrade Project Support	\$139,430	Complete
19	Escalator Replacement at Civic Center Support	\$248,304	Complete
20	Measure R Project Control Support	\$178,065	Complete
21	Division 20 Carwash and Cleaning Platform Support	\$198,686	Complete
22	Martin Luther King Transit Center Support	\$54,801	Complete
23	Soundwall Packages 5,6,7 & 8 Contract Administration Support	\$431,679	Complete
24	I-405 HOV Claims Support	\$145,408	Complete
25	Crenshaw/LAX Transit Corridor Project Security	\$40,752	Complete
26	Metro Red Line North Hollywood West Entrance Contract Administration Support	\$119,187	Complete
27	Southwestern Yard Project Support	\$686,772	Open
28	Cancelled	\$0	Cancelled
29	Patsaouras Plaza Busway Station Project	\$704,566	Open
<b>Subtotal – CWO's issued-to-date</b>		<b>\$84,322,100</b>	
<b>Subtotal – pending CWO's/Modifications</b>		<b>\$0</b>	
<b>Total Approved CWO's/Modifications</b>		<b>\$84,322,100</b>	
<b>Prior Board Approved Annual Work Program Funding</b>		<b>\$86,459,000</b>	
<b>Increased Annual Work Program Funding for this Recommended Action</b>		<b>\$10,953,136</b>	
<b>Total Annual Work Program Funding including this action</b>		<b>\$97,412,136</b>	

ATTACHMENT C

JULY 2015 TO DECEMBER 2015  
 FY16 6-MONTH WORK PROGRAM FUNDING

<b>Contract Work Order</b>	<b>Description</b>	<b>Total \$'s Required for Board Action</b>
2	I-405 HOV Sepulveda Pass Widening	\$1,013,930
16	Crenshaw/LAX Transit Corridor Project Support	\$8,328,162
27	Southwestern Yard	\$669,601
29	Patsaouras Plaza Busway Station	\$241,443
	<b>Subtotal</b>	<b>\$10,253,136</b>
	<b>Unallocated Contingency</b>	<b>\$700,000</b>
	<b>Total</b>	<b>\$10,953,136</b>

**Board Report**

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**File #:** 2015-0960, **File Type:** Contract**Agenda Number:** 36.

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**REVISED**  
**CONSTRUCTION COMMITTEE**  
**JULY 16, 2015****SUBJECT: REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT****ACTION: AUTHORIZE THE CHIEF EXECUTIVE OFFICER (CEO) TO EXECUTE CONTRACT MODIFICATION****RECOMMENDATION**

CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing the Chief Executive Officer to execute Contract Modification No. 3 to Contract No. MC070, to ARCADIS U.S., Inc., to **continue providing Construction Management Support Services (CMSS) through December 31, 2015 for the Regional Connector Transit Corridor Project**, in the amount of \$5,955,000, increasing the total contract value from \$11,180,690 to \$17,135,690.

**ISSUE**

On March 21, 2013, the Board approved and awarded Contract MC070 to Arcadis U.S., Inc., for Construction Management Support Services in the amount of \$3,499,990 for this project. On April 24, 2014, the Board approved a modification in the amount of \$7,680,700 to the contract to continue Construction Management Support Services during FY15. Construction management support services are professional services that are required to assist Metro by providing technical expertise and staff augmentation in the oversight and management of the final design and construction, and assist in closeout of the Regional Connector Transit Corridor Project. The executed contract is an eight year (with two one-year options for contract duration extension) cost-plus fixed fee contract with provisions for Board approval of the contract value every fiscal year by Contract Modification. This report requests approval through December 31, 2015 (the first half of FY16) pending the CEO's mid-year cost-budgeting exercise. The history of the contract's awarded amount and all Contract Modifications is contained in Attachment B. Contract No. C0981R, "Advanced Utility Relocations" was awarded on January 13, 2014, and the Design-Build Contract No. C0980 was awarded on May 6, 2014, with revenue service projected in 2020. Metro Project Management requires additional consultant staff with the expertise to oversee the design-builder's construction operations and assist Metro with the management of the Project.



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The recommended Board action will provide sufficient contract funding through December 31, 2015. A separate funding request for the second half of FY16 (January 1, 2016 through June 30, 2016) will be processed for approval. Future work will be funded on a year-to-year basis. This approach will result in more accurate budgeting for each year, while providing better control over consultant services costs.

## DISCUSSION

The primary role of the CMSS is to provide highly skilled and qualified individuals to assist Metro with the construction management of the Project by becoming part of a fully-integrated construction management team residing in the project field office, under the oversight of Metro Project Management. The CMSS consultant provides administration, inspection services and technical support during the final design, construction, pre-revenue operations and closeout phases of the Project. As part of this request Metro's Project Manager identified and evaluated the annual work plan and negotiated with Arcadis, U.S., Inc. to determine the recommended Contract Modification value.

The CMSS contact work plan for FY15 has been running at approximately 20 full-time equivalents (FTEs) per month, most of which are providing construction-related field services, technical expertise on ongoing construction work plans, and staff augmentation. These 20 FTEs in FY15 are planned to continue and carry over through FY16. The CMSS FY16 work plan level of effort is estimated to increase by approximately 20 FTEs from the FY15 expenditure level. The increase in the staffing level is due to work needed to manage and oversee the construction activities as it significantly ramps up in FY16.

In a parallel process under a separate board report, staff is recommending a total of ~~37~~ 33 new non-contract Metro positions for FY16 by converting ~~32~~ 28 new Construction Management Support Services (CMSS)/Consultant positions based on the assumption that all existing CMSS/consultant positions in FY15 shall remain. ~~Eleven~~ Eight of the new ~~32~~ 28 CMSS/Consultant positions proposed for conversion in FY16 to new Metro non-contract positions fall under the ARCADIS scope of work under Contract Modification No. 3. If the Board approves the new non-contract Metro positions, a reduction of up to ~~\$2,749,965~~ \$1,931,549 (for the entire FY 16) may be deducted from Contract Modifications to Arcadis for CMSS during FY 16 for these ~~eleven~~ eight new non-contract Metro positions ~~provided that these Metro positions are in place at the Regional Connector Transit Project on July 1, 2015.~~ ~~Otherwise a~~ A prorated rate of ~~\$17,559~~ \$20,120 per month (per CMSS position) may be deducted from those Contract Modifications for every CMSS consultant position that is converted to a new non-contract Metro position and placed on the Project.

Due to uncertainty of when, and if, Metro positions will be available, as a contingency factor, this contract assumes all 11 CMSS/Consultant positions identified to be converted to Metro positions will be temporarily filled with CMSS positions for at least the first six months of FY16. The other new CMSS/Consultant positions for FY16 are for specialty positions which are not planned to be

converted into non-contract Metro position.

### **DETERMINATION OF SAFETY IMPACT**

This Board action will not have an impact on established safety standards for Metro's construction projects. The CMSS contract provides services that support Metro's internal safety staff on the Regional Connector Transit Corridor Project. The scope of services for the CMSS contract includes provisions for staff members to ensure that safety is the highest priority during oversight of all phases of construction.

### **FINANCIAL IMPACT**

Funding for the CMSS contract is included in the FY16 budget in Cost Center 8510, (Construction Project Management) under Project 860228 (Regional Connector Transit Corridor Project), Account 50316, (Professional Services). Since this is a multi-year contract, the Executive Director of Engineering and Construction and the Project Manager will be accountable to budget the cost for future years on an annual basis.

#### **Impact to Budget**

The sources of funds for this report's Recommendation are Federal 5309 New Starts, State Prop 1B PTMISEA, and State Repayment of Capital Project Loans. The approved budget through December 31, 2015, is designated for the Regional Connector Transit Corridor Project and does not have an impact to operations funding sources. These funds were assumed in the LRTP for the Regional Connector Transit Corridor Project. This Project is not eligible for Propositions A and C funding due to the proposed tunneling element of the Project. Availability of Measure R funds begin again in FY16 and continue through FY23. No other funds were considered.

### **ALTERNATIVES CONSIDERED**

The Metro Board could decide not to approve the recommended contract modification. This is not recommended because Metro does not have sufficient staff with expertise in the many different fields, including construction managers, resident engineers and inspectors in the disciplines of systems, tunnels, stations, cut and cover work, sequential excavation method work, trackwork, civil, architecture, geology, mechanical and electrical, rail activation, systems integration, survey, among many others. The recommendation by staff will provide adequate staff and expertise during the first half of FY16 to continue to successfully deliver the completion of the project's construction on schedule and within budget.

Should the Board approve the separate board item to hire additional non-contract Metro positions (as presented above herein), positions anticipated to be filled with consultant staff through the recommended action would be converted to Metro staff via a transition plan to be determined by the Executive Director of Engineering and Construction.

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**NEXT STEPS**

1. After Board approval and execution of the contract modification, staff will direct the consultant to continue providing construction management support services for the Regional Connector Transit Corridor project through FY16.
2. Staff will report back by December 2015 on the actual number of non-contract Metro positions hired and placed on the project with the corresponding reduction in the CMSS contract value.
3. Staff will report back by December 2015 with a proposed work plan request for the second half of FY16.

**ATTACHMENTS**

- A. Procurement Summary
- B. Contract Modification/Change Order Log

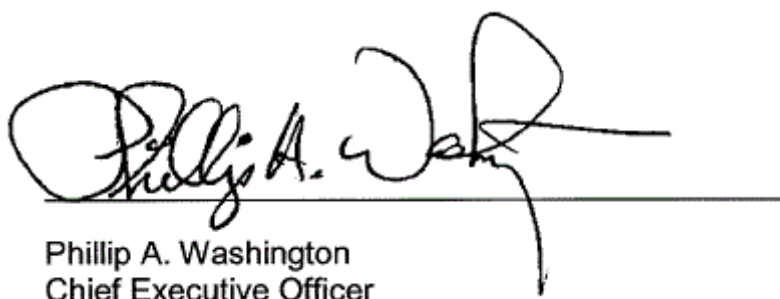
Prepared by: Girish Roy, Deputy Executive Officer and Project Manager  
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Reviewed by: Ivan Page Interim Executive Director Vendor/Contract Management  
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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

**MODIFICATION FOR CONTRACT NO. MC070  
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT  
CONSTRUCTION MANAGEMENT SUPPORT SERVICES**

1.	<b>Contract Number:</b> MC070		
2.	<b>Contractor:</b> ARCADIS, U.S., Inc.		
3.	<b>Mod. Work Description:</b> Provide construction management support services during construction of Design-Build Contract C0980 for the Regional Connector Transit Corridor Project through December 31, 2015 (the first half of FY 16).		
4.	<b>Contract Work Description:</b> Construction Management Support Services		
5.	<b>The following data is current as of:</b> 04/03/15		
6.	<b>Contract Completion Status</b>		<b>Financial Status</b>
	<b>Contract Awarded:</b>	05/13/13	<b>Contract Award Amount:</b> \$3,499,990
	<b>Notice to Proceed (NTP):</b>	05/17/13	<b>Total of Modifications Approved:</b> \$7,680,700
	<b>Original Complete Date:</b>	05/2021	<b>Pending Modifications (including this action):</b> \$5,955,000
	<b>Current Est. Complete Date:</b>	05/2021	<b>Current Contract Value (with this action):</b> \$17,135,690
7.	<b>Contract Administrator:</b> Susan Santoro		<b>Telephone Number:</b> 213-893-7144
8.	<b>Project Manager:</b> Girish Roy		<b>Telephone Number:</b> 213-893-7119

**A. Procurement Background**

This Board Action is to approve Contract Modification No. 3 to continue providing construction management support services through December 31, 2015 (the first half of FY16) for the Regional Connector Transit Corridor Project.

This contract modification will be processed in accordance with Metro's Acquisition Policy and the contract is a Cost Plus Fixed Fee type contract.

On May 13, 2013, Metro awarded Contract No. MC070, an eight year, cost plus fixed fee type contract to ARCADIS, U.S., Inc. with a not to exceed amount of \$3,499,990 for the first year FY14 to provide construction management support services on the Regional Connector Transit corridor Project.

Attachment B shows two modifications have been issued to date.

**B. Cost/Price Analysis**

The recommended price has been determined to be fair and reasonable based upon fact-finding, clarifications, and cost analysis, taking into consideration an independent cost estimate (ICE), technical evaluation, and negotiations, pending a completed audit of the consultant’s provisional overhead rates. The most current fiscal year data was requested from the consultant, and is expected to be provided shortly. Upon receipt of this data, an audit request will be submitted to MASD and any findings resulting in an increase or decrease to the contract amount will be incorporated into the contract via a Contract Modification.

<b>Proposed Amount</b>	<b>Adjusted Metro ICE</b>	<b>Negotiated Amount</b>	<b>Amount to Be Funded (First half of FY16)</b>
\$13,869,000	\$12,055,606	\$11,910,669	\$5,955,000

The above referenced Contractor’s cost proposal, Metro ICE, cost analysis, and negotiated amount were developed based on the assumption of full FY16 funding. Metro recommends funding only for the first half of FY16 at this time. The additional amount necessary to fund the remainder of FY16 CMSS services will be brought to the Board for approval at a later date.

**C. Small Business Participation**

Arcadis made a 26.79% Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) commitment. Arcadis’ current DBE participation is 55.84%. Arcadis is exceeding its DBE commitment.

<b>DBE</b>	<b>26.79%</b>	<b>DBE</b>	<b>55.84%</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Committed</b>	<b>Current Participation<sup>1</sup></b>
1.	ABA Global	Caucasian Female	3.14%	10.87%
2.	DHS Consulting	Subcontinent Asian American	8.29%	15.28%
3.	EPC Consultants	Subcontinent Asian American	6.59%	13.93%
4.	Ghirardelli Associates	Caucasian Female	3.60%	8.64%
5.	MBI Media	Caucasian Female	0.99%	0.00%
6.	Ramos CS	Hispanic American	2.34%	4.64%
7.	R Industrial & Healthcare	African American	0.59%	0.95%
8.	Allied Protection Services	African American	1.25%	1.52%
	<b>Total</b>		<b>26.79%</b>	<b>55.84%</b>

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

**D. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

**E. Prevailing Wage**

Prevailing wage is applicable to this modification. Labor Wage and Retention Programs will monitor this project for compliance with the payment of prevailing wages.

## CONTRACT MODIFICATION/CHANGE LOG

MODIFICATION FOR CONTRACT NO. MC070  
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT  
CONSTRUCTION MANAGEMENT SUPPORT SERVICES

<b>Mod. No.</b>	Original Contract	05/13/13	\$3,499,990
1	FY 2015 Incremental Funding	07/01/14	\$7,680,700
2	Add Junior Staff Engineer Position	07/21/14	\$0.00
3	FY 2016 Incremental Funding (through December 31, 2015 only)	Pending	\$5,955,000
	<b>Total:</b>		<b>\$17,135,690</b>

**Board Report**

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**File #:** 2015-0961, **File Type:** Contract**Agenda Number:** 37.

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**REVISED**  
**CONSTRUCTION COMMITTEE**  
**JULY 16, 2015****SUBJECT: WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT****ACTION: AUTHORIZE THE CHIEF EXECUTIVE OFFICER (CEO) TO EXECUTE CONTRACT MODIFICATION****RECOMMENDATION**

CONSTRUCTION COMMITTEE RECOMMENDED (5-0) authorizing the Chief Executive Officer (CEO) to execute Change Modification No. 2 to Contract No. MC071, Westside Extension Support Team (WEST), to continue providing **Construction Management Support Services (CMSS) for six months of FY16 for the Westside Purple Line Extension Section 1 Project**, in an amount not-to-exceed \$6,487,628, increasing the total contract value from \$14,513,451 to \$21,001,079.

**ISSUE**

On July 25, 2013, the Board approved and awarded, to WEST, the Construction Management Support Services contract for this project. Construction management support services are required to oversee and manage the construction and assist in closeout of the Westside Purple Line Extension Section 1 Project. Metro Project Management requires the continuation of construction management support services to provide the expertise to oversee the construction of the advanced utility relocations at the three station areas, Division 20 Maintenance-of-Way/Non-Revenue Vehicle Maintenance Building, the Design/Builder's construction operations and assist Metro with the management of the Project. On May 22, 2014, the Board authorized annual funding for WEST to continue to provide construction management support services through FY15, for a total contract value in an amount not-to-exceed \$14,513,451.

The recommended Board action will provide sufficient contract funding for six months of FY16, pending the CEO's mid-year cost budgeting exercise. Future work will be funded on an Annual Work Program, year-to-year basis. This approach will result in more accurate budgeting for each year, while providing better control over consultant services costs.



## **DISCUSSION**

The primary role of the CMSS is to provide highly skilled and qualified individuals to assist Metro with the construction management of the Project by becoming part of a fully-integrated construction management team residing in the construction field office, under the oversight of Metro Project Management. The CMSS consultant will provide administration, maintenance, inspection services and technical support during the construction, pre-revenue operations and closeout phases of the Project.

In a parallel process under a separate board report, staff is recommending a total of ~~37~~ 33 new non-contract Metro Engineering and Construction (E&C) positions for FY16 by converting ~~32~~ 28 new Construction Management Support Services (CMSS)/Consultant positions. ~~Six~~ Five of the ~~32~~ 28 CMSS/Consultant positions proposed for conversion to new Metro non-contract positions fall under the WEST's scope of work under Contract Modification No. 2. If the Board approves the new non-contract Metro E&C positions, a reduction of up to ~~\$1,264,787~~ \$1,093,070 may be deducted from Contract Modification No. 2 for these ~~six~~ five new non-contract Metro positions ~~provided that these Metro positions are in place at the Westside Purple Line Extension Section 1 Project on July 1, 2015.~~ ~~Otherwise,~~ a A prorated rate of ~~\$17,567~~ \$18,218 per month (per position) may be deducted from Contract Modification No. 2 for every CMSS/Consultant position that is converted to new non-contract Metro position and placed on the project.

## **DETERMINATION OF SAFETY IMPACT**

This Board action will not have an impact on established safety standards for Metro's construction projects. The CMSS contract will provide services that support Metro's internal safety staff on the Westside Purple Line Extension Section 1 Project. The scope of services for the CMSS contract includes provisions for staff members to ensure that safety is the highest priority during oversight of all phases of construction.

## **FINANCIAL IMPACT**

Funds are included in the FY16 budget for this action under Project 865518 - Westside Purple Line Extension Section 1 Project in Cost Center 8510 (Construction Project Management), and Account Number 50316 (Professional Services). Since this is a multi-year project, the Executive Director of Engineering and Construction and the Project Manager will be accountable to budget the cost for future years on an annual basis, including the exercise of any options for future phases.

### Impact to Budget

The sources of funds for the recommended action are Federal 5309 New Starts, Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan proceeds and Measure R 35%. The approved FY16 budget is designated for the Westside Purple Line Extension Section 1 Project and does not have an impact to operations funding sources. These funds were assumed in the Long Range Transportation Plan (LRTP) for the Westside Purple Line Extension Section 1 Project. 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.

### ALTERNATIVES CONSIDERED

The Board may elect to discontinue using WEST for CMSS in FY16. Staff does not recommend this alternative as the construction projects they are assigned are in various degrees of completion and loss of experienced staff would be a detriment to the completion of these projects. There is insufficient time to hire all Metro staff required or to solicit a new CMSS consultant. Therefore, this action will extend the services of all the existing FY15 CMSS positions including approximately 30% DBE. Furthermore, a portion of CMSS positions are needed on an as-needed basis only and not on a full-time basis. Some of the CMSS positions also provide specialty work on an as-needed basis of which is not representative of Metro's core functions.

In a parallel process under a separate board report, staff is proposing to convert ~~six~~ five new CMSS positions to new non-contract Metro positions. However, due to the uncertainty of the hiring of new Metro positions in a timely manner, new CMSS positions are added as an interim measure.

### NEXT STEPS

1. After Board approval and execution of the contract modification, staff will direct the consultant to continue providing construction management support services for the Westside Purple Line Extension Section 1 Project for six months of FY16.
2. Staff will report back by December 2015 on the actual number of non-contract Metro positions hired and placed on the project with the corresponding reduction in the CMSS contract value.

### ATTACHMENTS

- A. Procurement Summary
- B. Contract Modification Authority/Change Order Log

Prepared by:

Dennis Mori, Executive Officer, Project Director, (213) 922-7221

James Cohen, Deputy Executive Officer, Project Management, (323) 900-2114


Rick Wilson, Director Project Control (213) 922-3627

Reviewed by:

Ivan Page, Interim Executive Director, Vendor/Contract Management (213) 922-6383

Nalini Ahuja, Executive Director, Finance and Budget (213) 922-3088

Bryan Pennington, Executive Director, Engineering & Construction (213) 922-7449



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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

**WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT  
CONSTRUCTION MANAGEMENT SUPPORT SERVICES  
CONTRACT MODIFICATION NO. 2**

<b>1.</b>	<b>Contract Number:</b> MC071		
<b>2.</b>	<b>Contractor:</b> Westside Extension Support Team, J.V. (WEST)		
<b>3.</b>	<b>Mod. Work Description:</b> Continue Construction Management Support Services for six months of Fiscal Year 2016		
<b>4.</b>	<b>Contract Work Description:</b> Construction Management Support Services		
<b>5.</b>	<b>The following data is current as of:</b> April 14, 2015		
<b>6.</b>	<b>Contract Completion Status</b>		<b>Financial Status</b>
	<b>Contract Awarded:</b>	7/26/13	<b>Contract Award Amount:</b> \$4,683,115
	<b>Notice to Proceed (NTP):</b>	8/09/13	<b>Total of Modifications Approved:</b> \$9,830,336
	<b>Original Complete Date:</b>	8/09/24	<b>Pending Modifications (including this action):</b> \$6,487,628
	<b>Current Est. Complete Date:</b>	8/09/24	<b>Current Contract Value (with this action):</b> \$21,007,079
<b>7.</b>	<b>Contract Administrator:</b> Zachary Munoz		<b>Telephone Number:</b> 213-922-7301
<b>8.</b>	<b>Project Manager:</b> Dennis Mori		<b>Telephone Number:</b> 213-922-7221

**A. Procurement Background**

This Board Action is to approve Contract Modification No. 2 to continue Construction Management Support Services for Section 1 of the Westside Purple Line Extension Project.

This Contract Modification will be processed in accordance with Metro's Acquisition Policy and the contract type is cost plus fixed fee.

On July 25, 2013, the Metro Board authorized the Chief Executive Officer to execute a cost-plus fixed fee type contract (Contract No. MC071) for Construction Management Support Services with West Extension Support Team (WEST), for an amount not-to-exceed \$4,683,115, for the first year of the Contract, FY14. On May 22, 2014, the Board authorized WEST to continue to provide Construction

Management Support Services through FY15 for an amount not-to-exceed \$9,830,336.

Attachment B shows that only the one modification has been issued to date, and this recommended modification is currently pending.

The proposed Contract Modification is for an amount not-to-exceed of \$6,487,628 to continue the necessary Construction Management Support Services for six months of FY16.

**B. Cost/Price Analysis**

The negotiated amount complies with all requirements of Metro Procurement policies and procedures and was determined fair and reasonable through fact-finding, clarifications, and cost analysis. An independent cost estimate (ICE) was obtained as part of the cost analysis before negotiating.

An audit request has been submitted to the Metro Management Audit Services Department (MASD) to determine actual overhead rates incurred. In order to prevent any unnecessary interruption to the Project, provisional overhead rates have been established and used for the negotiated amount. The negotiated amount is subject to retroactive adjustments to the Contract upon completion of the audit. In accordance with FTA Circular 4220.1F, if an audit has been performed by any other cognizant agency within the last twelve month period Metro will receive and accept the audit report rather than perform another audit.

<b><u>Proposal Amount (for 12 months)</u></b>	<b><u>Metro ICE (for 12 months)</u></b>	<b><u>Negotiated Amount (for 6 months)</u></b>
\$14,323,790	\$13,955,737	\$6,487,628

**C. Disadvantaged Business Participation**

Westside Extension Support Team made a 28.26% Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) commitment. Westside Extension Support Team is currently exceeding its DALP commitment with 33.17% DBE participation.

<b>SMALL BUSINESS COMMITMENT</b>	<b>DALP 28.26%</b>	<b>SMALL BUSINESS PARTICIPATION</b>	<b>DALP 33.17%</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Committed</b>	<b>Current Participation<sup>1</sup></b>
1.	Anil Verma Associates, Inc.	Asian Subcontinent American	0.39%	0.00%

2.	Cabrinha Hearn & Associates	Hispanic American	10.37%	5.11%
3.	Cogstone Resource Management	Caucasian Female	2.15%	2.37%
4.	D'Leon Consulting Engineers	Hispanic American	0.00%	1.38%
5.	Diana Ho Consulting Group	Asian Pacific American	0.00%	0.06%
7.	Kal Krishnan Consulting Services, Inc.	Asian Subcontinent American	0.00%	0.74%
8.	Lenax Construction Services, Inc.	Caucasian Female	1.72%	0.86%
	MARRS Services, Inc.	Asian Subcontinent American	6.85%	10.53%
	Ramos Consulting Engineers, Inc.	Hispanic American	6.78%	11.18%
	Safework, Inc.	Caucasian Female	0.00%	0.96%
<b>Total</b>			<b>28.26%</b>	<b>33.17%</b>

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

**D. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

ATTACHMENT B

**Contract Modification Authority (CMA) / Change Order Log  
Westside Purple Line Extension Section 1 Project**

ATTACHMENT B

<b>Mod. no.</b>	<b>Description</b>	<b>Date</b>	<b>Amount</b>
1	Continue Construction Management Support Services thru FY 15	5/22/14	\$9,830,336
2	Continue Construction Management Support Services for six months of FY 16 <b>Pending Board Approval</b>		\$6,487,628
	<b>Total mods:</b>		<b>\$16,317,964</b>



**Board Report**

**File #:** 2015-0848, **File Type:** Contract

**Agenda Number:** 11.

**REVISED  
CONSTRUCTION COMMITTEE  
JULY 16, 2015**

**SUBJECT: CONSTRUCTION MANAGEMENT CONSULTANT SUPPORT  
SERVICES CONTRACT, CONTRACT PS100800-2641**

**ACTION: AUTHORIZE ADDITIONAL CONTRACT VALUE IN AN AMOUNT NOT-  
TO-EXCEED \$2,144,000**

**RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION:

- A. authorizing an increase to the total authorized funding for Contract No. PS100800-2641 with MARRS Services, Inc., for **pending and future task orders to provide Construction Management Consultant (CMC) Support Services**, in an amount not to exceed \$2,144,000, increasing the total contract value from \$7,744,000 to \$9,888,000; and
- B. authorizing the Chief Executive Officer to execute individual Task Orders (TOs) and Contract Modifications within the Board approved contract funding amount.

**ISSUE**

Staff came to the Construction Committee in November 2014 seeking to increase the value of contract PS100800-2641 by \$4,288,000 for work it forecasted through the end of the contract in June 2016 (FY16). At the Construction Committee meeting, the Committee recommended an increase of only half that amount, \$2,144,000. Staff has awarded task orders totaling \$7,452,264 and has less than \$300,000 of the authorized funding remaining. Staff comes to the Board asking for funding in the amount of last November's reduction, \$2,144,000, because its forecast for work through the end of FY16 has not changed, but it no longer has sufficient funding to award additional task orders.

MARRS is a Small Business Enterprise (SBE) company, and has provided Construction Management Consultant (CMC) services on current bus facilities capital projects including Division 13, Harbor Transitway Improvements, Bus Division Facility Improvements, Harbor Gateway Transit Center Improvements, Slauson Bus Stop improvements, and a bollard safety project along the San



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Bernardino (I-10) Freeway. MARRS has performed satisfactorily since initial award of the contract.

## **DISCUSSION**

The primary role of the CMC is to provide skilled and qualified staff to support and augment Metro staff with construction management of Metro's bus facilities construction contracts. Both Metro and CMC staff, in most cases, work side-by-side in integrated project management offices (IPMO). In essence, the CMC contract allows us to efficiently and effectively augment Metro Construction Management staff as required, so that the proper resources required to manage a contract are available to us both in terms of staff availability and technical expertise. The CMC contract funds are authorized by issuing separate Task Orders (TOs) for various projects using labor classifications and rates set forth in the contract. This method of contracting results in more efficient cost and schedule management, since TOs and modifications to existing TOs are negotiated and issued as additional work is identified. For each task order or modification, Metro prepares a scope of work and an estimate of hours, and the contractor subsequently provides a proposal. If there is a discrepancy, Metro and the contractor fact-find and negotiate the hours. After agreement, the task order is issued and the work proceeds.

In April 2011, the MTA Board authorized the Chief Executive Officer to award the MARRS contract and execute individual TOs and modifications for an amount not to exceed \$2,500,000. The CMC contract is a Time and Material Contract with a base contract term of three years and two one-year options. The contract was executed on June 17, 2011, and the expiration date of the three year base contract was June 17, 2014. Primarily due to satisfactory performance, staff has exercised the options and extended the period of performance through June 17, 2016.

The initial \$2,500,000 was calculated based on three years of small TOs, primarily for inspectors and night-time oversight on construction jobsites for bus facilities capital projects. However, due to the technical expertise of MARRS staff, the MARRS team has also assisted Metro with its underground storage tank (UST) replacement program and the Division 13 Bus Operations and Maintenance Facility. MARRS's services are also being used to support projects funded by departments outside of Engineering and Construction. For example, MARRS is being used for CMC support for the Bus Shelters and Pylons along Rapid Bus Lines on Wilshire Blvd, and earlier this spring, staff also began using MARRS to oversee construction of a joint development project at 1<sup>st</sup> and Boyle off the Gold Line's Mariachi Plaza Station. Nonetheless, the single largest TO has been for CMC support on the Division 13 project. Since the start of construction of Division 13 in August 2012, MARRS has provided a resident engineer, office engineers, construction field inspectors, schedulers, and estimators to support the project.

On July 25, 2013 the Board approved an increase to the total contract value in the amount of \$3,100,000, increasing the total contract value to \$5,600,000. This action was required primarily to accommodate the addition of the Division 13 project to the MARRS contract. Due to the current needs of our capital program, and staff's desire to continue using MARRS for CMC services,

additional contracting authority is now required to provide CMC support for our bus facility projects.

With Contract PS100800-2641 extended through June 2016, the current contracting authorization of \$7,744,000 is already subscribed through Division 13 and other smaller capital projects. As a result, additional contracting authority is now required to continue supporting approved bus facility capital projects through the contract period of performance. Furthermore, due to the technical expertise provided by MARRS, staff intends to use MARRS personnel to assist with the Patsaouras Plaza Improvements Project (202317) which will start construction this summer. A listing of the current task orders, proposed projects, and forecasted task order amounts is included as Attachment B. As shown on the attachment, the requested contract value through expiration in June 17, 2016 is \$9,888,000.

In regards to small business participation, upon contract award MARRS made an 80% SBE commitment. To date, MARRS has maintained a 100% SBE participation.

### **DETERMINATION OF SAFETY IMPACT**

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

### **FINANCIAL IMPACT**

The funding for these services is included in the approved FY16 budget in various bus facilities capital projects, and the 1<sup>st</sup> and Boyle joint development project. Task Orders will be issued and funded from the associated life-of-project (LOP) budgets. The funding source differs depending on the individual project. These activities will remain within the approved life-of-project budget for each respective project.

Since this is a multi-year contract, the cost center manager and Executive Director, Engineering and Construction, will be accountable for budgeting the cost of the annual work program for each fiscal year for the term of the contract, including any option(s) exercised.

### **Impact to Budget**

Funding for this action will come from various sources eligible for bus / rail facilities capital expenditures and major construction projects funded with specific grant sources. Approval of this action will result in use of funding which are also eligible for Bus and Rail Operations.

### **ALTERNATIVES CONSIDERED**

The Board may elect to discontinue using MARRS Services, Inc., for CMC services. Staff does not recommend this alternative as the construction projects they are assigned to are in various degrees

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of completion and the loss of staff would cause these projects to be significantly impacted. Given that the MARRS contract will expire in June 2016, staff intends to conduct a new CMC procurement shortly so that a new contractor is available before the existing contract expires.

Another alternative would be to hire Metro staff to perform the required services. This alternative is also not recommended since the intent of the CMC is to augment Metro staff in terms of technical expertise and availability of personnel. CMC services are typically required on a periodic or short-term basis to accommodate for peak workloads or specific tasks over the life of the projects. Further, for some projects, the specific technical expertise required may not be available within the ranks of Metro staff, whereas the CMC consultant can provide the technical expertise on an as-needed basis.

### **NEXT STEPS**

Staff will issue a contract modification and issue task orders, as needed.

### **ATTACHMENTS**

Attachment A - Procurement Summary

Attachment B - Contract Task Order/Modification Log

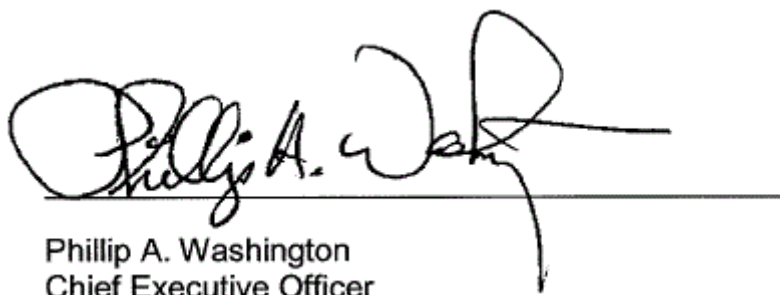
Prepared by: James S. Gleig, Director of Construction, (213) 922-7453

Tim Lindholm, Executive Officer, Project Management, (213) 922-7297

Reviewed by:

Ivan Page, Interim Executive Director, Vendor/Contracts Management, (213) 922-6383

Bryan Pennington, Executive Director, Engineering and Construction, (213) 922-7449



Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

CONSTRUCTION MANAGEMENT CONSULTANT SUPPORT SERVICES  
CONTRACT

1.	<b>Contract Number:</b> PS-100800-2641		
2.	<b>Contractor:</b> MARRS Services, Inc.		
3.	<b>Mod Work Description:</b> Increase Contract Value for pending task orders/modifications to support ongoing projects.		
4.	<b>Work Description:</b> Construction Management		
5.	<b>The following data is current as of:</b> June 10, 2015		
6.	<b>Contract Completion Status:</b>		
	<b>Award Date:</b>	6/17/11	<b>Board Approved NTE Amount:</b> \$7,744,000
	<b>Notice to Proceed (NTP):</b>	6/17/11	<b>Total Contract Modification Authority (CMA):</b> \$7,744,000
	<b>Orig. Completion Date:</b>	6/17/14	<b>Value of Task Order and mods. issued to date (including this action):</b> \$7,452,264
	<b>Estimated Completion Date:</b>	6/17/16	<b>Remaining Board Approved NTE Amount:</b> \$291,736
7.	<b>Contract Administrator:</b> Frederick Origel	<b>Telephone Number:</b> (213) 922-7331	
8.	<b>Project Director:</b> Jim Gleig	<b>Telephone Number:</b> (213) 922-7453	

**A. Contract Action Summary**

This Board Action is to increase the contract NTE value. All task orders and contract modifications are handled in accordance with Metro's acquisition Policy. The contract type is Time and Material.

In April 2011, the Board authorized the CEO to award Contract PS-100800-2641 to MARRS Services, Inc. and execute individual Task Orders within the Board approved contract value (Item # 3). This recommended action is to increase the contract value for pending task orders and modifications.

Attachment B shows task orders and modifications issued to date, and the additional task orders and modifications that are currently pending authorization.

**B. Cost/Price Analysis**

The price for all future task orders and modifications will be determined to be fair and reasonable based on audit of the labor and overhead rates, cost analysis, technical evaluation, fact finding, and negotiations.

An audit request has been submitted to the Metro Management Audit Services Department (MASD) to determine all allowable and allocable direct and overhead rates. Task Orders and Modifications are subject to retroactive adjustments to the Contract upon completion of the audit for the actual direct and overhead rates incurred.

**C. Small Business Participation**

MARRS Services made an 80% Disadvantaged Business Enterprise (DBE) Anticipated Level of Participation (DALP) commitment. MARRS Services is currently exceeding their DALP commitment with a current DBE participation amount of 100%.

<b>DBE COMMITMENT</b>	<b>80%</b>	<b>DBE PARTICIPATION</b>	<b>100%</b>
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	<b>DBE Prime and Subcontractors</b>	<b>Status</b>	<b>Ethnicity</b>	<b>% Committed</b>	<b>Participation<sup>1</sup></b>
1.	MARRS Services, Inc.	Performing	Subcontinent Asian American	74.00%	98.89%
2.	Safework, Inc.	Will Perform	Non-Minority Female	2.00%	0.00%
3.	Simplex Construction Management	Will Perform	Subcontinent Asian American	2.00%	0.00%
4.	Ramos Consulting Services	Performing	Hispanic American	2.00%	0.11%
<b>Total Commitment</b>				<b>80%</b>	<b>100%</b>

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

**ATTACHMENT B**

**CONTRACT TASK ORDER/ MODIFICATION LOG**

**CONSTRUCTION MANAGEMENT CONSULTANT SUPPORT SERVICES  
CONTRACT**

<b>Task Order/Mod No.</b>	<b>Description</b>	<b>Status</b>	<b>Cost</b>
1	Division 13	Approved	\$5,366,826
2	Environmental Services UST Support	Approved	\$668,992
3	Safety Bollards on I-10	Approved	\$33,475
4	Harbor Transitway CDRP	Approved	\$38,193
5	Bus Facilities Improvements	Approved	\$328,324
6	Slauson Bus Stop Amenity Improvements	Approved	\$40,765
7	Artesia Transit Center Improvements	Approved	\$8,256
8	Location 61 Roof Replacement	Approved	\$53,045
9	Rail Operations – Red Line	Approved	\$10,617
10	Bus Facilities Improvements and Enhancements II	Approved	\$219,056
11	Wilshire Customer Service Center	Approved	\$38,569
12	Patsaouras Plaza Bus Station Construction	Approved	\$32,889
13	Environmental Field Inspection – UST LA Times Bldg.	Approved	\$86,956
14	FY15-17 Fuel Storage Tank Systems 202211	Approved	\$375,715
15	Terminal 47 and Terminal 48 Corrosion Repairs	Approved	\$35,585
16	Sealing of El Monte Station Deck	Approved	\$29,222
17	El Monte Bike Hub	Approved	\$29,222
18	Sylmar Child Care	Approved	\$28,279
19	Wilshire Rapid Bus Shelters	Approved	\$28,279
Subtotal – Approved Task Orders/Modifications			\$7,452,264
12	Add Estimator to Support Patsaouras Plaza	Pending	\$160,000
TBD	First and Boyle Joint Development FY16	Pending	\$80,000
1	Division 13 (FY16)	Forecast	\$284,000
12	Patsaouras Plaza Bus Station Construction FY16	Forecast	\$995,000
TBD	First and Boyle Joint Development FY16 (401039)	Forecast	\$100,000
TBD	BLOC Construction (204025)	Forecast	\$40,000
TBD	Facilities Improvements (202331)	Forecast	\$40,000
14	Environmental Services UST Support FY16	Forecast	\$290,000

TBD	Silver Line Improvements (202319) FY16	Forecast	\$75,000
TBD	Facilities Improvements (202320) FY16	Forecast	\$50,000
TBD	Facilities Improvements Div 1 (202324)	Forecast	\$90,000
TBD	Facilities Improvements BRT (202326)	Forecast	\$90,000
TBD	Facilities Improvements LRT (204083)	Forecast	\$90,000
Subtotal – Approved Task Orders/Modifications			\$7,452,264
Subtotal – Pending or Forecasted Changes/Modifications			\$2,384,000
<b>Total Mods/Task Orders and Pending or Forecasted Task Orders (including this request)</b>			\$9,836,264
Contract Value and Prior CMA Authorized by the Board (including award and modifications)			<del>\$7,144,000</del> <u>\$7,744,000</u>
Increased CMA and Contract Value for this recommended action			\$2,144,000
<b>Total CMA and Contract Value including this action</b>			\$9,888,000
<b>Remaining CMA for Future Changes</b>			0 <u>\$51,736</u>



Board Report

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File #: 2015-0215, File Type: Contract

Agenda Number: 39.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015**

**SUBJECT: GATEWAY LIGHTING RETROFIT PROJECT**

**ACTION: APPROVE USE OF DESIGN-BUILD CONTRACTING DELIVERY APPROACH FOR THE GATEWAY LIGHTING RETROFIT PROJECT**

**RECOMMENDATION**

CONSTRUCTION COMMITTEE RECOMMENDED (5-0):

A. finding that awarding design-build contracts pursuant to **Public Utilities Code Section 130242 (a)** will achieve private sector efficiencies in the integration of the design, project work, and components related to the construction and installation of energy efficient lights in Metro's Gateway Headquarters Building;

**(REQUIRES TWO-THIRDS VOTE)**

- B. authorizing the Chief Executive Officer to award the competitively bid design-build contract to the lowest responsive, responsible bidder, pursuant to Public Utilities Code Section 130051.9 (c); and
- C. approving an increase of Contract Modification Authority (CMA) for Contract No. PS07643022 with Control Technologies to provide Building Management System upgrades in the amount of \$1,000,000, increasing the CMA from \$100,000 to \$1,100,000.

**ISSUE**

Metro is authorized to enter into design-build contracts pursuant to Public Utilities Code Section 130242. This section requires that the Board make the finding set forth in Recommendation A.

The Metro Gateway Lighting Retrofit Project will remove existing recessed fluorescent light fixtures and replace them with new, energy efficient, LED light fixtures. This project is consistent with the



intent and identified action to reduce energy use in our facilities as outlined in our Environmental Policy and Energy Conservation and Management Plan. A cost-benefit analysis of the Gateway Lighting Retrofit Project provides a cost and savings comparison between LED fixtures and fluorescent fixtures (see Attachment C).

The current Gateway building management system is proprietary therefore Control Technologies, Inc. must be part of the project team. As part of the project team, the control systems contractor must work with the design build contractor and be involved in the design, specification, installation, and commissioning of the lighting and the control components to ensure that the lighting controls will operate with the existing building management system.

### **DISCUSSION**

The primary benefit of the design-build process is a shortened project schedule where the design-builder is able to start construction while the design is being completed. Other possible benefits include additional efficiencies in project management, administration and coordination.

Utilization of a design-build process is allowed under Public Utilities Code Section 130242, which provides for award of a design-build contract to the lowest responsive and responsible bidder. As set forth above, awarding design-build contracts will achieve certain efficiencies in the projects, such as reducing project administration and management costs, and expediting project completion.

Approval of this action would allow staff to proceed with a solicitation utilizing the Design-Build Contracting Delivery Approach pursuant to Public Utilities Code Section 130242.

The project was selected for the Design-Build Contracting Delivery Approach based on the following considerations:

- A single point of responsibility for design and construction will increase the time and management efficiency on the implementation of the projects;
- Metro will have the benefit of an integrated team that provides engineering, construction management, and administrative resources, resulting in cost savings;
- Staff project development resources are limited, so more budgeted projects can be accomplished by adding design-build capability;
- Metro's design risks are shifted to Design-Builder, while changes related to design are minimized;
- The project requires standard or minimal design effort and it therefore more conducive to being implemented by design-build contractors with general engineering and contracting capacity.

The major cost savings on this project is controlling the use of electricity via the building management control systems. Controls will be installed that will monitor the lighting levels and reduce the lighting in all areas via these automatic controls. Thus the lighting control system must be compatible with the existing building systems. The major Gateway building systems are already controlled by the building management control system. The building management system is a computerized building-automation and energy management system consisting of thousands of automatic devices and controls for the building heating, ventilation, air conditioning and lighting. It is imperative that the new system not only support the controls necessary for the lighting project to be a success but it must communicate with the entire building system.

### **FINANCIAL IMPACT**

The FY16 funding for this project will come from Project Number 210802, Gateway Lighting Retrofit Project, in the amount of \$239,438 in Cost Center 8510, Construction Contracts/Procurement. Since this is a multi-year capital project, the cost center manager and Executive Director, Engineering & Construction will be responsible for budgeting in future years.

#### **Impact to Budget**

The source or funds for this project is the Sustainability Implementation Program funds which is a board approved annual allocation and is eligible to fund Bus and Rail Operations. No other source of funds were considered.

### **ALTERNATIVES CONSIDERED**

This project is needed to avoid increasing electricity rates. This work could be accomplished utilizing consultants to prepare separate designs or with designs prepared by staff for bid and construction. Staff does not recommend this approach. There are distinct and clear advantages to having a single contractor responsible for both design and construction, primarily in the avoidance of certain project management, staff, administration and coordination costs, as well as significant reductions in contract cost and overall project schedule. The scope and size of the project lend itself to the more streamlined design-build project delivery method.

### **ATTACHMENTS**

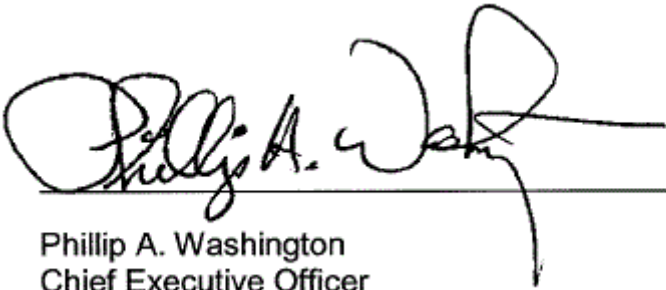
- A Procurement Summary
- B Contract Modification/Change Log
- C Cost Benefit Analysis for 5,000 2x4 Fixtures

Prepared By:

Cris B. Liban, Executive Officer, Environmental Compliance and Sustainability (213) 922-2471

Reviewed By:

Ivan Page, Interim Executive Director Vendor/Contract Management, 213 922-6383  
Bryan Pennington, Executive Director, Engineering & Construction, 213 922-7449



Phillip A. Washington  
Chief Executive Officer

**PROCUREMENT SUMMARY  
GATEWAY BUILDING MANAGEMENT SYSTEM  
GATEWAY LIGHTING RETROFIT PROJECT**

1.	<b>Contract No.:</b> PS07643022			
2.	<b>Contractor:</b> Control Technologies			
3.	<b>Mod. Work Description:</b> Increase Contract Modification Authority			
4.	<b>Work Description:</b> Gateway Building Management System			
5.	<b>The following data is current as of :</b>	March 10, 2015		
6.	<b>Contract Completion Status:</b>			
	<b>Bids Opened:</b>	N/A	<b>Financial Status:</b>	
	<b>Contract Awarded:</b>	2/22/07	<b>Contract Award Amount:</b>	\$640,000.00
	<b>NTP:</b>	N/A	<b>Total of Modifications approved:</b>	\$1,389,345.00
	<b>Orig. Complete Date:</b>	2/21/17	<b>Pending Modifications (including this action):</b>	\$1,000,000.00
	<b>Current Est. Complete Date:</b>	2/21/17	<b>Current Contract Value (with this action):</b>	\$3,029,345.00
7.	<b>Contract Administrator:</b> Kenneth Takahashi	<b>Telephone Number:</b> (213) 922-1047		
8.	<b>Project Manager:</b> John Flores	<b>Telephone Number:</b> (213) 922-7770		

**A. Procurement Background**

In February 2007, sole source Contract No. PS07643022 was awarded to Yamas Controls Southern California, Inc. for a term of ten years, in the amount of \$640,000, for maintenance of the Gateway Building Management System. In January 2008, Yamas Controls Southern California, Inc. was acquired by Control Technologies.

Attachment B shows that four modifications have been issued to date to add work.

**B. Cost/Price Analysis**

The recommended price of any future changes will be determined to be fair and reasonable based upon cost analysis, technical evaluation, fact finding, and negotiations.

**C. Small Business Participation**

At the time of contract award, in February 2007, the Diversity and Economic Opportunity Department did not establish a Small Business Enterprise (SBE) goal for this procurement, as the Control Technologies System is proprietary. However, for this contract modification, there will be limited opportunities for supply equipment, contingent upon the equipment not voiding proprietary electrical warranties associated with the Gateway lighting work. Control Technologies made a 5% SBE commitment.

<b>Small Business Goal</b>	<b>N/A</b>	<b>Small Business Commitment</b>	<b>5% SBE</b>
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	<b>SBE Subcontractor</b>	<b>% Commitment</b>
1.	Global Electric	5%
	<b>TOTAL</b>	<b>5%</b>

**ATTACHMENT B**

**CONTRACT MODIFICATION/CHANGE ORDER LOG  
GATEWAY BUILDING MANAGEMENT SYSTEM**

**GATEWAY LIGHTING RETROFIT PROJECT**

<b>Mod no.</b>	<b>Description</b>	<b>Status</b>	<b>Cost</b>
1	Add Trend Log	Approved	\$6,000.00
2	Equipment Upgrades	Approved by Board	\$1,153,845.00
3	Additional Contract Authority	Approved	\$94,000.00
4	Additional Contract Authority	Approved by Board	\$135,500.00
5	Increase Contract Modification Authority	Pending	\$1,000,000.00
Subtotal – Approved Modifications			\$1,389,345.00
Subtotal – Pending Changes/Modifications			\$1,000,000.00
<b>Subtotal Totals: Mods. + Pending Changes/Modifications</b>			<b>\$2,389,345.00</b>
Previously Authorized CMA			\$100,000.00
CMA Necessary to Execute Pending Changes/Mods + Possible Claims			\$1,000,000.00
<b>Total CMA including this Action</b>			<b>\$1,100,000.00</b>
<b>CMA Remaining for Future Changes/Mods after this Action</b>			<b>\$1,000,000.00</b>

## ATTACHMENT C

### Gateway Lighting Retrofit Project - Cost-Benefit Analysis for 5,000 2x4 Fixtures

Cost of Fixtures & Installation	Return on Investment (years)	Location / Area		Existing Conditions	Conditions After Retrofits	Projected Annual Savings
\$1,044,808.20	4.276	Gateway Office Spaces (2) T8, low watt	Energy Usage (kWh)	3,248,708	1,399,833	1,848,875
			Operating Costs	\$448,438.05	\$204,090.30	\$244,347.75
			GHGe (metric tons)	1,814.87	782.01	1,032.86
\$1,426,426.20	4.873	Gateway Office Spaces Volumetric LED	Energy Usage (kWh)	3,248,708	990,845	2,257,862
			Operating Costs	\$448,438.05	\$155,711.24	\$292,726.80
			GHGe (metric tons)	1,814.87	553.53	1,261.34

#### Energy and Operational Cost Savings Over the Operational Life

Year	Energy Cost (per kWh)	Existing	Option A - (2) T8, low watt		Option B - Volumetric LED	
			Cost	Savings	Cost	Savings
2015	\$0.125	\$448,438	\$204,090	\$244,348	\$155,711	\$292,727
2016	\$0.132	\$470,952	\$213,845	\$257,106	\$162,672	\$308,279
2017	\$0.139	\$494,691	\$224,129	\$270,562	\$170,008	\$324,684
2018	\$0.140	\$499,419	\$226,220	\$273,199	\$171,544	\$327,875
2019	\$0.142	\$504,192	\$228,331	\$275,861	\$173,095	\$331,097
2020	\$0.143	\$509,010	\$230,462	\$278,548	\$174,659	\$334,351
2021	\$0.145	\$513,874	\$232,612	\$281,262	\$176,237	\$337,637
2022	\$0.146	\$518,785	\$234,782	\$284,003	\$177,830	\$340,955
2023	\$0.147	\$523,743	\$236,973	\$286,770	\$179,437	\$344,306
2024	\$0.149	\$528,748	\$239,184	\$289,564	\$181,058	\$347,690
2025	\$0.150	\$533,801	\$241,415	\$292,386	\$182,694	\$351,107
2026	\$0.152	\$538,902	\$243,668	\$295,235	\$184,344	\$354,558
2027	\$0.153	\$544,053	\$245,941	\$298,111	\$186,010	\$358,043
2028	\$0.155	\$549,252	\$248,236	\$301,016	\$187,690	\$361,562
2029	\$0.157	\$554,502	\$250,552	\$303,949	\$189,386	\$365,116
2030	\$0.158	\$559,802	\$252,890	\$306,911	\$191,097	\$368,705
2031	\$0.160	\$565,152	\$255,250	\$309,902	\$192,824	\$372,329
2032	\$0.161	\$570,555	\$257,632	\$312,922	\$194,566	\$375,988
2033	\$0.163	\$576,008	\$260,037	\$315,972	\$196,324	\$379,684
2034	\$0.165	\$581,515	\$262,464	\$319,051	\$198,098	\$383,416
2035	\$0.166	\$587,074	\$264,913	\$322,161	\$199,889	\$387,185
2036	\$0.168	\$592,687	\$267,386	\$325,301	\$201,695	\$390,991
2037	\$0.169	\$598,353	\$269,882	\$328,471	\$203,518	\$394,835
2038	\$0.171	\$604,074	\$272,402	\$331,673	\$205,358	\$398,717
2039	\$0.173	\$609,851	\$274,945	\$334,906	\$207,214	\$402,636
2040	\$0.175	\$615,683	\$277,512	\$338,171	\$209,088	\$406,595
<b>TOTAL</b>		<b>\$14,193,116</b>	<b>\$6,415,756</b>	<b>\$7,777,360</b>	<b>\$4,852,047</b>	<b>\$9,341,069</b>

#### Installation, Annual Lamp Replacement and Annual Maintenance Costs

	Total Existing	(2) T8, low watt usage	(2) T8, low watt savings	Volumetric LED usage	Volumetric LED savings
Fixtures/Installation	\$0	\$1,044,808		\$1,426,426	
Lamps/Maintenance	\$43,011.74	\$29,396.55	\$13,615.20	\$32,057.54	\$10,954.21
<b>TOTAL</b>	<b>\$43,012</b>	<b>\$1,074,205</b>		<b>\$1,458,484</b>	
Power Usage (kWh/yr)	Existing Lighting (kWh) 3,248,708	Consumption (kWh) 1,399,833	Savings (kWh) 1,848,875	Consumption (kWh) 990,845	Savings (kWh) 2,257,862

**ATTACHMENT B**

**CONTRACT MODIFICATION/CHANGE ORDER LOG  
GATEWAY BUILDING MANAGEMENT SYSTEM**

**GATEWAY LIGHTING RETROFIT PROJECT**

<b>Mod no.</b>	<b>Description</b>	<b>Status</b>	<b>Cost</b>
1	Add Trend Log	Approved	\$6,000.00
2	Equipment Upgrades	Approved by Board	\$1,153,845.00
3	Additional Control System Maintenance	Approved	\$94,000.00
4	Add Union Station East Complex	Approved by Board	\$135,500.00
5	LED Lighting Retrofit Project	Pending	TBD
Subtotal – Approved Modifications			\$1,389,345.00
Subtotal – Pending Changes/Modifications			\$1,000,000.00
<b>Subtotal Totals: Mods. + Pending Changes/Modifications</b>			<b>\$2,389,345.00</b>
Previously Authorized CMA			\$100,000.00
CMA Necessary to Execute Pending Changes/Mods + Possible Claims			\$1,000,000.00
<b>Total CMA including this Action</b>			<b>\$1,100,000.00</b>
<b>CMA Remaining for Future Changes/Mods after this Action</b>			<b>\$1,000,000.00</b>



## ATTACHMENT C

### Gateway Lighting Retrofit Project - Cost-Benefit Analysis for 5,000 2x4 Fixtures

Cost of Fixtures & Installation	Return on Investment (years)	Location / Area		Existing Conditions	Conditions After Retrofits	Projected Annual Savings
\$1,044,808.20	4.276	Gateway Office Spaces (2) T8, low watt	Energy Usage (kWh)	3,248,708	1,399,833	1,848,875
			Operating Costs	\$448,438.05	\$204,090.30	\$244,347.75
			GHGe (metric tons)	1,814.87	782.01	1,032.86
\$1,426,426.20	4.873	Gateway Office Spaces Volumetric LED	Energy Usage (kWh)	3,248,708	990,845	2,257,862
			Operating Costs	\$448,438.05	\$155,711.24	\$292,726.80
			GHGe (metric tons)	1,814.87	553.53	1,261.34

#### Energy and Operational Cost Savings Over the Operational Life

Year	Energy Cost (per kWh)	Existing	Option A - (2) T8, low watt		Option B - Volumetric LED	
			Cost	Savings	Cost	Savings
2015	\$0.125	\$448,438	\$204,090	\$244,348	\$155,711	\$292,727
2016	\$0.132	\$470,952	\$213,845	\$257,106	\$162,672	\$308,279
2017	\$0.139	\$494,691	\$224,129	\$270,562	\$170,008	\$324,684
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2020	\$0.143	\$509,010	\$230,462	\$278,548	\$174,659	\$334,351
2021	\$0.145	\$513,874	\$232,612	\$281,262	\$176,237	\$337,637
2022	\$0.146	\$518,785	\$234,782	\$284,003	\$177,830	\$340,955
2023	\$0.147	\$523,743	\$236,973	\$286,770	\$179,437	\$344,306
2024	\$0.149	\$528,748	\$239,184	\$289,564	\$181,058	\$347,690
2025	\$0.150	\$533,801	\$241,415	\$292,386	\$182,694	\$351,107
2026	\$0.152	\$538,902	\$243,668	\$295,235	\$184,344	\$354,558
2027	\$0.153	\$544,053	\$245,941	\$298,111	\$186,010	\$358,043
2028	\$0.155	\$549,252	\$248,236	\$301,016	\$187,690	\$361,562
2029	\$0.157	\$554,502	\$250,552	\$303,949	\$189,386	\$365,116
2030	\$0.158	\$559,802	\$252,890	\$306,911	\$191,097	\$368,705
2031	\$0.160	\$565,152	\$255,250	\$309,902	\$192,824	\$372,329
2032	\$0.161	\$570,555	\$257,632	\$312,922	\$194,566	\$375,988
2033	\$0.163	\$576,008	\$260,037	\$315,972	\$196,324	\$379,684
2034	\$0.165	\$581,515	\$262,464	\$319,051	\$198,098	\$383,416
2035	\$0.166	\$587,074	\$264,913	\$322,161	\$199,889	\$387,185
2036	\$0.168	\$592,687	\$267,386	\$325,301	\$201,695	\$390,991
2037	\$0.169	\$598,353	\$269,882	\$328,471	\$203,518	\$394,835
2038	\$0.171	\$604,074	\$272,402	\$331,673	\$205,358	\$398,717
2039	\$0.173	\$609,851	\$274,945	\$334,906	\$207,214	\$402,636
2040	\$0.175	\$615,683	\$277,512	\$338,171	\$209,088	\$406,595
<b>TOTAL</b>		<b>\$14,193,116</b>	<b>\$6,415,756</b>	<b>\$7,777,360</b>	<b>\$4,852,047</b>	<b>\$9,341,069</b>

#### Installation, Annual Lamp Replacement and Annual Maintenance Costs

	Total Existing	(2) T8, low watt usage	(2) T8, low watt savings	Volumetric LED usage	Volumetric LED savings
Fixtures/Installation	\$0	\$1,044,808		\$1,426,426	
Lamps/Maintenance	\$43,011.74	\$29,396.55	\$13,615.20	\$32,057.54	\$10,954.21
<b>TOTAL</b>	<b>\$43,012</b>	<b>\$1,074,205</b>		<b>\$1,458,484</b>	
Power Usage (kWh/yr)	Existing Lighting (kWh) 3,248,708	Consumption (kWh) 1,399,833	Savings (kWh) 1,848,875	Consumption (kWh) 990,845	Savings (kWh) 2,257,862

## ATTACHMENT C

### Gateway Lighting Retrofit Project - Cost-Benefit Analysis for 5,000 2x4 Fixtures

Cost of Fixtures & Installation	Return on Investment (years)	Location / Area		Existing Conditions	Conditions After Retrofits	Projected Annual Savings
\$1,044,808.20	4.276	Gateway Office Spaces (2) T8, low watt	Energy Usage (kWh)	3,248,708	1,399,833	1,848,875
			Operating Costs	\$448,438.05	\$204,090.30	\$244,347.75
			GHGe (metric tons)	1,814.87	782.01	1,032.86
\$1,426,426.20	4.873	Gateway Office Spaces Volumetric LED	Energy Usage (kWh)	3,248,708	990,845	2,257,862
			Operating Costs	\$448,438.05	\$155,711.24	\$292,726.80
			GHGe (metric tons)	1,814.87	553.53	1,261.34

#### Energy and Operational Cost Savings Over the Operational Life

Year	Energy Cost (per kWh)	Existing	Option A - (2) T8, low watt		Option B - Volumetric LED	
			Cost	Savings	Cost	Savings
2015	\$0.125	\$448,438	\$204,090	\$244,348	\$155,711	\$292,727
2016	\$0.132	\$470,952	\$213,845	\$257,106	\$162,672	\$308,279
2017	\$0.139	\$494,691	\$224,129	\$270,562	\$170,008	\$324,684
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2020	\$0.143	\$509,010	\$230,462	\$278,548	\$174,659	\$334,351
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2025	\$0.150	\$533,801	\$241,415	\$292,386	\$182,694	\$351,107
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2028	\$0.155	\$549,252	\$248,236	\$301,016	\$187,690	\$361,562
2029	\$0.157	\$554,502	\$250,552	\$303,949	\$189,386	\$365,116
2030	\$0.158	\$559,802	\$252,890	\$306,911	\$191,097	\$368,705
2031	\$0.160	\$565,152	\$255,250	\$309,902	\$192,824	\$372,329
2032	\$0.161	\$570,555	\$257,632	\$312,922	\$194,566	\$375,988
2033	\$0.163	\$576,008	\$260,037	\$315,972	\$196,324	\$379,684
2034	\$0.165	\$581,515	\$262,464	\$319,051	\$198,098	\$383,416
2035	\$0.166	\$587,074	\$264,913	\$322,161	\$199,889	\$387,185
2036	\$0.168	\$592,687	\$267,386	\$325,301	\$201,695	\$390,991
2037	\$0.169	\$598,353	\$269,882	\$328,471	\$203,518	\$394,835
2038	\$0.171	\$604,074	\$272,402	\$331,673	\$205,358	\$398,717
2039	\$0.173	\$609,851	\$274,945	\$334,906	\$207,214	\$402,636
2040	\$0.175	\$615,683	\$277,512	\$338,171	\$209,088	\$406,595
<b>TOTAL</b>		<b>\$14,193,116</b>	<b>\$6,415,756</b>	<b>\$7,777,360</b>	<b>\$4,852,047</b>	<b>\$9,341,069</b>

#### Installation, Annual Lamp Replacement and Annual Maintenance Costs

	Total Existing	(2) T8, low watt usage	(2) T8, low watt savings	Volumetric LED usage	Volumetric LED savings
Fixtures/Installation	\$0	\$1,044,808		\$1,426,426	
Lamps/Maintenance	\$43,011.74	\$29,396.55	\$13,615.20	\$32,057.54	\$10,954.21
<b>TOTAL</b>	<b>\$43,012</b>	<b>\$1,074,205</b>		<b>\$1,458,484</b>	
Power Usage (kWh/yr)	Existing Lighting (kWh) 3,248,708	Consumption (kWh) 1,399,833	Savings (kWh) 1,848,875	Consumption (kWh) 990,845	Savings (kWh) 2,257,862

**Board Report**

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**File #:** 2015-0223, **File Type:** Contract

**Agenda Number:** 40.

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**REVISED**  
**CONSTRUCTION COMMITTEE**  
**JULY 16, 2015**

**SUBJECT: WESTSIDE PURPLE LINE EXTENSION PROJECT**

**ACTION: AUTHORIZE THE AWARD OF CONTRACT C1078 MAINTENANCE OF WAY/NON-REVENUE VEHICLE MAINTENANCE BUILDING**

**RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer to award a 28 month firm fixed price contract, under Invitation for Bid No. C1078, with Clark Construction Group, the lowest responsive and responsible bidder for the **final design and construction of the Maintenance of Way/Non-Revenue Vehicle Maintenance Building** to be constructed as part of the Division 20 Yard and Shops expansion for a firm fixed price of \$52,830,310.

**ISSUE**

On September 19, 2013, the Board approved the use of the Design/Build delivery method for the Maintenance of Way/Non-Revenue Vehicle Maintenance Building, but did not approve the staff recommendation to authorize the CEO to award the contract after the receipt of bids. An Invitation For Bid (IFB) was advertised on September 19, 2014, under CPUC 130242 (a). Bids were received on February 6, 2015. Under CPUC 130242 (e) the contract shall be awarded to the lowest responsive and responsible bidder.

Board approval of the Recommendation is required to fulfill the scope related to the Division 20 Yard and Shops expansion and modifications as part of the requirements for the Westside Purple Line Extension Section 1 Project, as described in the Federal Transit Administration (FTA) Full Funding Grant Agreement (FFGA).

**BACKGROUND**

In April 2012, the Board of Directors certified the Final EIS/EIR for the Westside Purple Line Extension Project as a nine-mile, dual track heavy-rail transit subway project that will operate as an

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extension of the Metro Purple Line heavy rail transit subway system. The Project received the Full Funding Grant Agreement (FFGA) on May 21, 2014 for work on Section 1 (3.92 miles of twin-tunnels from Wilshire/Western to Wilshire/La Cienega, with three subway stations) that includes expansion and modifications to the Division 20 rail yard and shops facilities to support the extension of the Purple Line and the anticipated growth in service of both the Purple Line and Red Line.

In addition, the Maintenance of Way/NRV Maintenance Building is a replacement building for existing buildings that will be displaced in order to construct a turn-back facility within Division 20 beyond the existing terminus at Union Station. This area will also be required as a temporary laydown area for the C1045 Design/Build Contract (Tunnels, Stations, Trackwork, Systems and Systems Integration Testing) to allow the C1045 Contractor to stage and weld rail that will be fed into the 3.92 miles of the Westside Purple Line Extension Section 1 Project, via the existing tunnel portal located at Division 20.

Since the time of the certification of the Final EIS/EIR in 2012, staff has worked with stakeholders and the City of Los Angeles on requested changes to the Maintenance of Way/NRV Building. In 2012/13, these included accommodations for the City supported project to construct the Lucky Brand Jeans design/production facility on a portion of the identified yard expansion site and accommodations for the City's 6th Street Viaduct Replacement Project.

In 2014, residents and activists in the Arts District who had been working with the City of Los Angeles on the proposed new park and river access as part of the 6th Street Viaduct Replacement Project, raised concerns about the appropriateness of the Maintenance of Way/NRV (MOW/NRV) Building and its design adjacent to the proposed new park and river access. In response to these concerns, the Board approved Motion #83 on October 2, 2014, directing the CEO to work with the Arts District residents and other stakeholders to identify changes that could be made to the planned maintenance of way building to ensure that the building complements the proposed arts park and river walk.

Per the Board directive, Metro staff further engaged Arts District Representatives to explore their requests to develop design alternatives that would either relocate the building to an alternate site north of the 1st Street Bridge or provide design changes on the previously approved site adjacent to the future 6th Street Bridge. Attachment C provides a summary of these outreach efforts which included over 18 stakeholder meetings and more than 30 internal meetings to review and prepare the necessary analyses and responses to community requests. During this time, the stakeholders actively participated with their own proposals prepared by faculty at the Southern California Institute of Architecture and an outside architectural firm commissioned by the stakeholders to present alternative concepts and ideas.

Many of the above requests for changes and accommodations have been made and others can still be made during the Design/Build phase. However, it was determined that moving the building to a completely different site would have significant cost and schedule impacts to the Westside Purple Line Extension Project at this late stage in project development. Therefore, other alternatives were

explored during more recent meetings held between Metro and the Arts District Stakeholders to retain the MOW Building on the Metro owned site at 6th/Santa Fe. The revised site plan would maintain the current building footprint which includes rooftop parking and surface parking but reconfigures the site plan by increasing the distance to the 6th Street Bridge by moving the location of the building farther back on the current property that MTA has already acquired. Other concepts such as underground parking or a second level of rooftop parking were determined to be financially infeasible.

The revised plan will provide a building setback of at least 85 feet from the 6th Street property line and at least 50 feet from the Santa Fe Avenue property line. This will improve site lines and views of the new bridge from Santa Fe Avenue. We will also continue to explore the feasibility of pushing the building farther back from the bridge toward the northeastern property boundary if fire/life safety conditions mandated by the Los Angeles City Fire Department and operational requirements of our Division 20 Railyard Operations and Maintenance functions can be met..

We will continue to work with stakeholders and the City during the Final Design and Construction phase following the award of Contract C1078 to include possible additional elements requested by the stakeholders including landscaping, color & lighting treatments and an art component.

Metro Art staff normally work with the Project Team and Design Builder to explore how an art opportunity may be integrated. In this case, opportunities would be explored in exterior locations facing Santa Fe Avenue and the 6th Street Bridge. Opportunities may include enhanced architectural glass, grilles, panels or lighting. The Metro process convenes a Curatorial Advisory Committee of high profile Los Angeles area museum curators with a background in contemporary visual art to establish a Prequalified Artist Pool.

In the longer term, staff will work with the Los Angeles Bureau of Engineering as they develop designs for the Arts Park and River Gateway under the new 6th Street Bridge. One concept to be explored with the City would utilize some of the setback area that will be provided on the Metro owned MOW Building site to expand the Arts Plaza in return for City owned surplus properties that are expected to remain on the south side of the bridge following construction. These opportunities will be better understood when the City further develops their plans for the Arts Park and River Gateway immediately adjacent to the MOW Building site.

Board approval of the Recommendation at this time is required to maintain the overall schedule for the Westside Purple Line Extension Section 1 Project and reduce the potential of schedule delays and cost impacts.

## **DETERMINATION OF SAFETY IMPACT**

The recommended action has no impact on safety.

### **FINANCIAL IMPACT**

Funds are included in the FY16 budget for this action under Project 865518 - Westside Purple Line Extension Section 1 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 Executive Director of Engineering and Construction and the Project Manager will be responsible for budgeting costs in future years.

Board approval of the Recommendation at this time is required to maintain the overall schedule for the Westside Purple Line Extension Section 1 Project and reduce the potential of schedule delays and their resulting cost impacts. Staff will continue to work with Arts District Stakeholders following the award of the bid to address changes to the design on the 6<sup>th</sup>/Santa Fe approved site. As the recommended bid award amount is more than the budget line item for the Maintenance of Way/Non-Revenue Vehicle Maintenance Building included in the FTA Full Funding Grant Agreement, the additional costs related to the base scope will be funded by project contingency. In the event that further changes in the design result in new costs outside of the approved project budget, staff will return to the Board with a supplemental funding plan for approval.

### **Impact to Budget**

The sources of funds for the recommended action are Federal 5309 New Starts and Measure R 35% (Cash). The approved FY16 budget is designated for the Westside Purple Line Extension Section 1 Project and does not have an impact to operations funding sources. These funds were assumed in the LRTP for the Westside Purple Line Extension Section 1 Project. 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.

### **ALTERNATIVES CONSIDERED**

The Board could decide to reject the staff Recommendation to award the C1078 Contract. However, this alternative is not recommended because there is no assurance of better prices and the Maintenance of Way/Non-Revenue Vehicle Repair Building is required to replace existing buildings that will need to be demolished on their current site to provide a site for a future turn-back facility that will be required to support increased service levels on the Red/Purple Lines and satisfy the required headways for passenger revenue service. The current building site will also be required for the C1045 (Tunnels, Stations, Trackwork, Systems and Systems Integration Testing) Design/Build Contract to provide a temporary laydown and welding area for the trackwork that will be installed in the new tunnels and stations for the Westside Purple Line Extension Project.

**NEXT STEPS**

Project staff will issue a Notice of Award, execute a contract with the recommended contractor and once bonds, insurance, and project labor agreement requirements are met, issue a Notice to Proceed.

**ATTACHMENT**

- A. Procurement Summary
- B. Motion No. 83 by Director Molina - October 2014
- C. Summary of Extended Outreach Efforts

Prepared By:

Dennis S. Mori, Executive Officer, Project Management (213-922-7221)

Tim Clark, Interim Director Contract Administration (213-922-7246)

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Phillip A. Washington  
Chief Executive Officer



**PROCUREMENT SUMMARY  
WESTSIDE PURPLE LINE EXTENSION PROJECT  
MAINTENANCE OF WAY / NON REVENUE VEHICLE BUILDING  
/CONTRACT NO. C1078**

1.	<b>Contract Number:</b> C1078	
2.	<b>Recommended Vendor:</b> Clark Construction Group	
3.	<b>Type of Procurement (check one):</b> <input checked="" type="checkbox"/> IFB <input type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	<b>Procurement Dates:</b>	
	A. Issued: 9/19/14	
	B. Advertised/Publicized: 9/20/14	
	C. Pre-proposal/Pre-Bid Conference: 10/15/14	
	D. Proposals/Bids Due: 2/6/15	
	E. Pre-Qualification Completed: 3/18/15	
	F. Conflict of Interest Form Submitted to Ethics: 3/12/15	
	G. Protest Period End Date: June 23, 2015	
5.	<b>Solicitations Picked up/Downloaded:</b> 61	<b>Bids/Proposals Received:</b> 2
6.	<b>Contract Administrator:</b> Zachary Munoz	<b>Telephone Number:</b> (213)922-7301
7.	<b>Project Manager:</b> Dennis Mori	<b>Telephone Number:</b> (213)922-7238

**A. Procurement Background**

This Board Action is to approve Contract no. C1078 issued in support of Westside Purple Line Extension Project.

IFB No. C1078 was issued in accordance with Metro’s Acquisition Policy and the contract type is a firm fixed price.

Invitation for Bid (IFB) No. C1078 was issued on September 19, 2014. The Notice requesting bids was published in several newspapers of general circulation on September 20, 2014. The IFB was also posted on Metro’s website and notice of availability postcards were mailed to potential bidders. A Pre-Bid conference was held on October 15, 2014, with 48 firms in attendance. A total of 3 Amendments were issued.

- Amendment No. 1 issued on October 31, 2014, revised various Project Definition Documents and revised the bid due date;
- Amendment No. 2 issued on December 12, 2014, revised various Project Definition Documents, added various Reference Documents, and revised the bid due date;

- Amendment No. 3 issued on January 16, 2015, revised various Volume I Documents and Project Definition Documents.

Sixty-one firms purchased the IFB package. Metro responded to one hundred and two clarification inquiries from the plan holders. Metro received two bids at a public bid opening, held on February 6, 2015.

**B. Evaluation of Bids**

The firm recommended for award, Clark Construction Group, was found to be in full compliance with the bid requirements.

No.	Bidder Name	Bid Amount
1.	Clark Construction Group	\$52,923,000
2.	S.J. Amoroso Construction	\$57,277,000

**C. Price Analysis**

The recommended bid price has been determined to be fair and reasonable based upon adequate price competition and selection of the lowest responsive and responsible bidder.

Bidder Name	Bid Amount	Metro ICE	Negotiated or NTE amount
Clark Construction Group	\$52,923,000	\$61,119,226	N/A

As part of the IFB, Metro requested that bidders provide separate price schedules for unit prices for potential contract changes and delay compensation. These pricing schedules are not part of the base contract award, but are available to Metro to expedite negotiation of contract changes and compensable delay claims. Clark Construction Group’s Total Bid Price of \$52,923,000 included \$62,690 for unit price work for potential contract changes and \$30,000 for compensable delay compensation. These line items were included for evaluation purposes only, and are not included in the Total Contract Award amount of \$52,830,310.

**D. Background on Recommended Contractor**

Clark Construction Group (Clark) has been in operation since 1906. Clark has 4,200 employees spread across offices and jobsites throughout the United States. They have completed projects of all sizes and levels of complexity. Some of Clark’s past projects include, Washington Metropolitan Area Transit Authority Brentwood Shop Extension in Washington D.C., Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim CA, and LAX Tom Bradley International Terminal in Los Angeles CA).

**E. (1) Small Business Participation - Design**

The Diversity and Economic Opportunity Department (DEOD) established a 20% Disadvantaged Business Enterprise (DBE) goal for design. Clark Construction Group exceeded the goal and made a 24.07% DBE commitment.

<b>DBE Goal</b>	<b>20%</b>	<b>DBE Commitment</b>	<b>24.07%</b>
-----------------	------------	-----------------------	---------------

	<b>DBE</b>	<b>Ethnicity</b>	<b>% Committed</b>
1.	Bobby Knox	African American	0.72%
2.	Innovative Engineering Group	Asian Pacific American	8.47%
3.	JCE Structural Engineering Group	Hispanic American	2.41%
4.	Sanchez/Kamps Associated Designs	Hispanic American	1.16%
5.	V&A	Hispanic American	11.13%
6.	AP Engineering & Testing, Inc.	Asian Pacific American	0.18%
<b>Total Commitment</b>			<b>24.07%</b>

**E. (2) Small Business Participation - Construction**

The Diversity and Economic Opportunity Department (DEOD) established a Race Conscious DBE goal of 16% for construction. To be responsive to DBE requirements, Clark Construction Group was required to identify all known DBE subcontractors at time of proposal. Clark Construction Group listed one DBE firm as noted below. In addition, Clark Construction Group was required to submit a DBE Contracting Plan identifying construction opportunities to meet its DBE commitment. Clark Construction Group must update its Contracting Plan monthly, as contract work is bid and awarded to DBE firms. DEOD reviewed and approved the Contracting Plan submitted by Clark Construction Group.

<b>DBE Goal</b>	<b>16%</b>	<b>DBE Commitment</b>	<b>16%</b>
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	<b>DBE</b>	<b>Ethnicity</b>	<b>% Committed</b>
1.	BBC Electric	African American	1.95%
2.	TBD	TBD	14.05%
<b>Total Commitment</b>			<b>16.00%</b>

**F. All Subcontractors Included with Recommended Contractor’s Proposal**

	<b>Subcontractor</b>	<b>Services Provided</b>
1.	Gruen & Associates	Urban Design
2.	Bobby Knox	Specifications
3.	Exponent	Life Safety
4.	Gannett Fleming	Structural Engineering
5.	Innovative Engineering Group	Mechanical Engineering
6.	JCE Structural Engineering Group, Inc.	Structural Engineering
7.	Menlo Scientific	AV/Acoustics
8.	Sanchez/Kams Associated Design	Environmental Graphics
9.	TK1SC	Low Voltage Engineering
10.	V&A	Civil Engineering
11.	Haley & Aldrich	Geotech
12.	AP Engineering & Testing, Inc.	Lab Testing
13.	McMurray Stern	High Density Storage
14.	Letner Roofing Company	Metal Panels
15.	Control Air Conditioning	HVAC & Plumbing
16.	Cosco	Fire Sprinklers
17.	Neal Electric	Electrical
18.	BBC Electric	Electrical Supplier

**G. Living/Prevailing Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is applicable on Professional Service Contracts listed below that are \$25,000.00 or greater and have a contract term of three (3) months or more. The LW/SCWRP will apply to professional service contracts for Asphalt and Concrete Repair, Facility and Building Maintenance, Food Services, Janitorial and Custodial, Landscaping, Laundry Services, Moving Services, Office and Clerical (copier maintenance, facsimile maintenance, courier mailing, photographic, printing, collections), Parking Lot Management, Pest Control, Security, Street Sweeping, Towing, Trash Collection, Tree Trimming, Weed Abatement and Debris Removal; and any other Service or labor determined by Metro’s Board of Directors, Executive Management or DEOD, to meet the intent of the Policy.

**H. Prevailing Wage Applicability**

Prevailing wages are applicable on Public Works contracts that are funded by State/Local and/or Federal dollars. The California Labor Code requires the payment of prevailing wages on state and local contracts in excess of \$1,000; and in the case of federally assisted projects, Federal Labor Standards Provisions require the payment of prevailing wages for contract in excess of \$2,000.

In the event that this Contract is subject to the provisions of California law regarding Public Works, including, but not limited to California Labor Code Sections 227, 1021, and 1720 through and including 1861, together with all applicable regulations (e.g. Title 8 California Code of Regulations, Section 16001 et. seq.), prevailing wages will be applicable to the contract. In addition to the requirements for payment of prevailing wages set forth in the Labor Compliance Manual, this Contract, if federally funded, is also subject to payment of prevailing wages under federal law by the Davis Bacon Act, as determined by the US Department of Labor. All pertinent federal and state statutes and regulations, including but not limited to those referred to above will be incorporated by reference into the contract document.

Motion by Director Molina

October 2, 2014

Metro is planning to construct a new maintenance of way building at the south portion of the Division 20 maintenance facility to accommodate additional service due to the subway expansion. In 2012, the project was environmentally cleared as a part of the Westside Subway. More recently, the City of Los Angeles unveiled plans for the Sixth Street viaduct replacement project which includes an arts park and performance space as well as a river gateway tunnel connection under the rail yard to the Los Angeles River.

Residents and activists in the Arts District only recently became aware of the proposed maintenance of way building after working collaboratively with the City of Los Angeles on the proposed new park and river access for a number of years. The community has raised concerns about the appropriateness of the new building and its design adjacent to the proposed new park and river access. Metro is now ready to procure a design builder for the maintenance of way building. It is imperative that Metro address the community's concerns prior to selecting a design/build contractor for the project.

**I THEREFORE MOVE** that the Board direct the CEO to work with Arts District residents and other stakeholders to identify changes that can be made to the planned maintenance of way building, to ensure that the building compliments the proposed arts park and river walk, and report back to the Board at the November Board meeting.

**SUMMARY OF EXTENDED  
OUTREACH EFFORTS WITH  
ARTS DISTRICT STAKEHOLDERS**

**OCTOBER 2014 – JULY 2015**

Date	Activities	Internal Metro Meetings	Meetings with Arts District Stakeholders
October 2, 2014	Metro Board Motion to work with stakeholders on MOW building	-	-
October 2014 - March 2015	Stakeholder requested review of alternative site feasibility assessment to move MOW building north of 1 <sup>st</sup> Street	20	8
May 2015 – July 2015	Refocused reviews of changes to original site owned by Metro at 6 <sup>th</sup> /Santa Fe	10	10
<b>TOTAL MEETINGS</b>		<b>30</b>	<b>18</b>



**Board Report**

**File #:** 2015-0223, **File Type:** Contract

**Agenda Number:** 40.

**REVISED**  
**CONSTRUCTION COMMITTEE**  
**JULY 16, 2015**

**SUBJECT: WESTSIDE PURPLE LINE EXTENSION PROJECT**

**ACTION: AUTHORIZE THE AWARD OF CONTRACT C1078 MAINTENANCE OF WAY/NON-REVENUE VEHICLE MAINTENANCE BUILDING**

**RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer to award a 28 month firm fixed price contract, under Invitation for Bid No. C1078, with Clark Construction Group, the lowest responsive and responsible bidder for the **final design and construction of the Maintenance of Way/Non-Revenue Vehicle Maintenance Building** to be constructed as part of the Division 20 Yard and Shops expansion for a firm fixed price of \$52,830,310.

**ISSUE**

On September 19, 2013, the Board approved the use of the Design/Build delivery method for the Maintenance of Way/Non-Revenue Vehicle Maintenance Building, but did not approve the staff recommendation to authorize the CEO to award the contract after the receipt of bids. An Invitation For Bid (IFB) was advertised on September 19, 2014, under CPUC 130242 (a). Bids were received on February 6, 2015. Under CPUC 130242 (e) the contract shall be awarded to the lowest responsive and responsible bidder.

Board approval of the Recommendation is required to fulfill the scope related to the Division 20 Yard and Shops expansion and modifications as part of the requirements for the Westside Purple Line Extension Section 1 Project, as described in the Federal Transit Administration (FTA) Full Funding Grant Agreement (FFGA).

**BACKGROUND**

In April 2012, the Board of Directors certified the Final EIS/EIR for the Westside Purple Line Extension Project as a nine-mile, dual track heavy-rail transit subway project that will operate as an



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extension of the Metro Purple Line heavy rail transit subway system. The Project received the Full Funding Grant Agreement (FFGA) on May 21, 2014 for work on Section 1 (3.92 miles of twin-tunnels from Wilshire/Western to Wilshire/La Cienega, with three subway stations) that includes expansion and modifications to the Division 20 rail yard and shops facilities to support the extension of the Purple Line and the anticipated growth in service of both the Purple Line and Red Line.

In addition, the Maintenance of Way/NRV Maintenance Building is a replacement building for existing buildings that will be displaced in order to construct a turn-back facility within Division 20 beyond the existing terminus at Union Station. This area will also be required as a temporary laydown area for the C1045 Design/Build Contract (Tunnels, Stations, Trackwork, Systems and Systems Integration Testing) to allow the C1045 Contractor to stage and weld rail that will be fed into the 3.92 miles of the Westside Purple Line Extension Section 1 Project, via the existing tunnel portal located at Division 20.

Since the time of the certification of the Final EIS/EIR in 2012, staff has worked with stakeholders and the City of Los Angeles on requested changes to the Maintenance of Way/NRV Building. In 2012/13, these included accommodations for the City supported project to construct the Lucky Brand Jeans design/production facility on a portion of the identified yard expansion site and accommodations for the City's 6th Street Viaduct Replacement Project.

In 2014, residents and activists in the Arts District who had been working with the City of Los Angeles on the proposed new park and river access as part of the 6th Street Viaduct Replacement Project, raised concerns about the appropriateness of the Maintenance of Way/NRV (MOW/NRV) Building and its design adjacent to the proposed new park and river access. In response to these concerns, the Board approved Motion #83 on October 2, 2014, directing the CEO to work with the Arts District residents and other stakeholders to identify changes that could be made to the planned maintenance of way building to ensure that the building complements the proposed arts park and river walk.

Per the Board directive, Metro staff further engaged Arts District Representatives to explore their requests to develop design alternatives that would either relocate the building to an alternate site north of the 1st Street Bridge or provide design changes on the previously approved site adjacent to the future 6th Street Bridge. Attachment C provides a summary of these outreach efforts which included over 18 stakeholder meetings and more than 30 internal meetings to review and prepare the necessary analyses and responses to community requests. During this time, the stakeholders actively participated with their own proposals prepared by faculty at the Southern California Institute of Architecture and an outside architectural firm commissioned by the stakeholders to present alternative concepts and ideas.

Many of the above requests for changes and accommodations have been made and others can still be made during the Design/Build phase. However, it was determined that moving the building to a completely different site would have significant cost and schedule impacts to the Westside Purple Line Extension Project at this late stage in project development. Therefore, other alternatives were

explored during more recent meetings held between Metro and the Arts District Stakeholders to retain the MOW Building on the Metro owned site at 6th/Santa Fe. The revised site plan would maintain the current building footprint which includes rooftop parking and surface parking but reconfigures the site plan by increasing the distance to the 6th Street Bridge by moving the location of the building farther back on the current property that MTA has already acquired. Other concepts such as underground parking or a second level of rooftop parking were determined to be financially infeasible.

The revised plan will provide a building setback of at least 85 feet from the 6th Street property line and at least 50 feet from the Santa Fe Avenue property line. This will improve site lines and views of the new bridge from Santa Fe Avenue. We will also continue to explore the feasibility of pushing the building farther back from the bridge toward the northeastern property boundary if fire/life safety conditions mandated by the Los Angeles City Fire Department and operational requirements of our Division 20 Railyard Operations and Maintenance functions can be met..

We will continue to work with stakeholders and the City during the Final Design and Construction phase following the award of Contract C1078 to include possible additional elements requested by the stakeholders including landscaping, color & lighting treatments and an art component.

Metro Art staff normally work with the Project Team and Design Builder to explore how an art opportunity may be integrated. In this case, opportunities would be explored in exterior locations facing Santa Fe Avenue and the 6th Street Bridge. Opportunities may include enhanced architectural glass, grilles, panels or lighting. The Metro process convenes a Curatorial Advisory Committee of high profile Los Angeles area museum curators with a background in contemporary visual art to establish a Prequalified Artist Pool.

In the longer term, staff will work with the Los Angeles Bureau of Engineering as they develop designs for the Arts Park and River Gateway under the new 6th Street Bridge. One concept to be explored with the City would utilize some of the setback area that will be provided on the Metro owned MOW Building site to expand the Arts Plaza in return for City owned surplus properties that are expected to remain on the south side of the bridge following construction. These opportunities will be better understood when the City further develops their plans for the Arts Park and River Gateway immediately adjacent to the MOW Building site.

Board approval of the Recommendation at this time is required to maintain the overall schedule for the Westside Purple Line Extension Section 1 Project and reduce the potential of schedule delays and cost impacts.

## **DETERMINATION OF SAFETY IMPACT**

The recommended action has no impact on safety.

### **FINANCIAL IMPACT**

Funds are included in the FY16 budget for this action under Project 865518 - Westside Purple Line Extension Section 1 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 Executive Director of Engineering and Construction and the Project Manager will be responsible for budgeting costs in future years.

Board approval of the Recommendation at this time is required to maintain the overall schedule for the Westside Purple Line Extension Section 1 Project and reduce the potential of schedule delays and their resulting cost impacts. Staff will continue to work with Arts District Stakeholders following the award of the bid to address changes to the design on the 6<sup>th</sup>/Santa Fe approved site. As the recommended bid award amount is more than the budget line item for the Maintenance of Way/Non-Revenue Vehicle Maintenance Building included in the FTA Full Funding Grant Agreement, the additional costs related to the base scope will be funded by project contingency. In the event that further changes in the design result in new costs outside of the approved project budget, staff will return to the Board with a supplemental funding plan for approval.

### **Impact to Budget**

The sources of funds for the recommended action are Federal 5309 New Starts and Measure R 35% (Cash). The approved FY16 budget is designated for the Westside Purple Line Extension Section 1 Project and does not have an impact to operations funding sources. These funds were assumed in the LRTP for the Westside Purple Line Extension Section 1 Project. 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.

### **ALTERNATIVES CONSIDERED**

The Board could decide to reject the staff Recommendation to award the C1078 Contract. However, this alternative is not recommended because there is no assurance of better prices and the Maintenance of Way/Non-Revenue Vehicle Repair Building is required to replace existing buildings that will need to be demolished on their current site to provide a site for a future turn-back facility that will be required to support increased service levels on the Red/Purple Lines and satisfy the required headways for passenger revenue service. The current building site will also be required for the C1045 (Tunnels, Stations, Trackwork, Systems and Systems Integration Testing) Design/Build Contract to provide a temporary laydown and welding area for the trackwork that will be installed in the new tunnels and stations for the Westside Purple Line Extension Project.

**NEXT STEPS**

Project staff will issue a Notice of Award, execute a contract with the recommended contractor and once bonds, insurance, and project labor agreement requirements are met, issue a Notice to Proceed.

**ATTACHMENT**

- A. Procurement Summary
- B. Motion No. 83 by Director Molina - October 2014
- C. Summary of Extended Outreach Efforts

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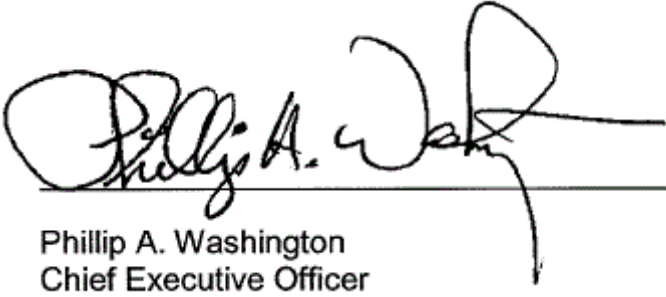
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Phillip A. Washington  
Chief Executive Officer

**Board Report**

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**File #:** 2015-0224, **File Type:** Contract**Agenda Number:** 41.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015****SUBJECT: SUSTAINABILITY PROGRAM ASSISTANT SERVICES****ACTION: AWARD AND EXECUTE PROFESSIONAL SERVICES CONTRACT FOR  
SUSTAINABILITY PROGRAM ASSISTANT SERVICES****RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer to award and execute a five year contract, Contract No. PS84203243, with Cumming Construction Management, Inc. for **Sustainability Program Assistance Services on Task Orders** for a total amount not-to-exceed \$12,481,230 inclusive of three base years (not to exceed \$7,339,981) with two one-year options (year one = \$2,545,173 and year two = \$2,596,076.)

**ISSUE**

The Los Angeles County Metropolitan Transportation Authority (Metro) has incorporated sustainable principles, specifically climate, energy, water and resource conservation and management, into its organizational values and core business goals. These principles express the agency's commitment to "reduce, re-use, and recycle all internal resources and reduce greenhouse gas emissions." Operational and construction-related sustainability principles have been formally implemented throughout our agency since 2007. Over the past few years, the number of initiatives and projects related to these themes has evolved resulting in significant cost savings and operational efficiencies, while simultaneously increasing the health and welfare of our employees and the people we serve through a safe working and customer focused environment.

As we increase our transit and transportation infrastructure, staff's internal ability to oversee these sustainability-related operational and capital projects become more challenging on two fronts: our ability to properly manage the implementation of the cost-saving and environmentally protective projects as well as our ability to ensure that we develop and implement new ideas to ensure continual improvement. To this end, staff has solicited and recommends the execution of a professional services contract for sustainability program assistance services to provide as-needed analysis, studies, surveys, investigations, modeling, predictions, and/or reports related to the operation and

maintenance of Metro's transportation system, facilities, and support activities.

Metro's existing Environmental Engineering Consultant Services contract includes sustainability project implementation. This recommended contract award was solicited to increase participation of firms that work in the sustainability industry in Metro's programs, especially those which can provide programmatic sustainability oversight for a large transit agency, such as Metro.

The Environmental Compliance and Sustainability (ECSD) group is in the midst of an unprecedented time to consider new responsibilities and revenue generating opportunities as a result of evolving environmental and climatic statutory and regulatory needs to ensure the protection of human health and environment; as well as to constantly address the challenge of operational sustainability while ensuring resiliency and maintaining a state of good repair. As technology in the energy, water, resource management conservation and environmental space also continues to evolve at a very fast pace, ECSD has a need for several specialty contracts to respond to these continuously challenging agency-wide and project needs while continually balancing our short- and long-term goals of succession planning, cost-savings, employee development, economic growth, and project success. The process to procure for such specialty contracts is consistent with ECSD's Business Plan submitted and presented to our Board in January 2015 and as reviewed with OMB through the FY16 budget process.

## **DISCUSSION**

Metro's existing Environmental Engineering Consultant Services contract supports numerous sustainability projects, such as planning for recycled water irrigation lines, deployment of a water recycling system, design of lighting retrofits and energy efficiency measures, engineering of renewable energy systems, other resource reduction initiatives at Metro facilities and alignments, and the implementation of Metro's Environmental Management System (EMS).

Staff divided the current scope of sustainability-related work into four new individual scopes of work to increase participation of firms that work in the sustainability industry, specifically in the field of programmatic sustainability assistance and EMS implementation. This Contract No. PS84203243 is the third contract award being presented to the Board for approval. Earlier contract award include Contract No. PS84203244, Energy and Renewable Energy Consultant Services and Contract No. PS84203245, Solid Waste and Natural Resource Management Consultant Services. A fourth consultant contract for climate change mitigation/adaptation implementation will be released in the summer of 2015.

Contract No. PS84203243 will be an indefinite delivery/indefinite quantity contract. The consultant is not guaranteed any work. The services are only required on an as needed basis for specific program assistance. When consulting service requirements arise staff will issue Contract Work Orders and Task Orders.. These Task Orders will be funded from an existing project's budget with consideration of any information available at the time of planning and applicable time constraints on performance of the work.

All Task Orders will be fully negotiated based on agreed upon rates established in the Contract. .

Staff applies strict project controls in the execution of each of these Task Orders to closely monitor the Consultant's budget and Task Order schedules. No funds are obligated until a Contract Work Order/Task Order is awarded against a valid project.

The Contract No. PS84203243 includes a 25% Disadvantaged Business Enterprise (DBE)/Small Business Enterprise (SBE) goal. DBE attainment is based on the aggregate value of all task orders issued.

The success of Metro's sustainability program has resulted in a significant expansion of the program over the last few years, prompting the diversification and focus of Metro's sustainability consultant support into several disciplines. The services that this contract provides include the oversight of all sustainability-related efforts including those for our major capital projects, energy and resource management, implementation of sustainability related infrastructure, Environmental Management System implementation, and carbon emissions reduction projects oversight. This consultant will provide expert assistance to Metro staff on all matters that relate to the sustainability programmatic implementation.

To accomplish the assigned tasks, the consultant will provide necessary staff, sub-consultants, equipment, software, supplies, and services. Consultant shall employ or subcontract as necessary with such diverse professionals as Environmental Management System Specialists; Geographic Information Services (GIS) Specialist; Air Quality Engineers; Sustainability Engineers; Climate Engineer/Scientist; and such other professional practitioners as may be needed to support the required EMS, training and program guidance activities.

### **DETERMINATION OF SAFETY IMPACT**

This Board action will not have an adverse impact on safety standards for Metro. It will however increase safety as sustainability related projects and programs are implemented to increase the health and safety of our staff and enhance customer experience of our system.

### **FINANCIAL IMPACT**

Contract No. PS84203243 will be an Indefinite Delivery/Indefinite Quantity (IDIQ) contract. No MTA funds are obligated until a Contract Work Order (CWO) is issued by an MTA authorized Contracting Officer against a valid project budget. No expenditures are authorized until a Task Order is awarded by an MTA authorized Contracting Officer for a specific package of work within the CWO. All task orders are to be individually negotiated and level of effort fully defined prior to the authorization of any project specific funds. Execution of work under those Task Orders within those CWO awards can continue beyond the contract end date.

Obligations and authorizations made within the total Contract Amount will be against specific project or operations budgets which make up the Board-approved MTA budget for this particular fiscal year. Specific funding for this contract will parallel the project approved by Board under separate actions. The Executive Directors and Project Managers of each of the business units and projects overseeing



these projects will be responsible for providing appropriate budgets.

### Impact to Budget

There will be no net impact to Bus and Rail Operating Budgets. The initial source of funds for this contract is included in the FY15 budget under Project Number 450003 - Sustainability Environment, Cost Center 8420 Environmental Compliance and Services, Account 50316 Professional and Technical Services.

### ALTERNATIVES CONSIDERED

The Metro Board has provided significant guidance in Metro's vision of sustainability. Many projects have been implemented, constructed, and currently being maintained to fulfill this vision. These programs have provided significant financial, employee welfare, and enhanced customer experience for our agency. The benefits from these initial efforts are constrained by the number of staff currently able to provide implementation oversight. Contract PS84203243 is designed to accelerate many of these efforts specifically the cost-saving measures that have been programmed for the next few years. Having no support will result in missed opportunities for achieving operational and construction cost benefits.

During the last five years, the Metro Board has also approved various plans to achieve reductions in operational greenhouse gas emissions; implement innovative approaches and strategies to enhance customer experience, reduce limited natural and energy resource use; investigate public-private partnerships to supplement limited funds to design, build, operate, and maintain sustainability related infrastructure; and increase operational efficiency. Metro's operational sustainability program administered through the Environmental Compliance and Services Department has executed significant portions of that mandate; and will continue to do so using all of the sustainability-related consulting contracts (including Contract No. PS84203243) as an expert supplement for current staff's expertise.

The Metro Board has already desired staff to do programmatic implementation activities in house. However, there is an inherent risk in hiring for too many credentialed and highly skilled staff members full-time. While there are cost efficiencies that may be achieved by having some of these types of staff, current Metro staff determined that there is an optimum number of staff that we should internally hire to oversee these projects, then seek supplementary consultant Sustainability Project Assistance subject matter experts to complement staff skillsets only as-needed. We have seen the effectiveness of this management style (i.e., as-needed combination of internal staff and expert consultants), especially in large programs such as the energy and EMS. Unlike the other three contracts mentioned previously (i.e., Energy, Waster and Resource Management, and Climate Change) this contract being approved does not provide design services, but instead provides the programmatic expertise to make sure that design and construction of sustainability-related infrastructure and related projects and programs are appropriately implemented.

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Staff can solicit and award individual contracts every time additional staff is needed for oversight in any of the programmed sustainability-related efforts. Individually procuring these micro-contracts have associated inconsistent and most likely cumulative higher administrative and execution costs, especially in a sustainability program as large as Metro's. As many of our projects overlap with one another in a single major capital project or facility, having multiple consultants with overlapping skills will cause delays and result in administrative inefficiencies. ECSD currently oversees or supports over 100 task orders in any single fiscal year.

### **NEXT STEPS**

After the recommended Board Action is approved, staff will execute the conformed contract and proceed with issuing Task Orders and Contract Work Orders.

### **ATTACHMENTS**

- A. Procurement Summary
- B. Types and Total Value Estimates of Projects - FY15 to FY 19

Prepared By:

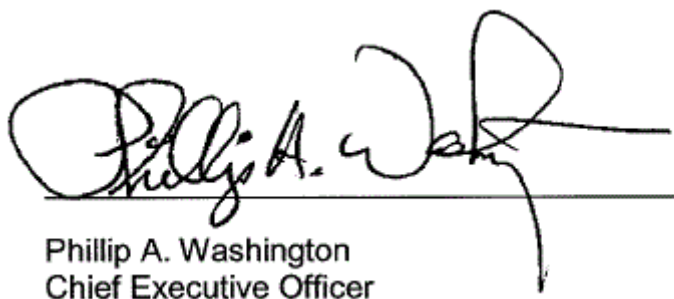
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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

## SUSTAINABILITY PROGRAM ASSISTANCE SERVICES/PS84203243

1.	<b>Contract Number:</b> PS84203243	
2.	<b>Recommended Vendor:</b> Cumming Construction Management, Inc.	
3.	<b>Type of Procurement (check one):</b> <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.	<b>Procurement Dates:</b>	
	<b>A. Issued:</b> 09/09/2014	
	<b>B. Advertised/Publicized:</b> 09/20/14	
	<b>C. Pre-proposal/Pre-Bid Conference:</b> 10/01/2014	
	<b>D. Proposals/Bids Due:</b> 11/21/2014	
	<b>E. Pre-Qualification Completed:</b> Pending	
	<b>F. Conflict of Interest Form Submitted to Ethics:</b> 01/29/2015	
	<b>G. Protest Period End Date:</b> (15 Calendar Days after Notification of Intent to Award)	
5.	<b>Solicitations Picked up/Downloaded:</b> 143	<b>Bids/Proposals Received:</b> 3
6.	<b>Contract Administrator:</b> Alan Leung	<b>Telephone Number:</b> (213) 922-7574
7.	<b>Project Manager:</b> Emmanuel Liban	<b>Telephone Number:</b> (213) 922-2471

**A. Procurement Background**

This Board Action is to approve the execution of Contract No. PS84203243 issued in support of Sustainability Program Assistance Services.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract will issue contract work orders on a Cost-Plus-Fixed Fee basis based on the Scope of Work and level of effort for each project participating in the services of this contract.

One (1) amendment was issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on October 21, 2014 revised the Due Date, the Submittal Requirements, and Form V1.0.

Metro held a pre-proposal conference on October 1, 2014, in the Gateway Conference Room on the 3rd floor of the Gateway Building. There were thirty-five (35) representatives from twenty-seven (27) firms that signed in at the pre-proposal conference. One-hundred forty three (143) individuals from various firms picked up the RFP Package. There one (1) amendment issued during the solicitation phase of this RFP. The firms that picked up or downloaded the RFP asked a total of forty-seven (47) Questions.

Metro received three (3) proposals on the due date November 21, 2014.

**B. Evaluation of Proposals/Bids**

The Proposal Evaluation Team (PET) consisted of two (2) members from Metro’s Environmental Department and one (1) member from Metro’s Planning Department, with good working knowledge of the contract requirements and technical capabilities to evaluate the proposals fairly without prejudice. The PET evaluated each firm and its proposed team of subcontractors, in accordance with the following Evaluation Criteria set forth in the RFP documents, and performance requirements included in the scope of services, utilizing the scoring guidelines shown in the table below.

The proposals were evaluated based on the following evaluation criteria and weights:

- Price 30 percent
- Degree of Skills and Experience of Personnel on Team 25 percent
- Experience of Firms on Team 20 percent
- Project management approach 15 percent
- Effectiveness of Management Plan and Quality 10 Percent

The evaluation criteria are appropriate and consistent with criteria developed for other, similar types of procurements. Several factors were considered when developing these weights, giving the greatest importance to the Proposer team’s capabilities and experience.

The solicitation was a competitively negotiated (non-A&E) procurement with price as a factor, as governed by the Metro ACQ-2 and FTA Circular 4220.1f. Price and technical factors were considered in the overall scoring of the proposals and award is based on the Proposal deemed in Metro’s best interests, followed by negotiations with the selected firm.

Metro received three (3) proposals on the due date of November 21, 2014, from the following firms:

1. CDM Smith, Inc. (CDM Smith)
2. Cumming Construction Management, Inc. (Cumming)
3. Urban Collaborative Studios, LLC. (UCS)

During the week of December 15, 2014, the evaluation committee met and interviewed the firms. The firms’ project managers and key team members had an opportunity to present each team’s qualifications and respond to the evaluation committee’s questions. In general, each team’s presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed each firm’s commitment to the success of the project. Also highlighted

were staffing plans, work plans, and perceived project issues. Each team was asked questions relative to each firm's proposed alternatives and previous experience.

**Qualifications Summary of Recommended Firm:**

The Cumming team exhibited a clear and thorough understanding of the project and approach, as evidenced by their proposal and oral interview. Both their written proposal and oral answers described a programmatic approach to the Scope of Services that seemed to align well with Metro's sustainability goals, policies, and practices. The approach demonstrated deep understanding of each section of the scope and addressed each item individually, along with best practices on how to execute each item. Additionally, Cumming's presentation also addressed both near and long term issues they expect to encounter.

<b>1</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>2</b>	<b>Cumming</b>				
<b>3</b>	Price		30.00%	28	
<b>4</b>	Degree of Skills and Experience of Personnel on Team		25.00%	23	
<b>5</b>	Experience of Firms on Team		20.00%	18	
<b>6</b>	Project Understanding and Approach		15.00%	14	
<b>7</b>	Effectiveness of Management Plan and Quality		10.00%	9	
<b>8</b>	<b>Total</b>		<b>100.00%</b>	<b>92</b>	<b>1</b>

<b>9</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>10</b>	<b>CDM Smith</b>				
<b>11</b>	Price		30.00%	19	
<b>12</b>	Degree of Skills and Experience of Personnel on Team		25.00%	18	
<b>13</b>	Experience of Firms on Team		20.00%	15	
<b>14</b>	Project Understanding and Approach		15.00%	12	

<b>15</b>	Effectiveness of Management Plan and Quality		10.00%	9	
<b>16</b>	<b>Total</b>		<b>100.00%</b>	<b>73</b>	<b>2</b>

<b>17</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>18</b>	<b>UCS</b>				
<b>19</b>	Price		30.00%	30	
<b>20</b>	Degree of Skills and Experience of Personnel on Team		25.00%	10	
<b>21</b>	Experience of Firms on Team		20.00%	9	
<b>22</b>	Project Understanding and Approach		15.00%	5	
<b>23</b>	Effectiveness of Management Plan and Quality		10.00%	5	
<b>24</b>	<b>Total</b>		<b>100.00%</b>	<b>59</b>	<b>3</b>

### **C. Cost/Price Analysis**

The cost analysis included (1) a comparison with historical data of other firms offering similar services; (2) an analysis of audited rates and factors for labor, equipment and other direct costs, and (3) compliance with both the Federal Acquisition Regulation (FAR) Part 31 guidelines and Generally Accepted Accounting Principles (GAAP). Metro has negotiated fixed billing rates for direct labor and equipment, terms and conditions, level of effort, a provisional overhead rate, and a factor to establish a fixed fee for each task order. The pricing for each task order will use the negotiated labor rates plus the provisional overhead rate and negotiated fee factor to establish a not-to-exceed amount on a cost-plus-fixed fee basis.

An audit request has been submitted to the Metro Management Audit Services Department (MASD). In order to prevent any unnecessary delay in contract award, provisional rates have been established subject to retroactive adjustments upon completion of any necessary audits. In accordance with FTA Circular 4220.1.F, if an audit has been performed by any other cognizant agency within the last twelve month period, Metro will receive and accept that audit report for the above purposes rather than perform another audit.

A fair and reasonable price for all future Contract Work Orders will be determined based upon a cost analysis, technical evaluation, fact finding, and negotiations, before issuing work to the Consultant.

The total evaluated contract prices are listed below.

	<b>Bidder/Proposer Name</b>	<b>Proposal Amount for Evaluation</b>	<b>Negotiated</b>
1	Cumming	\$12,823,943	\$12,481,230

	<b>Bidder/Proposer Name</b>	<b>Proposal Amount for Evaluation</b>	<b>Negotiated</b>
2.	CDM Smith	\$19,007,825	\$19,007,825

	<b>Bidder/Proposer Name</b>	<b>Proposal Amount for Evaluation</b>	<b>Negotiated</b>
3.	UCS	\$5,096,122	\$11,830,629

UCS submitted an updated cost proposal that increased their proposal amount from \$5,096,122 to \$11,830,629 as part of their Best and Final Offer because the proposer chose to address clarifications in the scope of services and anticipated level of effort.

The evaluated prices were scored based on the following formula:

Proposer Cost Score = Lowest Cost Proposal / Proposer's Cost \* 30 (maximum score)

#### **D. Background on Recommended Contractor**

Cumming is an international company that provides consultancy services in a wide variety of fields, including environmental, sustainability, and support services. Since opening for business nearly two decades ago, Cumming has grown consistently and substantially. Today, they have nearly 350 team members and have completed projects in more than 25 countries around the world.

The recommended contractor also has experience working in the Los Angeles area with public agencies to provide environmental project management services similar to the scope of services required under this contract. Cumming offers support and management services necessary to address Metro's expanding sustainable capital building programs, including construction support, environmental and sustainability policy development and implementation, energy conservation and renewable energy management, environmental management systems, and climate change and greenhouse gas emissions management.

**E. Small Business Participation**

The Diversity and Economic Opportunity Department (DEOD) established a 25% Disadvantaged Business Enterprise (DBE) goal for this solicitation. Cumming Construction Management, Inc. exceeded the goal by making a 43.83% RC DBE and 6.19% RN DBE commitments.

<b>Disadvantaged Business Enterprise Goal</b>	<b>25% DBE</b>	<b>Disadvantaged Business Enterprise Commitment</b>	<b>43.83% RC DBE 6.19% RN DBE</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Commitment</b>
1.	ICI Engineers	Asian Pacific American	2.92%
2.	C2PM	Asian Pacific American	4.87%
3.	Paragon	Asian Pacific American	9.90%
4.	GC Green	Hispanic American	4.99%
5.	Century Diversified, Inc.	Hispanic American	1.64%
6.	W2Design	Asian Pacific American	5.95%
7.	The Solis Group	Hispanic American	3.04%
8.	Power-Tech Engineers	Hispanic American	10.51%
	<b>Total RC DBE Commitment</b>		<b>43.83%</b>
9.	Coto Consulting, Inc.	Non-Minority Women	4.24%
10.	Integrated Engineering Mgmt.	Non-Minority Women	1.95%
	<b>Total RN DBE Commitment</b>		<b>6.19%</b>

**F. Living Wage and Service Contract Worker Retention Policy**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

**G. All Subcontractors Included with Recommended Contractor’s Proposal**

	<b>Subcontractor</b>	<b>Services Provided</b>
1.	Century Diversified	Engineering and CADD services
2.	W2Design	Engineering and GIS expertise
3.	Coto Consulting	Certified ISO14001 and EMS consulting
4.	ICI Engineers	Energy engineering
5.	C2PM	EMS and Project Management
6.	Paragon	EMS and Project Management
7.	GC Green	Energy engineering
8.	Okapi Architecture	Energy & Sustainability planning
9.	The Solis Group	Project management



10.	Integrated Engineering Management	Engineering
11.	Empowered Solutions	Energy engineering and renewable energy
12.	Power-Tech Engineers	Energy engineering
13.	Eckersall	GIS Services
14.	Evans Brooks Associates	Sustainability policy and planning
15.	Lentini Design	Graphic design and marketing

Types and Total Value Estimates of Projects – FY15 to FY19

EMS, Training, and Sustainability Program Guidance	No. of Units (yrs., projs.,etc.)	Estimated Cost of Consultant Services per Unit	Total Estimated Cost for Consultant Services
<b>a. EMS Program Maintenance Support</b>	<b>5 years</b>	<b>\$1,500,000</b>	<b>\$7,500,000</b>
<b>b. Environmental Training Institute</b>	<b>5 years</b>	<b>\$500,000</b>	<b>\$2,500,000</b>
<b>c. Sustainability Policies, Programs, and Guidance</b>	<b>5 years</b>	<b>\$450,000</b>	<b>\$2,250,000</b>
1. Sustainability Policy Development	5 years	\$75,000	\$375,000
2. Coordinate Sustainability Projects and Initiatives	5 years	\$75,000	\$375,000
3. Sustainability Program Guidance and Oversight	5 years	\$75,000	\$375,000
4. Develop and Maintain the Sustainability Dashboard & GIS	5 years	\$75,000	\$375,000
5. Prepare Annual Energy and Resource Report	5 years	\$150,000	\$750,000
<b>d. EMS &amp; Training Plans, Studies, Reports</b>	<b>5 reports</b>	<b>\$100,000</b>	<b>\$500,000</b>
<b>e. Innovative Sustainability Initiatives/ Solutions</b>	<b>5 years</b>	<b>\$50,000</b>	<b>\$250,000</b>

LOP Amount

ROM/Recommended  
\$13,000,000

**Board Report**

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**File #:** 2015-0542, **File Type:** Contract**Agenda Number:** 42.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015****SUBJECT: ENVIRONMENTAL ENGINEERING SERVICES****ACTION: AWARD AND EXECUTE PROFESSIONAL SERVICES  
CONTRACT FOR ENVIRONMENTAL ENGINEERING SERVICES****RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer to award and execute a five year contract, Contract No. PS84203274, with Kleinfelder, Inc. for **Environmental Engineering and Consulting services on Task Orders**, inclusive of three base years and two one-year option years with a total not-to-exceed amount of \$12,000,000.00. Base year contract value is \$7.2 million; Option year one contract value is \$2.4 million; and Option year two contract value is \$2.4 million.

**ISSUE**

Every Capital Project and many ongoing facilities maintenance and restoration activities undertaken by LA METRO requires environmental engineering and consulting services. METRO must remain in compliance with all applicable environmental laws and regulations to avoid potential fines, and civil and criminal liability. This contract is anticipated to be a critical component for technical and environmental engineering support for any of our capital and operating projects. This contract provides technical expert environmental assistance to ensure timely environmental compliance and execution of needed environmental design, data generation and analysis, and environmental measurement and monitoring necessary and as required by Federal and State statutes and regulations and local ordinances.

The Environmental Compliance and Sustainability (ECSD) group is in the midst of an unprecedented time to consider new responsibilities and revenue generating opportunities as a result of evolving environmental and climatic statutory and regulatory needs to ensure the protection of human health and environment; as well as to constantly address the challenge of operational sustainability while ensuring resiliency and maintaining a state of good repair. As technology in the energy, water, resource management conservation and environmental space also continues to evolve at a very fast pace, ECSD has a need for several specialty contracts to respond to these continuously challenging

agency-wide and project needs while continually balancing our short- and long-term goals of succession planning, cost-savings, employee development, economic growth, and project success. The process to procure for such specialty contracts is consistent with ECSD's Business Plan submitted and presented to our Board in January 2015 and as reviewed with OMB through the FY16 budget process.

## **DISCUSSION**

Metro's environmental engineering and consulting contract scopes include continued effort on performing environmental and geotechnical assessments, Phase I environmental site assessments, lead based paint and asbestos surveys, stormwater monitoring, air quality monitoring, soil and groundwater sampling, industrial wastewater sampling, GASB 49 Environmental Liability Reporting, fuel storage tank system design, permitting assistance and other regulatory reporting requirements.

Contract No. PS84203274 will be an indefinite delivery/indefinite quantity contract. The consultant is not guaranteed any work. When the need for environmental engineering and consulting services arises, only then will staff be able to issue Contract Work Orders from which Task Orders or changes are drawn. These Task Orders and changes will be funded from an existing project's budget with consideration of any information available at the time of planning and applicable time constraints on performance of the work.

All of the Task Orders will be fully negotiated based on agreed upon rates that will be negotiated at the onset of the project. Staff applies strict project controls in the execution of each of these Task Orders to closely monitor the Consultant's budget and Task Order schedules. No funds are obligated until a Contract Work Order/Task Order is awarded against a valid project.

The Contract No. PS84203274 includes a 15% Disadvantaged Business Enterprise (DBE)/Small Business Enterprise (SBE) goal. DBE attainment is based on the aggregate value of all task orders issued.

To accomplish the assigned tasks, the consultant will provide necessary staff, sub-consultants, equipment, software, supplies, and services. The consultant shall employ or subcontract as necessary with diverse environmental professionals such as professional engineers; registered geologists, qualified stormwater developers (QSD), Certified Industrial Hygienists (CIH), and Certified Asbestos Consultants (CAC).

## **DETERMINATION OF SAFETY IMPACT**

This Board action will not have an adverse impact on safety standards for Metro.

## **FINANCIAL IMPACT**

Contract No. PS84203274 will be an Indefinite Delivery/Indefinite Quantity (IDIQ) contract. No MTA funds are obligated until a Contract Work Order (CWO) is issued by an MTA authorized Contracting Officer against a valid project budget. No expenditures are authorized until a Task Order is awarded

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by an MTA authorized Contracting Officer for a specific package of work within the CWO. In other words, all task orders are to be individually negotiated and level of effort fully defined prior to the authorization of any project specific funds. Execution of work under those Task Orders within those CWO awards can continue beyond the contract end date.

Obligations and authorizations made within the total Contract Amount will be against specific project or operations budgets which make up the Board-approved MTA budget for this particular fiscal year. Specific funding for this contract will parallel the project approved by Board under separate actions. The Executive Directors and Project Managers of each of the business units and projects overseeing these projects will be responsible for providing appropriate budgets.

#### Impact to Budget

There will be no net impact to Bus and Rail Operating Budgets. The initial source of funds for this contract is included in the FY15 budget under Project Number 300012 - Site Remediation, Cost Center 8420 Environmental Compliance and Services, Account 50316 Professional and Technical Services. Future task orders are to be individually negotiated and level of effort fully defined prior to the authorization of any project specific funds from the projects that would use these services.

#### **ALTERNATIVES CONSIDERED**

If Contract PS84203274 is not awarded, staff's ability to support and respond to current environmental projects would be limited. As a consequence; we would not be able to immediately address the potential and existing environmental liabilities generated through our execution of construction and operating efforts. Such situation would also increase the likelihood of non-compliance resulting in potential fines, or orders to comply with regulatory requirements.

As another alternative, the Metro Board may recommended action and direct staff to do all Environmental Engineering services and technical support work in house. Under such situation, Metro would have to hire a much larger staff, and purchase of equipment that staff currently do not have. These would include the hiring of Drilling Crews and purchase of Drill Rigs field equipment and require additional storage, an in house Certified Analytical Lab, Lab Technicians, Certified Industrial Hygienists, additional qualified stormwater developers, UST design engineers, and other related disciplines. While Metro is in the process of adding new environmental staff, the number of staff needed in the short term will not be sufficient to have the ability to respond to all the large and small projects we anticipate to be supporting for the next 5 years.

Staff can solicit and award individual contracts for each environmental task as the need arises. Staff does not recommend this alternative. Individually procuring these CWO's and Task Orders have associated inconsistent and most likely cumulative higher administrative and execution costs and inefficiencies. Each of our Project Managers would also have to competitively procure for environmental services for each individual task order and would significantly delay our ability to

respond to time sensitive requirements from within the agency and from the regulatory agencies.

**NEXT STEPS**

After the recommended Board Action is approved, staff will execute the conformed contract and proceed with issuing Task Orders and Contract Work Orders.

**ATTACHMENTS**

Attachment A - Procurement Summary

Attachment B - Types and Total Value Estimates of Projects FY15 to FY19

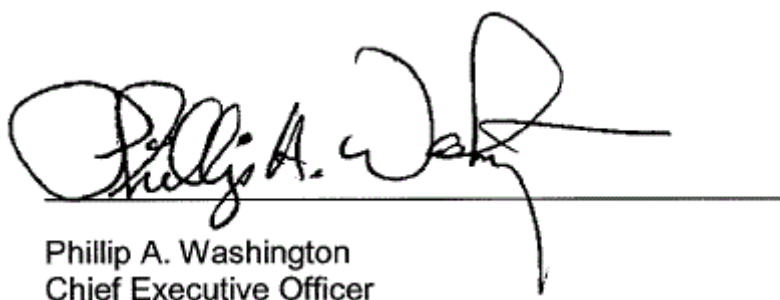
Prepared by:           Cris B. Liban, Executive Officer, Environmental Compliance and Sustainability (213) 922-2471

**Reviewed by:**

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Bryan Pennington, Executive Director, Engineering and Construction (213) 922-7449

Nalini Ahuja, Executive Director, Finance & Budget (213) 922-3088



Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

## ENVIRONMENTAL ENGINEERING SERVICES

1.	<b>Contract Number:</b> PS84203274	
2.	<b>Recommended Vendor:</b> Kleinfelder, Inc.	
3.	<b>Type of Procurement (check one):</b> <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	<b>Procurement Dates:</b>	
	A. Issued: 07/14/2014	
	B. Advertised/Publicized: 08/08/14	
	C. Pre-proposal/Pre-Bid Conference: 07/21/14	
	D. Proposals/Bids Due: 08/13/14	
	E. Pre-Qualification Completed: Pending	
	F. Conflict of Interest Form Submitted to Ethics: 01/29/2015	
	G. Protest Period End Date: (15 Calendar Days after Notification of Intent to Award)	
5.	<b>Solicitations Picked up/Downloaded:</b> 164	<b>Bids/Proposals Received:</b> 6
6.	<b>Contract Administrator:</b> Alan Leung	<b>Telephone Number:</b> (213) 922-7574
7.	<b>Project Manager:</b> Emmanuel Liban	<b>Telephone Number:</b> (213) 922-2471

**A. Procurement Background**

This Board Action is to approve the execution of Contract No. PS84203274 issued in support of Environmental Engineering Services.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract will issue task orders on a Firm Fixed Price, Unit Rate, Cost-Plus-Fixed Fee, or Time and Materials basis based on the Scope of Work for each task.

Two (2) RFP amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on July 31, 2014 revised the Letter of Invitation and updated the responsible Contract Administrator;
- Amendment No. 2, issued on August 4, 2014 clarified Scope of Services and submittal requirements.

Metro held a pre-proposal conference on July 21, 2014, in the Gateway Conference Room on the 3rd floor of the Gateway Building. There were twenty-four (24) representatives from sixteen (16) firms that signed in at the pre-proposal conference. One-hundred sixty four (164) individuals from various firms picked up the RFP Package. There were two (2) amendments issued during the solicitation phase of

this RFP. The firms that picked up or downloaded the RFP asked a total of thirty-three (33) Questions.

Metro received six (6) proposals on the due date August 13, 2014.

## **B. Evaluation of Proposals/Bids**

A Proposal Evaluation Team (PET) consisting of staff from Metro's Facilities Engineering and Environmental Compliance/Services Departments was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- Proposer teams capabilities and experience 30 percent
- Role and relevant experiences and capability of the firms on the prime contractors team 25 percent
- Staff positions identified in the Scope of Services 25 percent
- Project management approach 20 percent

The evaluation criteria are appropriate for the services required and consistent with criteria developed for other, similar types of procurements. Several factors were considered when developing these weights, giving the greatest importance to the Proposer team's capabilities and experience.

This is an Architect and Engineers, qualifications based procurement. Price cannot be used as an evaluation factor pursuant to state and federal law.

Of the six (6) proposals received, six (6) were determined to be within the competitive range. The six (6) firms within the competitive range are listed below in alphabetical order:

1. AECOM, Inc. (AECOM)
2. Cardno, Inc. (Cardno)
3. Kleinfelder, Inc. (Kleinfelder)
4. Tetra Tech, Inc. (Tetra Tech)
5. TRC Solutions, Inc. (TRC)
6. Worley Parsons, Ltd. (Worley Parsons)

During the week of November 3, 2014, the evaluation committee met and interviewed the firms. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. In general, each team's presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed each firm's commitment to the success of the project. Also highlighted were staffing plans, work plans, and perceived project issues. Each team was



asked questions relative to each firm’s proposed alternatives and previous experience.

**Qualifications Summary of Recommended Firm:**

Kleinfelder is an employee-owned engineering, consulting, and construction management firm that provides engineering services across the nation. Kleinfelder has assembled a team of experts and qualified subcontractors to help address Metro’s needs in the field of environmental engineering.

Kleinfelder’s proposal contained a relevant project list that displayed a successful working history with subcontractors, all of whom meet or exceed the requirements of the Scope of Services. The proposed staff also exhibited a high level of expertise, as evidenced by training, education, and relevant experience.

The PET ranked the proposals and assessed strengths, weaknesses and associated risks of each of the Proposers to determine the most qualified firm. The evaluation performed by the PET determined Kleinfelder as the most qualified firm to provide the services as required in the RFP.

<b>1</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>2</b>	<b>Kleinfelder</b>				
<b>3</b>	Proposer Teams Capabilities and experience		30.00%	28.87	
<b>4</b>	Role and relevant experiences and capability of the Firms on the Prime Contractors Team		25.00%	23.80	
<b>5</b>	Staff Positions Identified in the Scope of Services		25.00%	23.25	
<b>6</b>	Project Management Approach		20.00%	19.27	
<b>7</b>	<b>Total</b>		<b>100.00%</b>	<b>95.19</b>	<b>1</b>

<b>8</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>9</b>	<b>TRC</b>				
<b>10</b>	Proposer Teams Capabilities and experience		30.00%	27.30	
<b>11</b>	Role and relevant experiences and capability of the Firms on the Prime Contractors Team		25.00%	22.72	

1 2	Staff Positions Identified in the Scope of Services		25.00%	21.25	
1 3	Project Management Approach		20.00%	17.00	
1 4	<b>Total</b>		<b>100.00%</b>	<b>88.27</b>	<b>2</b>

1 5	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
1 6	<b>Tetra Tech</b>				
1 7	Proposer Teams Capabilities and experience		30.00%	27.07	
1 8	Role and relevant experiences and capability of the Firms on the Prime Contractors Team		25.00%	22.39	
1 9	Staff Positions Identified in the Scope of Services		25.00%	21.83	
2 0	Project Management Approach		20.00%	16.81	
2 1	<b>Total</b>		<b>100.00%</b>	<b>88.10</b>	<b>3</b>

2 2	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
2 3	<b>AECOM</b>				
2 4	Proposer Teams Capabilities and experience		30.00%	26.97	
2 5	Role and relevant experiences and capability of the Firms on the Prime Contractors Team		25.00%	21.97	
2 6	Staff Positions Identified in the Scope of Services		25.00%	21.08	
2 7	Project Management Approach		20.00%	16.21	
2 8	<b>Total</b>		<b>100.00%</b>	<b>85.23</b>	<b>4</b>

2 9	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
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				<b>Score</b>	
<b>30</b>	<b>Cardno</b>				
<b>31</b>	Proposer Teams Capabilities and experience		30.00%	25.83	
<b>32</b>	Role and relevant experiences and capability of the Firms on the Prime Contractors Team		25.00%	20.75	
<b>33</b>	Staff Positions Identified in the Scope of Services		25.00%	20.42	
<b>34</b>	Project Management Approach		20.00%	16.04	
<b>35</b>	<b>Total</b>		<b>100.00%</b>	<b>83.04</b>	<b>5</b>

				<b>Weighted Average Score</b>	
<b>36</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>		<b>Rank</b>
<b>37</b>	<b>Worley Parsons</b>				
<b>38</b>	Proposer Teams Capabilities and experience		30.00%	25.80	
<b>39</b>	Role and relevant experiences and capability of the Firms on the Prime Contractors Team		25.00%	21.64	
<b>40</b>	Staff Positions Identified in the Scope of Services		25.00%	19.75	
<b>41</b>	Project Management Approach		20.00%	14.90	
<b>42</b>	<b>Total</b>		<b>100.00%</b>	<b>82.09</b>	<b>6</b>

**C. Cost Analysis**

The cost analysis included among other things, (1) a comparison with historical data of other firms offering similar services; (2) an analysis of prior audited direct and overhead rates, and factors for labor, equipment and other direct costs, and (3) compliance with both the Federal Acquisition Regulation (FAR) Part 31 guidelines and Generally Accepted Accounting Principles (GAAP). Metro has negotiated fixed billing rates for direct labor and equipment, a provisional overhead rate, and a factor to establish a fixed fee for each task order. The pricing for each task order will use the contract defined fixed rates plus the negotiated fee factor to establish a lump sum price or a not-to-exceed amount on a unit price, cost-plus-fixed fee, or time and materials basis.

An audit request has been submitted to the Metro Management Audit Services Department (MASD). In order to prevent any unnecessary delay in contract award, provisional overhead rates have been established subject to retroactive Contract adjustments. In accordance with FTA Circular 4220.1.F, if an audit has been performed by any other cognizant agency within the last twelve month period, Metro will receive and accept that audit report for the above purposes rather than perform another audit.

A fair and reasonable price for all future Task Orders and Contract Work Orders will be determined based upon a cost analysis, technical evaluation, fact finding, and negotiations, before issuing work to the Consultant.

#### **D. Background on Recommended Contractor**

The recommended firm, Kleinfelder, located in San Diego, California, has been in business since 1961, and is a leader in the fields of Engineering, Architecture, and Science Consulting. Kleinfelder has nearly 1,900 employees across 68 offices across the United States, Canada, and Australia. They have been working in Los Angeles since 1984.

Mark Peabody will lead the team as Project Director. Mr. Peabody is a Professional Engineer and has over 26 years of experience in managing large infrastructure and environmental projects for transportation agencies. He will be the main point of contact regarding new requests for services and will coordinate Cost/Schedule Proposals (CSPs).

Kathleen McDonnell will act as the Project Manager for PS84203274. Ms. McDonnell has over 30 years of experience handling projects related to environmental engineering. She is a Professional Geologist with a strong project management background in projects directly related to the Scope of Services. As Project Manager, Ms. McDonnell will be responsible for identifying key personnel positions, acting as liaison between Metro and the Kleinfelder team, and coordinating tasks and schedules.

**E. Small Business Participation**

The Diversity & Economic Opportunity Department (DEOD) established a 15% Race Conscious Disadvantaged Business Enterprise (RC DBE) goal for the Environmental Engineering Support Services Bench. To be responsive proposers were required to form teams that included DBE firms, without schedules or specific dollar commitments. Kleinfelder made a 15% RC DBE commitment. RC DBE commitments will be determined based on the aggregate value of all Task Orders issued.

DBE BUSINESS GOAL	15% DBE	DBE BUSINESS COMMITMENT	15% DBE
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	<b>DBE Subcontractors</b>	<b>% Committed</b>
1.	Advanced Technology Laboratories, Inc.	TBD
2.	Aurora Industrial Hygiene	TBD
3.	Martini Drilling Corporation	TBD
4.	Morgner Construction Management	TBD
5.	APPL, Inc.	TBD
6.	Asset Laboratories	TBD
7.	Casamar Group, LLC	TBD
8.	CoreProbe International	TBD
9.	E-Nor Innovations, Inc.	TBD
10.	Entech Northwest, Inc.	TBD
11.	EMS Laboratories, Inc.	TBD
12.	Industrial Hygiene Management, Inc.	TBD
13.	Innovative Construction Solutions	TBD
14.	Interphase Environmental, Inc.	TBD
15.	MARRS Services	TBD
16.	Projectline Technical Services, Inc.	TBD
17.	Safe Probe, Inc.	TBD
18.	Terry A Hayes and Associates, Inc.	TBD
19.	The Bodhi Group	TBD
20.	Wagner Engineering and Surveying, Inc.	TBD
	<b>Total</b>	<b>15.0%</b>

**F. Living Wage and Service Contract Worker Retention Policy**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

**G. All Subcontractors Included with Recommended Contractor’s Proposal**

	<b>Subcontractor</b>	<b>Services Provided</b>
1.	Advanced Technology Laboratories, Inc.	Analytical testing
2.	Aurora Industrial Hygiene	Industrial hygiene
3.	Martini Drilling Corporation	Drilling services
4.	Morgner Construction Management	Noise, vibration, and stormwater services
5.	APPL, Inc.	Analytical testing
6.	Asset Laboratories	Analytical testing
7.	Barney’s Hole Digging Service, Inc.	Large diameter auger drilling
8.	BC2 Environmental Corporation	Drilling services
9.	Belshire Environmental Services	Waste management and UST testing
10	Casamar Group, LLC	Stormwater compliance
11	Cascade Drilling	Drilling services
12	CO’s Traffic Control	Traffic control
13	CoreProbe International	Direct push, in-situ remediation
14	Drewelow Remediation Equipment	Remediation equipment sales and rental
15	E-Nor Innovations, Inc.	Traffic control
16	Entech Northwest, Inc.	Noise and air quality services
17	EMS Laboratories, Inc.	Analytical testing (asbestos, lead, microbial)
18	Fiedler Group	UST system design services
19	Flat and Vertical, Inc.	Concrete cutting and coring
20	Forensic Analytical Laboratories	Analytical testing (asbestos, lead, microbial)
21	GeomorphIS	Geographic information system, drafting
22	Global Probe, Inc	Direct push drilling
22	Hazardous Technologies, Inc.	Waste management

3		
2 4	Industrial Hygiene Management, Inc.	Industrial hygiene
2 5	Innovative Construction Solutions	Remedial construction support
2 6	Interphase Environmental, Inc.	Direct push drilling, mobile laboratory
2 7	Jones Environmental, Inc.	Analytical testing, mobile laboratory
2 8	K-Vac Environmental Services, Inc.	Waste management
2 9	MARRS Services	Stormwater compliance
3 0	Prima Environmental, Inc.	Treatability studies
3 1	Projectline Technical Services, Inc.	Electrical design
3 2	Pure Effect, Inc.	Remediation equipment sales and rental
3 3	Safe Probe, Inc.	Utility clearance
3 4	Subsurface Surveys & Associations, Inc.	Utility clearance and geophysics
3 5	Southwest Geophysics, Inc.	Utility clearance and geophysics
3 6	Terry A Hayes and Associates, Inc.	Noise and air quality
3 7	The Bodhi Group	Technical and field support
3 8	Vironex	Direct push drilling, in-situ remediation
3 9	Wagner Engineering and Surveying, Inc.	Surveying services
4 0	Wayne Perry, Inc.	UST design and testing

Types and Total Value Estimates of Projects – FY15 to FY19

<b>Environmental Engineering</b>	<b>No. of Units (yrs., projs., etc.)</b>	<b>Estimate Cost of Consultant Services per Unit</b>	<b>Total Estimate Cost for Consultant Services</b>
<b>a. Stormwater Compliance</b>	<b>5 years</b>	<b>\$500,000</b>	<b>\$2,500,000</b>
<b>b. UST Design Engineering/Tech Support</b>	<b>5 years</b>	<b>\$250,000</b>	<b>\$1,000,000</b>
<b>c. Industrial Waste Water Compliance</b>	<b>5 years</b>	<b>\$140,000</b>	<b>\$700,000</b>
<b>d. Geotech/Environmental Investigations</b>	<b>5 years</b>	<b>\$160,000</b>	<b>\$800,000</b>
<b>e. Lead and Asbestos Consulting/Assessments</b>	<b>5 years</b>	<b>\$250,000</b>	<b>\$1,000,000</b>
<b>f. Mitigation Monitoring Support</b>	<b>5 years</b>	<b>\$1,000,000</b>	<b>\$5,000,000</b>
<b>g. Real Estate, Joint Development and Highways</b>	<b>5 years</b>	<b>\$250,000</b>	<b>\$1,000,000</b>
<b>Total :</b>			<b>\$12,000,000</b>



Types and Total Value Estimates of Projects – FY16 to FY20

<b>Environmental Engineering</b>	<b>No. of Units (yrs., projs., etc.)</b>	<b>Estimate Cost of Consultant Services per Unit</b>	<b>Total Estimate Cost for Consultant Services</b>
a. Stormwater Compliance	5 years	\$500,000	\$2,500,000
b. UST Design Engineering/Tech Support	5 years	\$250,000	\$1,000,000
c. Industrial Waste Water Compliance	5 years	\$140,000	\$700,000
d. Geotech/Environmental Investigations	5 years	\$160,000	\$800,000
e. Lead and Asbestos Consulting/Assessments	5 years	\$250,000	\$1,000,000
f. Mitigation Monitoring Support	5 years	\$1,000,000	\$5,000,000
g. Real Estate, Joint Development and Highways	5 years	\$250,000	\$1,000,000
<b>Total :</b>			<b>\$12,000,000</b>

**Board Report**

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**File #:** 2015-0849, **File Type:** Contract**Agenda Number:** 44.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015****SUBJECT: DESIGN SUPPORT DURING CONSTRUCTION FOR THE PATSAOURAS PLAZA  
BUSWAY STATION, CONTRACT PS093343240A****ACTION: AUTHORIZE ADDITIONAL CONTRACT MODIFICATION AUTHORITY****RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION approving an increase in the Contract Modification Authority (CMA) to Contract No. PS0933432406A with STV Incorporated (STV) in the amount of \$250,000, increasing the total CMA from \$500,000 to \$750,000 for the **design support during construction for the Patsaouras Plaza Busway Station.**

**ISSUE**

Design-Build Contract No. C0970 was awarded for the construction of Patsaouras Plaza Busway Station in February 2014. The Design-Builder has required assistance to address questions related to the preliminary design. This has resulted in a higher than anticipated level of involvement by STV. Staff has used up the CMA that remained in the contract when it issued a Contract Modification for design support during construction (DSDC).

**DISCUSSION**

Staff came to the Board in January 2013 to authorize the Chief Executive Officer to increase the cumulative Contract Modification Authority (CMA) for Contract No. PS0933432406a to \$500,000. At the time, staff had rejected bids to construct the Patsaouras Plaza Busway Station because all bids exceeded the LOP. Staff needed STV's services to conduct value engineering and re-design the busway station; prepare the project documents for re-bidding the work; and to provide assistance, such as answering questions from prospective bidders, during the re-bid process. A Contract Modification was also issued to provide DSDC services. The design-builder has required a higher than anticipated level of effort from STV to address questions related to the preliminary design and to assist with issues that require coordination with CALTRANS.

**DETERMINATION OF SAFETY IMPACT**

The Board action will not have an impact on established safety standards.

**FINANCIAL IMPACT**

Funds for the selected project is included in the FY16 budget in Cost Center 8510 under Project 202317, Account 50316.

Impact to Budget

Since this is a multi-year project, the Project Manager, Cost Center manager, and Executive Director, Engineering and Construction will be responsible for budgeting the cost in future fiscal years.

**ALTERNATIVES CONSIDERED**

The Board may choose to not approve the continuation of Design Support Services During Construction at this time. However this alternative is not recommended because STV is the only consultant capable of answering questions and addressing issues related to the preliminary design because STV developed it and assisted with the value engineering and re-design of the busway station prior to re-bidding the work.

**NEXT STEPS**

Staff will issue a Contract Modification to extend the period of performance for DSDC services through the end of construction.

**ATTACHMENTS**

Attachment A - Procurement Summary

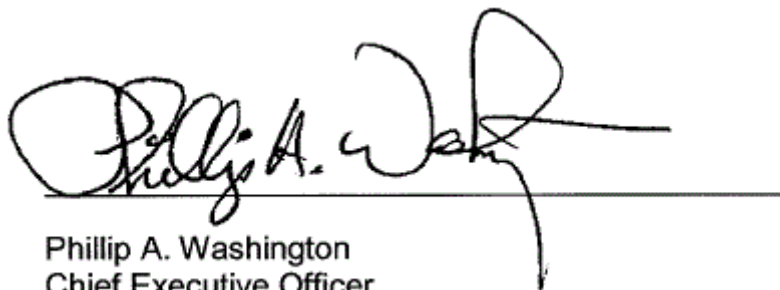
Attachment B - Contract Modification Authority (CMA)/Change Order Log

Prepared by: Manuel Gurrola, Project Manager, (213) 922-8889

Tim Lindholm, Executive Officer, Project Management, (213) 922-7297

Reviewed by: Ivan Page, Interim Executive Director, Vendor/Contracts Management, (213) 922-6383

Bryan Pennington, Executive Director, Engineering and Construction, (213) 922-7449



Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

**INCREASE CONTRACT MODIFICATION AUTHORITY (CMA)  
UNION/PATSAOURAS PLAZA BUSWAY STATION ACE DESIGN SERVICES  
CONTRACT NO. PS0933432406SA**

<b>1.</b>	<b>Contract Number:</b> PS0933432406A		
<b>2.</b>	<b>Contractor:</b> STV Incorporated (STV)		
<b>3.</b>	<b>Work Description:</b> Conceptual Engineering and Design		
<b>4.</b>	<b>The following data is current as of:</b> May 28, 2015		
<b>5.</b>	<b>Contract Status:</b> Active		
	<b>Bids/Proposals Opened:</b>	2	<b>Contract Award Amount:</b> \$789,067
	<b>Contract Awarded:</b>	10/23/2009	<b>Total of Modifications Approved:</b> \$361,086
	<b>NTP:</b>	11/24/2009	<b>Current Contract Value:</b> \$1,150,153
	<b>Original Complete Date:</b>	12/31/2010	<b>Current Est. Complete Date:</b> 3/31/2018
<b>6.</b>	<b>Contract Administrator:</b> Deneise Glover		<b>Telephone Number:</b> 213-922-7302
<b>7.</b>	<b>Project Manager:</b> Manuel Gurrola		<b>Telephone Number:</b> 213-922-8889

**A. Procurement Background**

On October 23, 2009, Contract No. PS0933432406A was awarded to STV Incorporated, the lowest responsive and responsible bidder, in the amount of \$789,067, for the conceptual engineering and design of Patsaouras Plaza Busway Station.

Attachment B shows that six (6) modifications have been issued to date to add work and shows pending requests for changes currently being reviewed for merit.

**B. Cost/Price Analysis**

The recommended price for any proposed Contract Modification will be determined to be fair and reasonable through fact-finding, clarifications, independent cost estimates, cost analysis, technical evaluation, and negotiations. The negotiations will yield a firm fixed price Contract Modification.

**C. Small Business Participation**

STV Incorporated made a Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) commitment of 7.39%. STV’s current DBE participation is 6.19%, a shortfall of 1.2%. According to STV, the DBE amount paid-to-date on the project exceeds the amount originally committed. However, the DBE participation as a “percentage” of total project costs is less than the original estimate.

On June 18, 2015, STV provided the following reasons for this shortfall: (1) Metro has increased STV’s scope of services over the last couple of years in order to provide funds for additional support in responding to the Design-Builder’s (D-B) submittals, Request for Information (RFIs), and to participate in meetings with the D-B Contractor. That work needed to be completed by STV management staff. Thus STV’s contract limit increased but Metro did not request scope of work items for DBE services, and (2) Metro decided not to have STV’s team review the various Contractor’s Geotechnical Engineering report submittals, which would have been provided by DBE subcontractor Diaz Yourman & Associates. DEOD will perform a final compliance review to determine if appropriate administrative sanctions are warranted.

<b>DBE Commitment</b>	<b>7.39%</b>	<b>DBE Participation</b>	<b>6.19%</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Commitment</b>	<b>Current Participation<sup>1</sup></b>
1.	Coast Surveying, Inc.	Hispanic American	5.18%	5.02%
2.	Diaz Yourman Associates	Hispanic American	2.21%	1.17%
	<b>Total</b>		<b>7.39%</b>	<b>6.19%</b>

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

**D. Living Wage Service Contract Worker Policy**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

**ATTACHMENT B**

**CONTRACT MODIFICATION AUTHORITY (CMA)/CHANGE ORDER LOG  
UNION/PATSAOURAS PLAZA BUSWAY STATION ACE DESIGN SERVICES  
CONTRACT NO. PS0933432406A**

<b>Modification Number</b>	<b>Description</b>	<b>Status (Approved or Pending)</b>	<b>Contract Value (A)</b>	<b>Modification Amount (B)</b>	<b>Board Approved CMA (C)</b>
N/A	Initial Award	Approved	\$789,067		\$200,000
1	Exercise Options (Article VI, Contract Options 1-A & 1-B)	Approved		\$72,732	
2	Conceptual Plan for Bus Stop & Pedestrian Bridge	Approved		\$15,387	
3	Prepare Right of Way Exhibits	Approved		\$29,269	
4	Update ACE Design Plans & Specs/Provide Monuments at Denny's Property	Approved		\$45,000	
5	As-Needed Construction Support Services	Approved		\$99,337	
6	Continuing Design Engineering	Approved		\$99,361	
					\$300,000
<b>Subtotal (Approved)</b>				\$361,086	
	Additional CMA Request	Pending		\$250,000	
<b>Subtotal (Pending)</b>				\$250,000	
<b>Subtotal (Approved and Pending)</b>				\$611,086	
<b>Subtotal – Approved Modifications within CMA</b>				\$361,086	
<b>Subtotal – All Approved Modifications</b>				\$361,086	
<b>Pending Changes/Modifications</b>				\$250,000	
<b>Total Modifications and Pending Changes</b>				\$611,086	
<b>Total Contract Value (Including Approved and Pending Modifications including Credits)</b> <b>(Original Contract \$789,067 + \$611,086)</b>			\$1,400,153		
<b>Board Approved cumulative CMA</b>					\$500,000
<b>Requested CMA (Approved and Pending, \$750,000 minus Board Approved CMA, \$500,000)</b>					\$250,000



Board Report

File #: 2015-0952, File Type: Contract

Agenda Number: 45.

CONSTRUCTION COMMITTEE  
JULY 16, 2015

**SUBJECT: ENVIRONMENTAL WASTE HANDLING AND ENVIRONMENTALLY-RELATED CONSTRUCTION SERVICES**

**ACTION: AUTHORIZE FULL FUNDING OF EN077 CONTRACT AND AUTHORIZE EXERCISE OF OPTION YEAR ONE**

**RECOMMENDATIONS**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION:

- A. authorizing the Chief Executive Officer (CEO) to **continue issuing task orders within the previously Board approved total contract not-to-exceed amount of \$38,000,000 for Contract EN077, with ARCADIS U.S., Inc.**, for the life of the contract, of which only \$21,200,000 the Board had authorized for expenditure in FY12 through FY14; and
- B. authorizing the CEO to exercise Option Year One for FY16.

**ISSUE**

Our capital projects and many ongoing facilities maintenance or restoration activities require evaluation and, as necessary, removal or treatment of hazardous or contaminated substances. Our agency must be able to do so expeditiously in order to avoid any delays in construction or to protect human health and the environment, wherever necessary. Compliance with all environmental laws under such circumstances is paramount to avoid fines, and civil or criminal liability. In order to ensure that MTA appropriately meets all of these constraints, our agency has solicited and awarded contracts for environmental services.

Under Contract No. EN077, ARCADIS U.S., Inc. currently assists with the proper clean-up, abating, managing, transporting, and disposing of contaminated or hazardous materials at various MTA construction and operating facilities; and sampling and testing at various locations for contaminated and hazardous soils and water. ARCADIS U.S., Inc. also performs, under this contract, construction services that require environmental contractor specialization.

Examples of services which have been performed under the Contract are the following:

- Emergency response to and remediation of aerially deposited lead soil contamination at freeway soundwall sites;
- Transporting and lawfully disposing of contaminated soil from Division 13 construction site and Division 10;
- Removal and disposal of fuel storage tanks at various MTA divisions, and disposal of soil contaminated by leakage from such tanks;
- Construction of leak-resistant and environmentally safe tank and mechanical systems at MTA divisions in order to remain in regulatory compliance; and
- Asbestos and lead-based paint removal from structures demolished in connection with construction of the Crenshaw Light Rail Line.

In June 2011 the Board awarded a five-year indefinite delivery/indefinite quantity contract, Contract No. EN077. The Board approved funding totaling a not-to-exceed amount of \$38 Million, inclusive of sales tax, and expenditures not-to-exceed \$21.2 Million during FY12 through FY14.

EN077 is an indefinite delivery/indefinite quantity contract. The consultant is not guaranteed any work and is issued Contract Work Orders and Task Orders based on specific environmental service needs. These Task Orders are funded from existing capital project's budget with consideration of any information available at the time of planning and applicable time constraints on performance of the work.

All of the work under this framework are negotiated on a not-to-exceed basis, and can only be performed and paid based on agreed upon rates that are defined in the Contract. Staff applies strict project controls in the execution of each of these Task Orders to closely monitor the Consultant's budget and Task Order schedules. No funds are obligated until a Contract Work Order/Task Order is awarded against a valid project.

As a result of the concurrent award and capital construction activities (i.e., Crenshaw Light Rail, Purple Line Extension, Regional Connector), much needed enhancement and refurbishment of existing Metro facilities to maintain a state of good repair, and recently evolved stricter air quality and underground storage tank and aboveground storage tank regulations, MTA staff has determined that there will be an accelerated and significant use of the environmental services of ARCADIS U.S., Inc. beginning in FY15. The specific list of projects expected to require environmental services, along with estimated costs of these services, is shown in Attachment B. Specifically, these include:

- Site Remediation at Divisions 8, 15, and 18 and 20. Emergency response to unforeseen contaminated sites at various ongoing capital projects; Baseline study and preparatory work for the new MTA Temporary Storage Site,
- UST Program (SB 989) Upgrades at Divisions 3, 5, 8. Division 10 Underground Storage Tank



(UST)/Above Ground Storage Tank (AST) replacements and Division 2 Vent Pipe Upgrades.

- Purple Line Extension: Pre-demolition abatement of hazardous materials (i.e., asbestos, lead paint) for properties being acquired. On call hazardous materials remediation services for encountered hazardous materials for advanced utility contract and design build contract. Loc 61 (Purple Line Extension Yard) building abatement and Site Remediation per DTSC voluntary cleanup agreement (VCA),
- Regional Connector: Pre-demolition abatement of hazardous materials (i.e., asbestos, lead paint) for properties being acquired. On call hazardous materials remediation services for encountered hazardous materials for advanced utility and design build contracts,
- Crenshaw Light Rail: Pre-demolition abatement of hazardous materials (i.e., asbestos, lead paint) for properties being acquired. On call hazardous materials remediation services for encountered hazardous materials for advanced utility and design build contracts,
- Various Bus Capital Improvement Projects: Patsaouras Plaza soil and waste water management; Harbor Gateway Transit Center site assessment; handling and disposal of soils encountered at operating divisions; materials encountered along Silver Line alignment during construction; lead based paint contaminated materials associated with corrosion repairs along El Monte Busway, and
- Various Rail Capital Improvement Projects: New Center St. BOC/ROC expansion site assessment and remediation; Metro Gold Line cross-passage remediation and Red Line Tar seepage remediation support.

Due to this accelerated and significant use of ARCADIS U.S., Inc.'s services, MTA staff has determined that the authorized contract value will soon be inadequate to ensure the execution of Contract Work Orders from which Task Orders are negotiated and executed. Staff therefore seeks funding up to the Contract not-to-exceed amount of \$38M through the remainder of the Contract to support the environmental waste handling and related construction services needs of all major capital and capital improvement projects and related services within the scope of ARCADIS U.S., Inc.'s contract.

Additionally, consistent with recent Board direction, the Board is requested to approve the exercise of Option Year One.

The process to procure for such specialty contracts is consistent with ECSD's Business Plan submitted and presented to our Board in January 2015 and as reviewed with OMB and through the FY16 budget process.

## **DISCUSSION**

Capital and transit-related projects undertaken by Metro continue to require evaluation of hazardous substances, contamination, or a need for regulatory compliance under federal, state and local law. In addition, Metro must comply with all environmental laws to avoid fines, and civil or criminal liability. This Environmental Hazardous Materials Handling and Related Construction Services contract assists with emergency response for evaluation, transport and disposal of encountered hazardous and non-hazardous soil, and liquid wastes which also includes asbestos and lead-based paint. The contract also includes: fuel storage tank system upgrades, repairs, removals, replacements in order to remain in regulatory compliance with local, state and federal regulatory requirements. Additional contract requirements include permit assistance, remediation system installation, maintenance and operation. Specifically for Measure R projects, the contract has been used as an emergency response contract and to support project remediation efforts if the contractor on those projects cannot perform such work scopes.

This contract is for as-needed Environmental Services. ARCADIS U.S., Inc. made a 40% DALP commitment at the onset of the project. Current DALP participation is 28.66%, of which 28.66% has been verified by staff. DBE attainment is based on the aggregate value of all task orders issued and payments paid against those task orders.

Attachment C summarizes the obligated costs associated with this contract for FY12 to FY15. Attachment C also indicates forecasted projects and costs from FY16 to FY17. Staff now returns to the Board to request annual funding for FY16 until contract termination date to authorize the use of the remaining contract value (from \$21.2M to \$38M).

## **DETERMINATION OF SAFETY IMPACT**

This Board action will not have an impact on safety standards for Metro. The increase in contract value will assist in increased safety in that it will provide environmental services to reduce environmental impacts and increase sustainability in all of Metro's construction and operational efforts.

## **FINANCIAL IMPACT**

EN077 is an Indefinite Delivery/Indefinite Quantity (IDIQ) contract. No MTA funds are obligated until a Contract Work Order is issued by a MTA authorized Contracting Officer against a valid project budget. No expenditures are authorized until a Task Order or Modification is awarded by a MTA authorized Contracting Officer for a specific package of work.

To date, MTA's financial and change control systems indicate that a Contract Work Order value of \$ 18,049,152 out of the currently Board-approved \$21.2M contract value has been obligated for completed an ongoing work. This includes \$17,507,691 of Task Orders issued along with \$541,461 in the value of task order modifications.

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Due to anticipated significant increase in level of effort, specifically for the Measure R projects, there is needed authority beginning in FY16 to authorize the rest of the remaining balance of the overall contract up to the not-to-exceed amount of \$38M. Obligations and expenditures under the existing Contract will be done on a per task order basis, and will be determined commensurate to the each capital and operational project needs.

Obligations and authorizations made within the EN077 Total Contract Value will be against specific project or operations budgets which make up the Board-approved MTA budget for the particular fiscal year. Specific funding for this contract will parallel the project approved by the Board under separate actions. The Executive Directors and Project Managers of each of the business units and projects overseeing these projects will be responsible for budgeting the costs.

Staff will request for additional EN077 contract value authority if the amount of work associated with each of those projects exceed the new EN077 contract value.

### **ALTERNATIVES CONSIDERED**

The MTA Board of Directors could decide not to authorize expenditures up to the full value of the contract and not authorize the exercise of option year one; ending staff's ability to issue any new task orders under contract EN077 and thus requiring staff to proceed with a new procurement for environmental waste handling and related construction services. Staff does not recommend this alternative, owing to high costs, delays and, for multiple contracts and administrative inefficiencies for procuring separate environmental services contracts to service affected projects.

As an alternative, MTA could perform all the environmental services in-house. Metro would have to hire additional staff with expertise in many different subjects, such as waste profiling, trucking and construction crews and laboratory science as well as purchase specialized equipment such as loaders, excavators and drill rigs which is not practical or cost-effective. Metro would incur more cost to do the work internally than by employing consultants. There is no additional ECSD staff included in the FY15 budget to possibly perform these functions

### **NEXT STEPS**

Upon approval, staff will exercise option year two and initiate new task orders up to the total authorized contract value of the EN077 contract.

### **ATTACHMENTS**

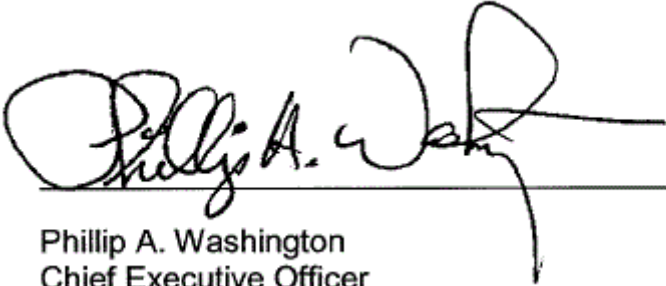
Attachment A - Procurement Summary  
Attachment B - Contract Modification/Change Log  
Attachment C - Current and Proposed EN077 Work

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**Prepared by:** Cris B. Liban, Executive Officer, Environmental Compliance and Sustainability (213) 922-2471

**Reviewed by:** Ivan Page, Interim Executive Director, Vendor/Contract Management (213) 922-1005

Bryan Pennington, Executive Director, Engineering and Construction (213) 922-7449



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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

ENVIRONMENTAL WASTE HANDLING AND ENVIRONMENTALLY RELATED  
CONSTRUCTION SERVICES/ EN077

1.	<b>Contract Number:</b> EN077		
2.	<b>Contractor:</b> Arcadis U.S. Inc. (ARCADIS)		
3.	<b>Mod. Work Description:</b> Continuation of environmental waste handling and environmentally related construction services.		
4.	<b>Contract Work Description:</b> Environmental waste handling and environmentally related construction services.		
5.	<b>The following data is current as of:</b> 6/26/15		
6.	<b>Contract Completion Status</b>		<b>Financial Status</b>
	<b>Contract Awarded:</b>	8/15/11	<b>Contract Award (Funding) Amount:</b> \$ 21,200,000 NTE
	<b>Notice to Proceed (NTP):</b>	9/26/11	<b>Total of Task Orders Approved:</b> \$18,049,152
	<b>Original Complete Date:</b>	8/14/14	<b>Pending Modifications (including this action):</b> \$ 0
	<b>Current Est. Complete Date:</b>	8/15/16	<b>Current Contract Value (Funding with this action):</b> \$ 38,000,000 NTE
7.	<b>Contract Administrator:</b> Daniel A. Robb		<b>Telephone Number:</b> (213) 922-1304
8.	<b>Project Manager:</b> Emmanuel Liban		<b>Telephone Number:</b> (213) 922-2471

**A. Procurement Background**

This Board Action is to approve Modification No. 08 issued in support of Contract No. EN077 to provide continued Environmental Waste Handling and Environmentally Related Construction Services as set forth in Contract EN077 currently in effect between Metro and ARCADIS.

This contract modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a cost reimbursable fixed fee, Indefinite Delivery/Indefinite Quantity Contract.

Contract EN077 with Arcadis US, Inc. is for a five (5) year term covering the period between August 15, 2011 through August 15, 2016. (inclusive of two un-priced one-year options, based on the Consultant's satisfactory performance). This Contract was approved by the Board of Directors on June 16, 2011, with approved expenditure up to \$21.2 Million for FY12 through FY14, of the \$38 Million in total contract value, inclusive of sales tax and the two (2) one-year options. Seven (7) contract modifications have been executed and approved by the Board over the life of the Contract. Modifications 1 through 3 were issued to update the Terms and Conditions

of the Agreement to include the Memorandum of Costs. Modification 4 extended the Contract term from August 14, 2014, to September 30, 2014. Modification 5 extended the Contract term from September 30, 2014, to March 31, 2015. Modification 6 extended the Contract term from March 31, 2015, to June 30, 2015 and Modification 7 extended the Contract term from June 30, 2015, to December 31, 2015. Modification 8 shall extend the Contract term from December 31, 2015, to August 15, 2016.

Additional information regarding all the modifications to EN077 can be found in Attachment B – Contract Modification/Change Log.

## **B. Evaluation of Proposals/Bids**

A Proposal Evaluation Team (PET) was previously convened in 2011 and determined ARCADIS to be the most qualified proposer. Contract award was made to the highest qualified Proposer.

This is an Architect and Engineers, qualifications based Contract. Price was not used as an evaluation factor pursuant to state and federal law.

## **C. Cost/Price Analysis**

A fair and reasonable price for all future Contract Work Orders “CWOs” and Task Orders “TO’s” shall be determined based upon a cost analysis, technical evaluation, fact finding, and negotiations, before issuing a CWO or Task Order to the Consultant. An audit to finalize the overhead rate for the first three years of the Contract and to set the provisional overhead rate for FY 15 and FY16 has been completed by the Metro Audit Services Department (MASD). Actual Overhead rates between 2011 through 2013 will be applied per Audit Report 15-CON-A05, as an equitable adjustment to the Contract, within the total authorized funding of \$38 Million.

## **D. Background on Recommended Contractor**

ARCADIS is an international company providing consultancy, design, engineering and management with emphasis on the following fields: environmental, infrastructure, water, and buildings. The company is ranked in the top ten (10) management and engineering consultancies in the world and top three (3) in the global environmental market.

The company’s primary areas of competence include waste management, soil, groundwater, air-quality, geo-technical information services, urban and rural development projects, and real estate projects.

**E. Disadvantaged Business Participation**

ARCADIS made a Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) commitment of 40%. The project is 73.33% complete and the current DALP participation is 28.66%. In order to address the 11.34% shortfall, ARCADIS confirmed that they are actively seeking DBE firms for future task order awards in the following scope areas: hazardous materials abatement and management; regulatory interaction; soil, water and other hazardous materials disposal; underground tank upgrade work, as well as other nonspecific tasks. DEOD will continue to monitor ARCADIS' efforts to meet their DBE commitment.

<b>DISADVANTAGED BUSINESS ENTERPRISE ANTICIPATED LEVEL OF PARTICIPATION COMMITMENT</b>		<b>40% DALP</b>	<b>DISADVANTAGED BUSINESS ENTERPRISE ANTICIPATED LEVEL OF PARTICIPATION</b>		<b>28.66% DALP</b>
<b>DBE Subcontractors</b>		<b>Ethnicity</b>	<b>% Commitment</b>	<b>Current Participation<sup>1</sup></b>	
1.	J.C. Palomar Construction	Hispanic American	CWO	19.05%	
2.	Advanced Technology Laboratories	Hispanic American	CWO	0.59%	
3.	Jet Drilling	Hispanic American	CWO	0.51%	
4.	Alliance Environmental Group <sup>2</sup>	Hispanic American	CWO	0.21%	
5.	Tri Span <sup>2</sup>	Hispanic American	CWO	2.96%	
6.	Insight EEC Inc. <sup>2</sup>	Subcontinent Asian American	CWO	3.15%	
7.	Bradley Tank <sup>2</sup>	Asian Pacific American	CWO	2.18%	
8.	AHTNA Government Services <sup>2</sup>	Native American	CWO	0.00%	
<b>Total DBE Commitment</b>			<b>40%</b>	<b>0</b>	

<sup>1</sup>Current Participation = Total Actual amount Paid-to-Date to DBE firms ÷ Total Actual Amount Paid-to-date to Prime.

<sup>2</sup>DBE Subcontractor added after contract award.

**F. Living Wage and Service Contract Worker Retention Policy**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

**G. Prevailing Wage Applicability**

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

**H. All Subcontractors Included with Recommended Contractor's Proposal**

<b>Subcontract List</b>
21st Century Lock & Key
ACCO Engineered Systems
Ahtna Government Services
Alliance Environmental Group, Inc.
AWS Construction, Inc.
BC2 Environmental
Belshire Environmental Services
BTI Environmental Services, Inc.
CA Hazardous Services
Century Sweeping
CI Services, Inc.
Coastal Traffic Systems
El Capitan Environmental Services
EMSL Analytical
Hydro Engineering
Insight Environmental Engineering & Construction, Inc.
J.C. Palomar, Inc.
JET Drilling
KOPPL
Ninyo & Moore
Pacific Coast Locators
Presidio Systems
Siemens Industry, Inc.
Specialized Industrial Services, Inc.
Spectrum Geophysics
TEG/LVI Environmental Services, Inc.
Traffic Management, Inc.
Tri Span, Inc.
TRL Systems
WWT Tunnel, LLC



**CONTRACT MODIFICATION/CHANGE LOG**  
**ENVIRONMENTAL WASTE HANDLING AND ENVIRONMENTALLY RELATED**  
**CONSTRUCTION SERVICES/ EN077**

<b>Mod. no.</b>	<b>Original Contract</b>	<b>(Date)</b>	<b>(Contract Total)</b>
1	Administrative Terms and Conditions	11/16/14	\$0.00
2	Retention Reduction Per Contract Code Section 7201	12/22/13	\$0.00
3	Add Subcontractors Trip Span & BTI	11/21/13	\$0.00
4	No Cost Period of Performance Extension 8/14/14 to 9/30/14	8/5/14	\$0.00
5	No Cost Period of Performance Extension 9/30/14 to 3/31/15	9/26/14	\$0.00
6	No Cost Period of Performance Extension 3/31/15 to 6/30/15	3/11/15	\$0.00
7	No Cost Period of Performance Extension 6/30/15 to 12/31/15	5/15/15	\$0.00
8	<b>Pending Board Approval</b>  No Cost Period of Performance Extension 12/31/15 to 8/15/16		
		<b>Total All Mods</b>	\$0.00

### Attachment C. Current and Proposed EN077 Work

<b>EN077 PROJECT CATEGORIES</b>	<b>OBLIGATED PROJECT FUNDS (FY12-15) (A)</b>	<b>SPECIFIC FY15-FY16 PROJECTS(1)</b>	<b>PROJECTED THRU FY16 (B)</b>	<b>TOTAL (A+B) (2)</b>
<b>SITE REMEDIATION</b>	\$ 5,148,939.00	Site Remediation at Divisions 8, 15, and 18 and 20. Emergency response to unforeseen contaminated sites at various ongoing capital projects ; Baseline study and preparatory work for the new MTA Temporary Storage Site	\$1,851,061.00	\$7,000,000.00
<b>TANK UPGRADES, STORMWATER AND UST OPERATOR PROGRAM</b>	\$ 7,947,287.00	UST Program (SB 989) Upgrades at Divisions 3 , 5, 8. Division 10 UST/AST replacements and Division 2 Vent Pipe Upgrades	\$ 52,713.00	\$8,000,000.00
<b>REGIONAL CONNECTOR(3)</b>	\$ 1,820,498.00	Pre-demolition abatement of hazardous materials (i.e., asbestos, lead paint) for properties being acquired. On call hazardous materials remediation services for encountered hazardous materials for advanced utility contract and design build contract. Loc 61 (Purple Line Extension Yard) Remediation	\$ 1,179,502.00	\$3,000,000.00
<b>PURPLE LINE EXTENSION(3)</b>	\$ 841,549.00	Pre-demolition abatement of hazardous materials (i.e., asbestos, lead paint) for properties being acquired. On call hazardous materials remediation services for encountered hazardous materials for advanced utility and design build contracts	\$ 5,158,451.00	\$6,000,000.00
<b>CRENSHAW CORRIDOR PROJECT(3)</b>	\$ 205,147.00	Pre-demolition abatement of hazardous materials (i.e., asbestos, lead paint) for properties being acquired. On call hazardous materials remediation services for encountered hazardous materials for advanced utility and design build contracts	\$ 5,794,853.00	\$6,000,000.00
<b>BUS FACILITY, VARIOUS</b>	\$648,991.00	Patsaouras Plaza soil and waste water management; Harbor Gateway Transit Center site assessment; handling and disposal of soils encountered at operating divisions; materials encountered along Silver Line alignment during construction; lead based paint contaminated materials associated with corrosion repairs along El Monte Busway	\$ 3,330,109.00	\$4,000,000.00
<b>RAIL FACILITY VARIOUS</b>	\$1,436,741.00	New Center St. BOC/ROC expansion site assessment and remediation; Metro Gold Line and Red Line Tar seepage and cross-passage remediation	\$ 2,563,259.00	\$4,000,000.00
	<b>\$ 18,049,152.00</b>		<b>\$ 19,929,948.00</b>	<b>\$38,000,000.00</b>
<b>Notes:</b>				
(1) Estimated costs based on current level of effort on executed similar projects. Specific amounts on a task by task basis are to be negotiated by staff prior to award.				
(2) Note that Measure R projects are included in this forecast. This Contract is currently being used as an emergency response contract for those Measure R projects and small capital improvement projects; and to support project remediation efforts if any of the Constructors cannot perform such scope.				
(3) The Measure R related projects estimates were included in the original Board Authorization of EN077 contract and estimated EN077 services are only used as guidance based on assumptions at the onset of contract. Exact not to exceed amount is determined per Measure R project. The estimated total dollar values include any unanticipated environmental waste handling and construction services work due to changed conditions or through the acceleration of any of these projects.				



**Board Report**

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**File #:** 2015-0586, **File Type:** Contract**Agenda Number:** 46.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015****SUBJECT: DESIGN SUPPORT DURING CONSTRUCTION FOR THE DIVISION 13 BUS  
MAINTENANCE AND OPERATIONS FACILITY****ACTION: AUTHORIZATION FOR CONTRACT MODIFICATION AUTHORITY****RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION approving an increase in the Contract Modification Authority (CMA) to Contract No. OP33402180 with Maintenance Design Group (MDG) in the amount of \$350,000, increasing the total CMA from \$1,350,000 to \$1,700,000 for **design support during construction for the Division 13 Bus Maintenance and Operations Facility.**

**ISSUE**

Difficulties encountered during construction have resulted in additional involvement by the Designer and Engineer of Record. Additional CMA is required to increase the value of the Task Order for Design Support During Construction (DSDC). MDG will also produce all as-built drawings of the new facility once construction is complete.

**DISCUSSION**

In November 2008, the Board approved the contract award for the design and engineering of Division 13, and which also included DSDC services. The original period of performance for the construction contract was estimated at 700 calendar days from the notice-to-proceed (NTP). Based on NTP issued May 2012, Division 13 construction was to be completed by July 2014. Construction delays caused primarily by differing site conditions and the collapse of Deck 14 in March 2014 extended the period of performance. Substantial completion is currently scheduled for September 2015. The CMA request of \$350,000 is based on the anticipated level of effort required to support the project through construction and final acceptance.

The DSDC scope of work includes the following tasks: responding to Requests for Information (RFIs); reviewing project submittals, monitoring construction progress, attending weekly project team site walks; issuing site visit reports; conducting inspections and documenting finds; producing

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Record Drawings; and providing design support for Metro requested changes.

**DETERMINATION OF SAFETY IMPACT**

The Board action will not have an impact on established safety standards.

**FINANCIAL IMPACT**

Funds for the selected project is included in the FY16 budget in Cost Center 8510 under Project 202001, Account 50316. The project is scheduled to be completed in the first quarter of FY16.

Impact to Budget

Since this is a multi-year project, the Project Manager, Cost Center manager, and Executive Director, Engineering and Construction will be responsible for budgeting the cost in future fiscal years.

**ALTERNATIVES CONSIDERED**

The Board may choose to not approve the continuation of Design Support Services During Construction at this time. However this alternative is not recommended because the MDG team is the "Designer-" and the "Engineer-" of Record for the Division 13 Project.

**NEXT STEPS**

Staff will issue a Contract Modification and issue a Task Order to extend the period of performance for DSDC services through the end of construction.

**ATTACHMENTS**

Attachment A - Procurement Summary

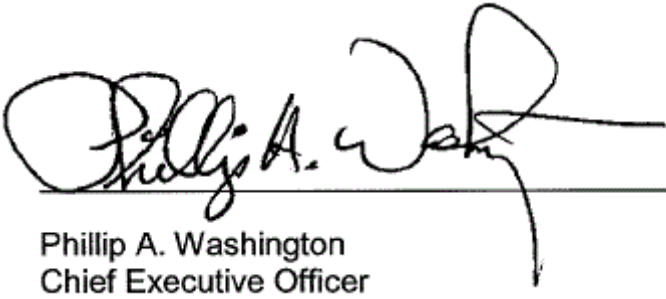
Attachment B - Contract Modification History/Change Order Log

Prepared by: Manuel Gurrola, Project Manager, (213) 922-8889

Tim Lindholm, Executive Officer, Project Management (213) 922-7297

Reviewed by: Ivan Page, Interim Executive Director, Vendor/Contracts Management  
(213) 922-6383

Bryan Pennington, Executive Director, Engineering and Construction  
(213) 922-7449



Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

## ARCHITECTURE/ENGINEERING SERVICES FOR DIVISION 13

1.	<b>Contract Number:</b> OP33402180			
2.	<b>Contractor:</b> Maintenance Design Group			
3.	<b>Work Description:</b> Design support during construction of Division 13			
4.	<b>The following data is current as of:</b> June 1, 2015			
5.	<b>Contract Status:</b>			
	<b>Bids/Proposals Opened:</b>	07/10/2008	<b>Contract Award Amount:</b>	\$6,792,851
	<b>Contract Awarded:</b>	11/20/2008	<b>Total of Modifications Approved:</b>	\$1,317,380
	<b>NTP:</b>	01/05/2009	<b>Current Contract Value:</b>	\$8,110,231
	<b>Original Complete Date:</b>	12/31/2011	<b>Current Est. Complete Date:</b>	12/31/2015
6.	<b>Contract Administrator:</b> Deborah Spottsville		<b>Telephone Number:</b> (213) 922-1040	
7.	<b>Project Manager:</b> Manuel Gurrola		<b>Telephone Number:</b> (213) 922-8889	

**A. Procurement Background**

In November 2008, Contract No. OP33402180 was awarded to Maintenance Design Group, LLC, the as the most qualified firm, in the amount of \$6,792,851, for architectural and engineering design services and as-needed construction support for the Division 13 project.

Attachment B shows that eight (8) modifications have been issued to date.

**B. Cost/Price Analysis**

The price of any future Contract Modifications and Task Orders will be determined to be fair and reasonable based upon cost analysis, technical evaluation, fact finding, and negotiations.

An audit request has been submitted to the Metro Management Audit Services Department (MASD) to determine allowable and allocable direct and overhead rates. Task Orders and Contract Modifications are subject to retroactive adjustments to the Contract upon completion of the audit.

### C. Small Business Participation

Maintenance Design Group, LLC (MDG) made a 17.27% Small Business Enterprise (SBE) commitment. MDG's current SBE participation is 15.87%, a shortfall of 1.4%. MDG gave the following reasons for the shortfall: (1) this is a Time-and-Materials task order, (2) all consultants perform specialized work; they are not able to commit a specific amount of hours for consultants to respond to Contractor's Request for Information (RFIs), and (3) the only remaining work is attending Construction Progress Meetings and conducting punch-list procedures which are not designated as SBE scope of services. DEOD will perform a final compliance review to determine if appropriate administrative sanctions are warranted.

<b>Small Business Commitment</b>	<b>SBE 17.27%</b>	<b>Small Business Participation</b>	<b>SBE 15.87%</b>
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	<b>SBE Subcontractors</b>	<b>% Committed</b>	<b>Current Participation<sup>1</sup></b>
1.	Gonzales Suarez Associates	1.37%	1.12%
2.	W2 Design	5.89%	5.51%
3.	C&J Technical Services	9.95%	9.18%
4.	Diaz-Yourman	0.07%	0.06%
	<b>Total</b>	<b>17.25%</b>	<b>0</b>

<sup>1</sup>Current Participation = Total Actual Amount Paid-to-Date to Subs ÷ Total Actual Amount Paid-to-Date to Prime

### D. Living Wage Service Contract Worker Policy

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

### E. Prevailing Wage Applicability

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



**ATTACHMENT B**

**CONTRACT MODIFICATION HISTORY/CHANGE ORDER LOG**

**ARCHITECTURE/ENGINEERING SERVICES FOR DIVISION 13/CONTRACT NO.  
OP33402180**

<b>Mod . No.</b>	<b>Description</b>	<b>Status</b>	<b>Cost</b>
1.	Alternative Design Elements and Period of Performance Extension	Approved	\$ 445,179
2.	60% Design Submittal, Task No. 3bb	Approved	\$ 185,000
3.	Period of Performance Extension	Approved	\$ 63,718
4.	Administrative Change	Approved	\$ 0
5.	Administrative Change	Approved	\$ 0
6.	Design Support Services During Construction	Approved	\$ 100,000
7.	Design Support Services During Construction	Approved	\$ 398,060
8.	Design Support Services During Construction	Approved	\$ 125,423
Subtotal – Approved Modifications			\$ 1,317,380
Subtotal – Pending Changes/Modifications			\$ 0
<b>Subtotal Totals: Mods. + Pending Changes/Modifications</b>			<b>\$ 1,317,380</b>
Subtotal – Pending Claims			\$ 0
<b>Total: Mods + Pending Changes/Mods + Possible Claims</b>			<b>\$ 1,317,380</b>
Previous Authorized CMA			\$ 1,350,000
CMA Necessary to Execute Pending Changes/Mods + Possible Claims			\$ 350,000
<b>Total CMA including this Action</b>			<b>\$ 1,700,000</b>
<b>CMA Remaining for Future Changes/Mods after this Action</b>			<b>\$ 382,620</b>

**Board Report**

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**File #:** 2015-0851, **File Type:** Informational Report

**Agenda Number:** 47.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015**

**SUBJECT: CRENSHAW/LAX TRANSIT PROJECT**

**ACTION: AUTHORIZE THE CHIEF EXECUTIVE OFFICER TO EXECUTE A  
CONTRACT MODIFICATION**

**RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer (CEO) to execute Contract Modification No. 39 to Contract No. E0117 with Hatch Mott MacDonald (HMM), to **continue Phase III Design Services During Construction (DSDC) support**, in the amount of \$6,656,000, increasing the total contract value from \$54,414,652 to \$61,070,652.

**ISSUE**

The Crenshaw/LAX Transit Project continues with final design and construction and requires a two-year extension of the HMM contract to provide specialized engineering consultant services. In addition to Metro staff there continues to be a need for HMM to provide DSDC support for the mainline project as the design-builder (Wash Shea Corridor Constructors) continues with final design and has commenced construction activities. HMM is required to supplement Metro support in the review of contract submittals, requests for information and contract design changes as they are received from the Crenshaw/LAX Transit Project design-build contractor.

In addition to supporting the efforts for the Crenshaw/LAX Transit Project HMM will also provide experienced engineering support for the Southwestern Yard Project in the review of design submittals, requests for information and design changes for the newly awarded design-build contractor (Hensel Phelps/Herzog JV) who will commence final design this summer.

**DISCUSSION**

In December 2009, the Board selected the Light Rail alternative as the Locally Preferred Alternative and awarded Contract E0117 to HMM for Phase I Advanced Conceptual Engineering, and contract options for Phase II Preliminary Engineering, Construction Contract Development and Bid Period Services; Phase III DSDC; and Phase IV Light Rail Transit (LRT) System Activation.

Phases I and II have been completed. In April 2012 the CEO was authorized by the Board to exercise the Phase III Contract option for DSDC support in the amount of \$13,235,158. This action is to extend the support from HMM for another two years through June 2017.

The Phase III DSDC scope of work includes the review of the design-build contractor's final design submittals, shop drawings, construction contractor's requests for information, review of design change notices/change orders, and support for issues resolution. The scope also includes additional bid support for the main alignment and Southwestern Yard design-build contracts. In addition, HMM provides final design oversight, support technical meetings, provide engineering support to the Metro project team and support the community relations team.

HMM is providing experienced engineering support to supplement existing Metro staff in the final design oversight, review of design submittals, requests for information and design changes, and also provides support to the Metro community relations team for the Crenshaw/LAX Transit Project. They will also provide experienced engineering support for the Southwestern Yard Project. There are not enough existing Metro positions available to provide such DSDC support. Some of the staff from HMM are on an as-needed basis only and not on a full-time basis depending on the type of submittals or questions received from the design-build contractors.

Authorization to exercise the option for Phase IV, LRT System Activation, will be presented to the Board when the project is ready to implement this Phase.

### **DETERMINATION OF SAFETY IMPACT**

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

### **FINANCIAL IMPACT**

The funds for this action are included in the FY16 budget under Project 865512 (Crenshaw/LAX Transit Corridor Project) and Project 860003 (Southwestern Yard Project), in Cost Center 8510 (Construction Project Management), and Account No. 50316 (Professional Services). Since this is a multi-year project, the Executive Director, Engineering and Construction will be responsible for budgeting in future years.

#### **Impact to Budget**

The sources of funds for this project are Federal STP, CMAQ, State Proposition 1B, Proposition A 35% and Measure R 35% as included in the adopted Long Range Transportation Plan and updated by Board action in June 2013. The FY16 budget does not include any Prop 35% funds which are eligible for rail operations and capital. The other funds are not eligible for bus and rail operating expenditures. No other funds were considered.

### **ALTERNATIVES CONSIDERED**

The Board could decide to not approve the recommended Contract Modification. This is not recommended because there continues to be major elements of final design by the design-builder that HMM is providing engineering support to review design submittals, requests for information and design changes. Not extending HMM would mean a loss of experienced staff that have been working on the Crenshaw/LAX Transit Project and would be a detriment to the completion of this project. There are not enough Metro positions available to provide DSDC support.

### **NEXT STEPS**

After Board approval and execution of the contract modification, staff will direct the consultant to continue providing design support services for the Crenshaw/LAX Transit and Southwestern Yard projects through FY17.

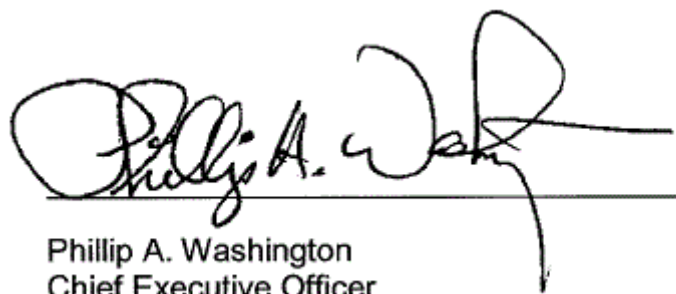
### **ATTACHMENTS**

Attachment A - Procurement Summary

Attachment B - Contract Modification Authority (CMA) Change Order Log

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(213) 922-7449



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Phillip A. Washington  
Chief Executive Officer

**ATTACHMENT A  
PROCUREMENT SUMMARY**

**Advanced Conceptual/Preliminary Engineering for Crenshaw Transit Corridor**

1	Contract Number: E0117			
2	Contractor: Hatch Mott Macdonald			
3	<b>Mod. Work Description:</b> Continued Funding for Phase III (Design Support During Construction)			
4	<b>Work Description:</b> Construction Management Support Services			
5	The following data is current as of: 06/09/15			
6	Contract Completion Status:		Financial Status:	
	Award Date:	01/07/2010	Award Amount	\$10,311,664
	Notice to Proceed (NTP):	01/07/2010	Total Contract Modifications	\$44,102,988
	Original Completion Date:	06/30/2015	Current Total Contract Value	\$54,414,652
	Current Est. Complete Date:	06/30/2017		
7	Contract Administrator: Valerie Dean		Telephone Number: 323-903-4123	
8	Project Manager: Charles Beauvoir		Telephone Number: 323,903-4113	

**A. Contract Action Summary**

The Request for Proposal (RFP) was an Architecture and Engineering (A&E) qualification-based procurement process in accordance with the California Government Code 4525-4529. This process requires that each of the responding firm's qualifications be evaluated, and the most qualified firm be selected, followed by cost and contract negotiations with the selected firm to establish a fair and reasonable contract price.

On June 26, 2009, the MTA issued a RFP for a Cost Plus Fixed Fee contract. No amendments were issued during the solicitation phase. The proposal evaluation team determined Hatch Mott MacDonald to be the most qualified proposer in October 2009 and the MTA Board authorized the Chief Executive Officer to negotiate and award a 9-year cost-plus fixed fee, Contract, Contract No. E0117, for Crenshaw Transit Corridor Advanced Conceptual Engineering, and

subsequent phases (options) for preliminary engineering, Design-build contract bid support, design support during construction and start-up support services for the LRT Alternative at the December 2009 meeting. The contract was for an amount not to exceed \$10,400,000 million to perform Phase I, Advanced Conceptual Engineering.

On September 23, 2010, the MTA Board of Directors authorized the CEO to exercise a 21 month cost plus fixed fee option for an amount not to exceed \$21,000,000 for Phase II Preliminary Engineering, Construction Contract Development and Bid Period Services.

On January 26, 2012, the MTA Board of Directors approved the recommendation to execute Contract Modification 16 for Advanced Utilities, Contract Modification 17, for BNSF track alignment, Contract Modification 18 for Integrated Project Management and Office Recurring Costs; and an increase of Contract Modification Authority for a not-to-exceed amount of \$2,524,038.

On April 19, 2012, the MTA Board of Directors authorized the Chief Executive Officer to execute contract modification No. 21 to Contract No. E0117 Advance Conceptual/Preliminary Engineering for Crenshaw Transit Corridor, with Hatch Mott MacDonald, to exercise the option for Phase III Design Services During Construction (DSDC), in the amount of \$13,235,158.

Attachment B shows that 37 Modifications have been approved to date and 1 modification is pending. The proposed modification 39 is for an amount of \$6,656,000 for the continued design services during construction of the Crenshaw/LAX Transit Project.

## **B. Cost/Price Analysis**

The negotiated amount complies with all requirements of Metro Procurement policies and procedures and was determined fair and reasonable through fact findings, clarifications, and cost analysis. An independent cost estimate (ICE) was obtained as part of the cost analysis before negotiating.

Proposal Amount	MTA Estimate	Negotiated Amount
\$7.21 million	\$6.77 million	\$6.65 million

## **C. Small Business Participation**

Hatch Mott MacDonald (HMM) made a commitment of 25.30% Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) on this contract. Current DBE participation is 21.42%, a shortfall of 3.88%. For Phase I and Phase II, HMM achieved 25.10% DBE participation. HMM provided the following explanation for the shortfall: 1) Phase III Scope Reduction - the HMM team forecasted a greater participation level in the review of Contractor Design-Build documents, which has predominantly been undertaken by Metro staff. This has impacted DBE services in the areas of architectural & general civil reviews, utilities, and management reporting, and 2) Project Continuity - to ensure continuity and efficiency, specialty work forecasted to be filled by DBE firms were maintained by non-DBE firms, who brought ongoing project experience gained during the preliminary engineering phase.

On June 26, 2015, HMM advised that they will continue to examine opportunities to increase their DBE participation for Phases III and IV in the following service areas: 1) Design support for the Contract C0991 - Southwestern Yard, 2) Right-of-Way project acquisition support, 3) Systems Integration for Contracts C0988 and C0991, and 4) Identify specialty services for DBEs such as environmental compliance and clearance. To date, HMM has utilized six (6) additional DBE subcontractors.

	DBE Subcontractors	Ethnicity	% Commitment	Current <sup>1</sup> Participation
1.	Anil Verma	Sub Asian American	10.49%	7.61%
2.	Earth Mechanics	Asian Pacific American	4.97%	2.63%
3.	UltraSystems	Caucasian	1.52%	0.28%
4.	Wagner Engineering	Caucasian	3.48%	2.29%
5.	The Solis Group	Hispanic American	3.24%	1.27%
6.	Epic Land Solutions	Caucasian	1.41%	1.76%
7.	E. W. Moon	African American	0.21%	0.50%
8.	BASE Architecture (added)	African American	0.00%	1.93%
9.	MARRS Services (added)	Sub Asian American	0.00%	1.74%
10.	Terry A. Hayes (added)	African American	0.00%	0.16%
11.	Cordoba (added)	Hispanic American	0.00%	0.36%
12.	The Alliance Group (added)	Asian Pacific American	0.00%	0.77%
13.	Armand Consulting (added)	Sub Asian American	0.00%	0.11%
	<b>Total Commitment</b>		<b>0</b>	<b>0</b>

<sup>1</sup>Current Participation = Total Actual Amount Paid-to-Date to Subs ÷ Total Actual Amount Paid-to-Date to Prime

**D. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

**ATTACHMENT B**  
**Contract Modification Authority (CMA) Change Order Log**

<b>MOD No.</b>	<b>Description</b>	<b>Value</b>	<b>Status</b>
1	Context- Sensitive Design and Planning.	\$890,119.00	Executed
2	Park Mesa Heights Grade Separation Analysis.	\$249,924.00	Executed
3	Cancelled		Cancelled
4	Provisional Indirect Rates to Fixed indirect Rate	No Cost	Executed
<b>5</b>	<b>Crenshaw LAX Phase II (Option)</b>	<b>\$21,000,000</b>	<b>Executed</b>
6	Project Administration/Design Consensus	\$382,638.00	Executed
7	Maintenance Facility Site	\$257,500.00	Executed
8	Period of Performance Time Extension	No Cost	Executed
9	Article VI Other Direct Costs;	No Cost	Executed
10	Geotechnical Investigation	\$156,718.00	Executed
11	Project Office	\$168,550.00	Executed
12	Paint & Body Shop : Special Fund	\$500,000.00	Executed
13	Crenshaw/LAX Re-Location Plan	\$72,491.00	Executed
14	FAA Options Analysis	\$92,685.00	Executed
15	Leimert Park Station	\$366,658.00	Executed
16	Utility Re-Location	\$968,678.00	Executed
17	BNSF Abandonment	\$832,666.00	Executed
18	Project Office Recurring Costs	\$651,208.00	Executed
19	Project Office Overhead Rate	No Cost	Executed
20	Westchester Light Rail Station	\$234,875.00	Executed
<b>21</b>	<b>Crenshaw/LAX – Phase III (Option)</b>	<b>\$13,235,158.00</b>	<b>Executed</b>
22	Project Management Support	\$439,204.00	Executed
23	Guideline Specification Support	\$412,712.00	Executed
24	Civil & Structural Design	\$486,055.00	Executed
25	Systems	\$380,048.00	Executed
26	Overhead Adjustment	\$ 70,038.00	Executed
27	Southwestern Yard/3 <sup>rd</sup> Party Coordination	\$1,959,247.00	Executed
28	Geotechnical	\$202,816.00	Executed
29	Additional Subcontractor	No Cost	Executed
30	Adjusted Hourly Rate	No Cost	Executed
31	Overhead and Fee Adjustment	\$93,000.00	Executed
32	Additional Subcontractor	No Cost	Executed
33	Additional Subcontractor	No Cost	Executed
34	Period of Performance –Ext	No Cost	Executed
35	Economic Price Adjustment FY 14	No Cost	Executed
36	Overhead Adjustment	No Cost	Executed
<b>MOD No.</b>	<b>Description</b>	<b>Value</b>	<b>Status</b>



37	Economic Price Adjustment FY 15	No Cost	Executed
38	Time Extension	No Cost	Pending
39	Additional Funding for Design Support Phase During Construction Phase III	Pending	Pending

Subtotal – Modifications issued-to-date	\$44,102,988	
Subtotal – Award Value	\$10,311,664	
Subtotal – Contract Value	\$54,414,652	
Subtotal –Pending Modification	\$ 6,656,000	
Total Contract Value	\$61,070,652	

Current CMA Authorized by the Board	\$ 12,023,275
Total Approved CMA Modifications (excluding Phase II and III Options )	-\$ 9,867,830
Remaining CMA	\$ 2,155,445

**Board Report**

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**File #:** 2015-0957, **File Type:** Contract**Agenda Number:** 48.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015****SUBJECT: REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT****ACTION: AUTHORIZE THE CHIEF EXECUTIVE OFFICER (CEO) TO EXECUTE CONTRACT MODIFICATION****RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the CEO to execute Contract Modification No. 22 to Contract No. E0119 with The Connector Partnership Joint Venture (CPJV) Inc. to continue providing **Design Support Services During Construction through FY16 for the Regional Connector Transit Corridor Project**, in the amount of \$8,283,594, increasing the total contract value from \$54,770,985 to \$63,054,579. This action does not increase Life of Project Budget.

**BACKGROUND**

On October 28, 2010, the Board authorized the CEO to negotiate and execute Contract E0119, Advanced Conceptual Engineering (ACE) and Preliminary Engineering (PE) for The Regional Connector Transit Corridor Project, with an initial not-to-exceed amount of \$21,500,000, and options for Design Support During Construction and System Activation Support. The executed contract is a cost-plus, fixed fee contract with provisions for Board approval of the contract value every fiscal year by Contract Modification. Accordingly, this report requests approval of annual funding for FY16.

The ACE phase (Phase I) encompassed all design activities and products (including all necessary data collection, coordination, and design studies) to fully document environmental impacts, respond to comments from FTA in the Administrative Draft EIS/EIR, and to develop a detailed cost estimate sufficient for advancement to later stages of project delivery. The PE phase (Phase II) established the design of the basic structural, mechanical, electrical, communication systems, trackwork, automatic train control, traction power, third rail contact system, fare collection, and other systemwide interfaces. At the completion of PE, CPJV prepared contract documents for the design/build contracting delivery method.

The Board approved the project definition for the Regional Connector Transit Corridor Project on April 26, 2012. As a result of CPJV's work on the Project, Metro received a Record of Decision from the Federal Transit Administration (FTA) on June 29, 2012, and the Full Funding Grant Agreement

(FFGA) on February 20, 2014.

In 2013, in accordance with CPJV's scope of work for Phase III, the Board authorized the CEO to exercise Contract Modification No. 20 for CPJV to provide design support services related to advanced utility relocations (Metro Contract C0981R and third party construction contracts), and to the procurement phase of the Design/Build Contract (Contract C0980) during FY14. Contract C0981R was awarded on January 13, 2014, and the award of the Design-Build Contract No. C0980 was approved by the Board on April 24, 2014.

## **ISSUE**

Metro's Project Management staff requires continuation of services to provide Design Support Services during Construction to review the design-builder's final design and ensure compliance with Metro's technical requirements, and other technical services during construction. Execution of the recommended Contract Modification No. 22 will provide continuity of the design support services during the final design phase and construction of the Project, as well as continued third-party coordination with the City, County, stakeholders and property owners.

The recommended Board action will provide sufficient contract funding for CPJV services through June 30, 2016. Future work will be funded on a year-to-year basis. This approach will result in more accurate budgeting for each year, while providing better control over consultant services.

In a parallel process under a separate board report, staff is recommending a total of 37 new non-contract Metro positions for FY 16 by converting 32 new Construction Management Support Services (CMSS)/Consultant positions. Three of the 32 CMSS/Consultant positions proposed for conversion to new Metro non-contract positions fall under the CPJV's scope of work under Contract Modification 22. If the Board approves the new non-contract Metro E&C positions, a reduction of up to \$594,346 may be deducted from Contract Modification 22 for these three new non-contract Metro positions provided that these Metro positions are in place at the Regional Connector Transit Corridor project on July 1, 2015. Otherwise, a prorated rate of \$16,510 per month (per position) may be deducted from Contract Modification 22 for every CMSS/consultant position that is converted to new non-contract Metro position and placed on the project.

## **DETERMINATION OF SAFETY IMPACT**

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

## **FINANCIAL IMPACT**

Funds are included in the FY16 budget for this action under Project 860228 - Regional Connector Transit Corridor in Cost Center 8510 (Construction Project Management), and Account Number 50316 (Professional and Technical Services). Because this is a multi-year project, the Executive Director of Engineering and Construction and the Project Manager will be accountable for budgeting costs for future years.

Impact to Budget

The sources of funds for this report's Recommendation are Federal 5309 New Starts, and TIFIA Loan Proceeds. The approved FY15 budget is designated for the Regional Connector Transit Corridor Project and does not have an impact to operations funding sources. These funds are part of the Life-of-Project (LOP) Budget for the Regional Connector Transit Corridor Project. This Project is not eligible for Propositions A and C funding due to the proposed tunneling element of the Project.

**ALTERNATIVES CONSIDERED**

The Board could decide not to approve the recommended contract modification. This is not recommended because there are major elements of design support services work that are required to support this design-build project, and Metro does not currently have sufficient staff with the required expertise to ensure a timely review of the design-build contractor's Final Design. Since CPJV developed the technical requirements for the design-build contract, it is staff's recommendation that CPJV's services are essential in providing continuity of the work in order to successfully deliver the project on schedule and within budget.

**NEXT STEPS**

1. After Board approval and execution of the contract modification, staff will direct the consultant to continue providing design support services for the Regional Connector Transit Corridor project through FY15.
2. Staff will report back by December 2015 on the actual number of non-contract Metro positions hired and placed on the project with the corresponding reduction in the contract value.

**ATTACHMENTS**

- A. Procurement Summary
- B. Contract Modification Authority (CMA) Summary

Prepared by:

Girish Roy, Deputy Executive Officer, Project Management (213) 922-7221  
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Reviewed by:

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(213) 922-7449



Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

**ADVANCED CONCEPTUAL ENGINEERING AND  
PRELIMINARY ENGINEERING FOR THE  
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT (E0119)  
MODIFICATION NO. 22**

<b>1.</b>	<b>Contract Number:</b> E0119		
<b>2.</b>	<b>Contractor:</b> Connector Partnership Joint Venture (CPJV)		
<b>3.</b>	<b>Mod. Work Description:</b> Provide FY16 design support services during construction for Contract Nos. C0981R and No. C0980 for the Regional Connector Transit Corridor Project.		
<b>4.</b>	<b>Contract Work Description:</b> Advanced Conceptual Engineering and Preliminary Engineering for the Regional Connector Transit Corridor Project		
<b>5.</b>	<b>The following data is current as of:</b> May 15, 2015		
<b>6.</b>	<b>Contract Completion Status</b>		<b>Financial Status</b>
	<b>Contract Awarded:</b>	12/2/10	<b>Contract Award Amount:</b> \$21,500,000
	<b>Notice to Proceed (NTP):</b>	12/3/10	<b>Total of Modifications Approved:</b> \$33,270,985
	<b>Original Complete Date:</b>	3/2018	<b>Pending Modifications (including this action):</b> \$8,283,594
	<b>Current Est. Complete Date:</b>	3/2020	<b>Current Contract Value (with this action):</b> \$63,054,579
<b>7.</b>	<b>Contract Administrator:</b> Joe O'Donnell		<b>Telephone Number:</b> 213-922-7231
<b>8.</b>	<b>Project Manager:</b> Girish Roy		<b>Telephone Number:</b> 213-893-7119

**A. Procurement Background**

This Board Action is to approve Modification No. 22 issued in support of Design Support during construction for the Regional Connector Transit Corridor Project.

This contract modification will be processed in accordance with Metro's Acquisition Policy and the contract type is a cost plus fixed fee.

Contract No. E0119 was awarded through an A&E (qualification-based) procurement process.

On October 28, 2010, the Metro Board authorized the Chief Executive Officer to negotiate and award a cost-plus fixed fee contract (No. E0119), for Regional

Connector Transit Corridor Advanced Conceptual Engineering/Preliminary Engineering to Connector Partnership, for an amount not to exceed \$21,500,000 to perform Phase I, Advanced Conceptual Engineering and Phase II, Preliminary Engineering. On December 2, 2010, Metro awarded a contract for \$21,500,000 for a period of fourteen months

Since that time, twenty-one modifications have been issued to implement additional scope tasks in support of the Regional Connector Transit Corridor Project. Refer to Attachment B – Contract Modification/Change Order Log. Staff anticipates that Connector Partnership Joint Venture services will be required through March 2020.

**B. Cost/Price Analysis**

The recommended price has been determined to be fair and reasonable based upon fact-finding, clarifications, and cost analysis, taking into consideration an independent cost estimate (ICE), technical evaluation, and negotiations, pending a completed audit of the consultant’s provisional overhead rates. The most current fiscal year data was requested from the consultant, and is expected to be provided shortly. Upon receipt of this data, an audit request will be submitted to MASD and any findings resulting in an increase or decrease to the contract amount will be incorporated via a Contract Modification.

<b>Proposal Amount</b>	<b>Metro ICE</b>	<b>Negotiated Amount</b>
\$8,313,342	\$7,889,138	\$8,283,594

**C. Small Business Participation**

CPJV made a Disadvantaged Business Enterprise Anticipated Level of Participation (DALP) commitment of 35.01%. The project is 88% complete and the current DALP participation is 28.49%. Although CPJV is not meeting their DALP commitment, they confirmed that they are actively seeking DBE firms to provide necessary structural and other engineering services, and will replace a position currently held by one of their employees. CPJV confirmed that with the projected cost they will achieve a DBE commitment of 35.5% in FY16. To date, CPJV has listed eight (8) additional DBE subcontractors, and is strongly encouraged to continue to make ongoing efforts to meet or exceed their 35.01% DBE commitment.

<b>DALP COMMITMENT</b>	<b>35.01%</b>	<b>DALP PARTICIPATION</b>	<b>28.49%</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Commitment</b>	<b>Current Participation<sup>1</sup></b>
1.	Barrio Planners	Hispanic American	4.18%	3.44%
2.	BA, Inc	African American	3.44%	5.73%
3.	Dakota Communications	African American	1.67%	0.49%
4.	D'Leon Engineers	Hispanic American	2.35%	1.76%
5.	E2 Consulting Engineers, Inc.	Subcontinent Asian American	1.68%	3.29%
6.	Intueor Consulting, Inc.	Asian Pacific American	3.34%	2.73%
7.	LKG-CMC, Inc.	Caucasian	1.19%	2.17%
8.	A Cone Zone	Caucasian	3.51%	0.31%
9.	Advanced Technologies Lab <sup>2</sup>	Hispanic American	0.00%	0.04%
10.	AP Engineering & Testing <sup>2</sup>	Asian Pacific American	0.00%	0.03%
11.	C&L Drilling	Caucasian	1.50%	0.00%
12.	Jet Drilling	Hispanic American	2.71%	0.22%
13.	Martini Drilling <sup>2</sup>	Hispanic American	0.00%	0.03%
14.	Tri-County Drilling <sup>2</sup>	Caucasian	0.00%	0.50%
15.	Murakawa Communications	Asian Pacific American	0.63%	0.00%
16.	Ted Tokio Tanaka Architects	Asian Pacific American	5.01%	3.36%
17.	Tierra West Advisors, Inc.	Asian Pacific American	0.76%	0.64%
18.	Wagner Engineering & survey	Caucasian	1.79%	1.31%
19.	Raw International, Inc.	African American	1.02%	1.44%
20.	Roy Willis & Associates	African American	0.25%	0.02%
21.	Universal Reprographics, Inc. <sup>2</sup>	Caucasian	0.00%	0.68%
22.	Kal Krishnan Consulting Services <sup>2</sup>	Subcontinent Asian American	0.00%	0.02%
23.	Lenax Construction Services <sup>2</sup>	Caucasian	0.00%	0.22%
24.	Sapphos Environmental <sup>2</sup>	Hispanic American	0.00%	0.05%
<b>Total Commitment</b>			<b>0</b>	<b>0</b>

<sup>1</sup>Current Participation = Total Actual Amount Paid-to-Date to Subs Total Actual Amount Paid-to-Date to Prime.

<sup>2</sup>DBE Subcontractors added after contract award.

#### **D. Living Wage and Service Contract Worker Retention Policy Applicability**



The Living Wage and Service Contract Worker Retention Policy is not applicable to this modification.

**CONTRACT MODIFICATION/CHANGE LOG**

**ADVANCED CONCEPTUAL ENGINEERING AND  
PRELIMINARY ENGINEERING FOR THE  
REGIONAL CONNECTOR TRANSIT CORRIDOR PROJECT/E0119**

<b>Mod. no.</b>	<b>Description</b>	<b>Date</b>	<b>Amount</b>
N/A	Initial Award	12/3/10	<b>\$21,500,000</b>
1	Risk Management Support	3/14/11	\$203,059
2	Revisions to Technical Scope of Services	7/29/11	\$0
3	Additional Geotechnical Borings	3/21/11	\$256,215
4	Upgrade Division 20 Generator & Tie-In	12/13/11	\$108,937
5	Increased Level of Effort for Design Services	12/13/11	\$444,742
6	Increased Level of Cost Estimating	12/13/11	\$299,241
7	Additional Specification Preparation Efforts	12/27/11	\$219,707
8	Constructability Design Changes	12/27/11	\$139,197
9	Flower Street Landscape Design	1/4/12	\$138,696
10	No Cost Extension	2/9/12	\$0
11	Advanced Preliminary Engineering	3/1/12	\$8,796,669
12	2 <sup>nd</sup> & Broadway Second Entrance Design	4/25/12	\$367,771
13	Advanced Utility Final Design	6/6/12	\$455,474
14	Cost Savings Station Designs	8/27/12	\$470,612
15	No Cost APE Extension	11/1/12	\$0
16	Additional Geotechnical Services	12/8/12	\$365,972
17	Bid Period Services	12/4/12	\$0
18	No Cost APE Extension	12/1/12	\$0
19	Bid Period Services	1/3/13	\$5,828,270
20	Bid Period Services / Design Support Services During Construction (Phase III)	7/1/13	\$7,852,815
21	Design Support Services During Construction (FY15)	7/1/14	\$7,323,608
22	Design Support Services During Construction (FY16)	Pending	\$8,283,594
23	No Cost Period of Performance Extension to August 31, 2015		\$0
	<b>Total:</b>		<b>\$63,054,579</b>

**Board Report**

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**File #:** 2015-1069, **File Type:** Contract**Agenda Number:** 49.

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**2<sup>nd</sup> REVISED**  
**CONSTRUCTION COMMITTEE**  
**July 16, 2015**

**SUBJECT: BRIGHTON TO ROXFORD DOUBLE TRACK PROJECT****ACTION: APPROVE CONTRACT FOR THE BRIGHTON TO ROXFORD DOUBLE TRACK PROJECT****RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION authorizing the Chief Executive Officer to execute a cost-plus-fixed-fee Contract No. PS2415-3412 with STV, Inc. for the **Brighton to Roxford Double Track Project** in the amount of \$12,500,000 inclusive of all design phases. This contract is for three years.

**ISSUE**

It is the intent of Metro Regional Rail to award a professional services contract to provide engineering services for completion of the environmental clearance documents, preliminary engineering documents, permitting, and final design engineering of the Brighton to Roxford Double Track Project. In addition the work includes the development of the necessary construction documents for the Project, as well as design support services during bid and construction.

**DISCUSSION****Background**

Metro is developing the Brighton to Roxford Double Track project (Project) in Los Angeles, CA, between milepost (MP) 12.7 and MP 23.6 on the Valley Subdivision. At this time, Metro is proceeding with the environmental clearance and the development of Plans, Specifications, and Estimates (PS&E) for construction of the Project.

The Project includes approximately 10.4 miles of new double track beginning at Control Point (CP) Brighton, at MP 12.7, and ending at CP Roxford, at MP 23.6 on the Valley Subdivision of the Antelope Valley Line. At the east end of the Project near CP Brighton, the scope of work includes connecting the new double track to the Brighton Siding extension that is being developed as part of the Empire Avenue and Buena Vista Grade Separation Project. The scope of work also includes connection to the 6,109 foot existing Sun Valley Siding between CP McGinley and CP Sheldon. In

addition, this Project includes construction of a second side platform at the future Metrolink Hollywood Way Station, and Sylmar/San Fernando Station. Modifications to 15 grade crossings are necessary along the Project corridor. This Project also includes construction of three new railroad bridges, as well as three pedestrian at-grade crossings at the Hollywood Way, & Sylmar/San Fernando Stations as well as improvements to the existing Astoria Street at-grade crossing.

The Project is located mostly within the city of Los Angeles, and partially within the cities of Burbank and San Fernando, California on Metro owned right-of-way. This corridor is operated and maintained by the Southern California Regional Rail Authority (SCRRA) for the Metrolink Commuter Rail Service. In addition, the Union Pacific Railroad (UPRR) provides freight service along this corridor.

The Project is located in close proximity to the Bob Hope Airport /Hollywood Way Station Project between MP 13.5 and MP 13.8. This Project and the Bob Hope Airport Station/Hollywood Way Station Project, represent two related projects that, in combination, will provide for overall operational flexibility along the Valley Subdivision. Both projects are contractually separate. This project adds capacity to Antelope Valley line and improves operations and passenger service while reducing travel times.

Funding Commitment

The Project is funded from Measure R 3% and state funds. This Project is the Number 2 ranked project on the Memorandum of Understanding (MOU) between the California High Speed Rail Authority (CHSRA) and several southern California agencies, including Metro. This MOU provides funding from Proposition 1A bonds and other sources for eligible projects.

<b>FUNDING SOURCE</b>	<b>FINAL DESIGN</b>
Proposition 1A	\$55 million
Measure R 3%	\$3 million
Other Sources	\$52 million
<b>TOTAL</b>	<b>\$110 million</b>

**DETERMINATION OF SAFETY IMPACT**

The Project will upgrade 15 at-grade crossings to current SCRRA design standards. In addition, the Project will incorporate SCRRA’s new Positive Train Control standards.

Site-specific safety features will be identified through the FHWA’s Manual on Uniform Traffic Control Devices grade crossing diagnostic process, whereby the LADOT, Metrolink, and the CPUC will review each crossing in accordance with Metrolink and CPUC best practices. The findings of the diagnostic review will be used to select safety improvement features such as pedestrian gates, emergency egress swing gates, and channelization handrails that will be included on the engineering drawings.

**FINANCIAL IMPACT**

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The total funding from Measure R 3% is \$3 million, which is included in the FY16 budget in department 2415, Regional Rail, Project No. 460074, Task 6.2.02.01. Since this is a multi-year contract, the cost center manager, and Executive Director, Engineering and Construction will be accountable and responsible for budgeting the cost of future fiscal year requirements.

Impact to Budget

Source of Funds: \$3,000,000 million in Measure R 3% funds.

**ALTERNATIVES CONSIDERED**

The Board could choose not to award the contract to STV and decide not to pursue the Brighton to Roxford Double Track Project. This alternative is not recommended due to the significant benefits that the Brighton to Roxford Double Track Project provides to commuter rail transportation and the SCRRA Antelope Valley subdivision. In addition, it should be noted that this project is currently on CHSRA/Metro MOU listed as second highest priority to receive funding and if not awarded Metro will lose that funding.

**NEXT STEPS**

Upon approval by the Board, staff will execute the contract, and begin the services for the Brighton to Roxford Double Track Project.

**ATTACHMENTS**

- A. Procurement Summary
- B. Brighton to Roxford Map

Prepared by: Don Sepulveda, Executive Officer, Regional Rail (213) 922-7491

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Phillip A. Washington  
Chief Executive Officer

## PROCUREMENT SUMMARY

## BRIGHTON TO ROXFORD DOUBLE TRACK PROJECT

1.	<b>Contract Number:</b> PS2415-3412	
2.	<b>Recommended Vendor:</b> STV, Inc.	
3.	<b>Type of Procurement (check one):</b> <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	<b>Procurement Dates:</b>	
	A. Issued: 09/15/14	
	B. Advertised/Publicized: 09/15/14	
	C. Pre-proposal/Pre-Bid Conference: 09/22/14	
	D. Proposals/Bids Due: 10/14/14	
	E. Pre-Qualification Completed: 01/06/15	
	F. Conflict of Interest Form Submitted to Ethics: 11/13/14	
	G. Protest Period End Date: 04/06/15	
5.	<b>Solicitations Picked up/Downloaded:</b> 108	<b>Bids/Proposals Received:</b> 2
6.	<b>Contract Administrator:</b> Ben Calmes	<b>Telephone Number:</b> (213) 922-7341
7.	<b>Project Manager:</b> Don Sepulveda	<b>Telephone Number:</b> (213) 922-7491

**A. Procurement Background**

This Board Action is to approve Contract No. PS2415-3412 issued in support of the Brighton to Roxford Double Track Project for professional Architectural and Engineering (A&E) services.

The RFP was issued in accordance with Metro's Acquisition Policy and Procedure, and the contract type is cost-plus-fixed-fee.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on September 23, 2014, provided minutes of the Pre-Proposal Conference and attendee sign-in sheets;
- Amendment No. 2, issued on September 30, 2014, provided answers to questions received regarding the RFP.

A pre-proposal conference was held on September 22, 2014 and was attended by 38 participants. Seventeen questions were asked and answers were released prior to the proposal due date. Two proposals were received by the due date, October 14, 2014.

## **B. Evaluation of Proposals/Bids**

A Proposal Evaluation Team (PET) consisting of staff from Regional Rail, Orange County Transportation Authority, City of Palmdale, and the Southern California Regional Rail Authority (Metrolink) was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- Skill and Experience of the Team                      35 percent
- Project Management Plan                                      25 percent
- Project Understanding    40 percent

The evaluation criteria are appropriate and consistent with criteria developed for other, similar A&E services. Several factors were considered when developing these weights, giving the greatest importance to the qualifications and experience of the personnel and the demonstrated understanding of the project.

This is an A&E qualifications based procurement. Price cannot be used as an evaluation factor pursuant to state and federal law. SBE preference is not applicable to A&E procurements.

Of the two proposals received, both were determined to be within the competitive range. The firms within the competitive range are listed below in alphabetical order:

1. HDR Engineering, Inc.
2. STV, Inc.

During the period October 15, 2014 to October 22, 2014, the PET evaluated and independently scored the technical proposals. The PET met on October 22, 2014 and determined that both proposers were in the competitive range. On October 29, 2014, the PET met to interview the firms and their proposed teams. The firm's proposed project managers and key personnel had an opportunity to present their team's qualifications and respond to the PET's questions.

Each team's presentation addressed the requirements of the RFP, experience with heavy rail engineering tasks, and proposed solutions. Each team was asked questions relative to each firm's qualifications and understanding of the project.

At the conclusion of the interviews, the PET met and completed their technical scores based on both written proposals and oral interviews.



### Qualification Summary of the Recommended Firm:

STV, Inc. (STV) has provided continuous services to Metro and Metrolink for over 20 years including work in the Brighton to Roxford rail corridor such as Metro's East San Fernando Valley Transit Corridor project and Metrolink's Sun Valley Siding project. These projects include extensive experience with the stakeholders involved such as the Union Pacific Railroad, Amtrak, the Los Angeles Department of Transportation and the cities of Los Angeles and Burbank.

STV's proposed Project Manager has over 20 years of experience successfully delivering heavy rail projects from conceptual studies to final design, specifications, and construction bidding and administration. STV provides project experience with similar complex issues including Metrolink's Sun Valley Siding, San Gabriel Subdivision Track Improvements, Pomona to Montclair Second Main Track, and the Riverside County Transportation Commission's Perris Valley Line extension.

STV's project team includes Small Business Enterprises with a history performing similar services satisfactorily for Metro.

The final scoring, after the interviews, for the top ranked team is as follows:

<b>1</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>2</b>	<b>STV, Inc.</b>				
<b>3</b>	<b>Skill and Experience of the Team</b>	84	35.00%	29.40	
<b>4</b>	<b>Project Management Plan</b>	84	25.00%	21.00	
<b>5</b>	<b>Project Understanding</b>	80	40.00%	32.00	
<b>6</b>	<b>Total</b>		<b>100.00%</b>	<b>82.40</b>	<b>1</b>

The final scoring, after the interviews, for the second ranked team is as follows:

<b>1</b>	<b>FIRM</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
<b>2</b>	<b>HDR Engineering, Inc.</b>				
<b>3</b>	<b>Skill and Experience of the Team</b>	84	35.00%	29.40	
<b>4</b>	<b>Project Management Plan</b>	71	25.00%	17.75	
<b>5</b>	<b>Project Understanding</b>	80	40.00%	32.00	
<b>6</b>	<b>Total</b>		<b>100.00%</b>	<b>79.15</b>	<b>2</b>

**C. Cost/Price Analysis**

The recommended price has been determined to be fair and reasonable based upon cost analysis including MASD audit, technical evaluation, fact-finding, and negotiations.

<b>Proposer Name</b>	<b>Proposal Amount</b>	<b>Estimate</b>	<b>Negotiated Amount</b>
STV, Inc.	\$16,580,291	\$11,103,750	\$13,594,016 <u>\$12,490,781</u>

**D. Background on Recommended Contractor**

The recommended firm, STV, Inc. (STV), headquartered in Douglassville, PA, with offices nationwide, including Los Angeles, has been in business for over 100 years. STV provides engineering services and consistently ranks in the top 25 firms in rail and mass transit.

Rail projects that STV has managed satisfactorily for Metro in the past five years include the San Fernando Valley Subregional Mobility Matrix, Metro Airport Connector draft Environmental Impact Statement (EIS) and Environmental Impact Report (EIR), the South Bay Green Line Extension EIS/EIR, Metro Blue, Green & Gold Lines Operations Capital Improvement Assessment, and Metro Red Line Station Canopies.

**E. Small Business Participation**

The Diversity and Economic Opportunity Department (DEOD) established a 25% Small Business Enterprise (SBE) goal for this solicitation. STV Incorporated exceeded the goal by making a ~~29.21%~~ ~~37.49%~~ 31.52% SBE commitment.

<b>SMALL BUSINESS GOAL</b>	<b>25% SBE</b>	<b>SMALL BUSINESS COMMITMENT</b>	<b><del>29.21%</del> <del>37.49%</del> 31.52% SBE</b>
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	<b>SBE Subcontractors</b>	<b>% Committed</b>
1.	Bullock & Associates, Inc.	<del>3.02%</del> <u>3.29%</u>
2.	Cornerstone Studios, Inc.	<del>0.63%</del> <u>0.58%</u>
3.	Diaz Yourman & Associates	<del>2.86%</del> <u>3.12%</u>
4.	Epic Land Solutions, Inc.	<del>1.13%</del> <u>1.06%</u>
5.	Lin Consulting	<del>3.37%</del> <u>3.66%</u>
6.	Pacific Railway Enterprise, Inc.	<del>13.11%</del> <u>14.27%</u>
7.	Ryan Snyder Associates, LLC	<del>0.23%</del> <u>0.26%</u>
8.	Wagner Engineering & Surveying, Inc.	<del>4.86%</del> <u>5.28%</u>
<b>9.</b>	<b>J.L Patterson &amp; Associates</b>	<b>5.97%</b>
	<b>Total Commitment</b>	<b><del>29.21%</del> <del>37.49%</del> <u>31.52%</u></b>

**F. Living Wage and Service Contract Worker Retention Policy Non-Applicability**

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) will not be applicable on this contract.

**G. All Subcontractors Included with Recommended Contractor's Proposal**

	<b>Subcontractor</b>	<b>Services Provided</b>
1.	Bullock & Associates, Inc.	Utility Engineering
2.	Cornerstone Studios, Inc.	Landscape Architecture
3.	Diaz Yourman & Associates	Geotechnical Services
4.	Epic Land Solutions, Inc.	Right of Way Consulting
5.	HNTB Corporation	Civil Engineering
6.	ICF Jones & Stokes, Inc.	Environmental Compliance Services
7.	J.L. Patterson & Associates, Inc.	Engineering Services
8.	LIN Consulting, Inc.	Traffic Engineering Services
9.	Pacific Railway Enterprises, Inc.	Signal & Communication Design
10	Ryan Snyder Associates, LLC	Bicycle, Transportation Planning

11 .	Wagner Engineering & Survey, Inc.	Surveying, Mapping
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# ATTACHMENT B



**Board Report**

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**File #:** 2015-0805, **File Type:** Project

**Agenda Number:** 50.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015**

**SUBJECT: METRO BLUE LINE PEDESTRIAN SAFETY ENHANCEMENTS AT GRADE  
CROSSINGS**

**ACTION: ADOPT LIFE-OF-PROJECT BUDGET**

**RECOMMENDATION**

**CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION:**

- A. adopting Life-of-Project (LOP) budget for Project 205104 (**Metro Blue Line (MBL) Pedestrian Active Grade Crossing Improvements Installation**) of \$30,175,000;
- B. increasing the Fiscal Year 2016 Budget for Project 205104 in Cost Center, 3960 - Rail Transit Engineering, by \$12,897,000 to fund the FY 2016 cash flow for these pedestrian grade crossing safety enhancements; and
- C. authorizing the CEO to negotiate and execute a Public Highway at-Grade Crossing Improvement Agreement with Union Pacific Railroad (UPRR) according to the Term Sheet (Attachment B).

**ISSUE**

The existing MBL light rail transit system is over 25 years old and pedestrian crossing protections needs updating to be consistent with Metro's current design standards. The installation of safety devices, such as pedestrian gates and emergency exit swing gates at rail pedestrian crossing intersections is expected to provide similar safety performance to our other light rail lines with at-grade crossings.

**BACKGROUND**

The Board adopted a motion by Director Yaroslavsky in July 2012 that was subsequently amended by Director Ridley-Thomas in August 2012, directing the CEO to convene a MBL Task Force and report back to the Board for all causes of accidents, including reviewing the design elements of the crossings, developing potential suicide prevention strategies, and to provide solutions for improving

pedestrian safety.

The Task Force was comprised of staff from Metro, the California Public Utilities Commission (CPUC), UPRR, the Cities of Los Angeles and Long Beach (although the City of Compton was invited, staff from the City of Compton was not present at the meetings) and the County of Los Angeles. UPRR was included because the MBL tracks run parallel to their tracks in close proximity along most of the alignment. Therefore, some of the pedestrian improvements will need to be made on UPRR's side of the right of way (ROW). The Task Force members agreed in concept to include pedestrian gates and swing gates on the Metro portion of the shared right of way, and based on feedback from UPRR, only swing gates on the UPRR side of the alignment. Nineteen (19) intersections were considered for improvement in the original project with only eleven (11) active pedestrian gates. An estimate of this project based on this scope resulted in the MBL Pedestrian and Swing Gates Project 205063 being approved by the LACMTA Board with a life of project budget (LOP) of \$7.7 million in November 2012. When Project 205063 was established, the original scope of work and LOP was intended to cover the cost for preliminary engineering (PE) and construction as a design-build contract based on the agreed-upon scope by the Task Force members. The CPUC, subsequently, required active pedestrian gating at all of the intersections (i.e. 27 intersections and 108 active pedestrian gates), dramatically changing the scope of the project, necessitating a new project and new project LOP budget. The prior MBL Grade Crossing Improvement Project 205063 will be cancelled having expended an estimated \$2,865,000 of \$7,700,000 through FY 2015 to complete all of the necessary design work for the new project and for third-party coordination. The balance of the remaining LOP funding for Project 205063 will be transferred to the new Project 205104.

## **DISCUSSION**

### **Original Project Estimates**

Having completed final design for Project 205104, we now have improved estimates on the costs necessary to complete the original MBL pedestrian crossing Project 205063 as well as the greatly expanded new project 205104 which includes many more active pedestrian gates. A table reconciling the original Project 205063 LOP with the costs to complete the much larger Project 205104 is included as Attachment C. We now know that the original LOP budget for Project 205063, established in November of 2012 for the now cancelled project omitted some elements which were identified during the final design of the new project. Specifically, the original project did not account for the following activities totaling \$2,013,954.

- Additional costs of \$350,132 associated with Metro labor were not identified in the original LOP.
- Metro Design costs were underestimated by of \$389,359.

- Metro grade crossing panels were overestimated by \$147,100.
- Flagging on Metro's side of the right-of-way was underestimated by \$74,119.
- Potential for utilities conflict was underestimated by \$125,000.
- Design support during construction, requests for information, and submittal reviews were underestimated by \$545,588.
- Construction Management costs did not account for \$545,588.
- Other agency soft costs such as Project Control, and Procurement were underestimated by \$409,191.
- The Contract Modification Authority (CMA) was overestimated by \$277,922.

#### External Agency Requirements - Design Changes Required by CPUC and City of Los Angeles

After completing the preliminary design and additional field diagnostic meetings with the Task Force members to refine the design, additional requests from most third parties resulted in a significant increase in the scope of the project. In late 2014, the CPUC informed Metro that the original project scope was no longer feasible as Metro will have to install pedestrian gates in addition to the swing gates on the UPRR side of the alignment to maintain uniformity with the devices proposed to be installed on Metro's side of the alignment. In that regard, CPUC staff urged Metro to continue to work with UPRR to overcome their original resistance to installing pedestrian gates on their side of the alignment. In subsequent discussions with UPRR, Metro was able to reach consensus to include the pedestrian gates on the UPRR side, in addition to only the swing gates as originally agreed at 23 crossings. This change required by the CPUC to now install active gating as well as swing gates on the UPRR side of the right of way was a material, design and construction change to the original scope of the project. Metro staff concurs with the change request by the CPUC because it brings the MBL up to our current design standard. We also believe the change reduces future legal liability risks.

The requirement for active pedestrian gating on the UPRR side of the tracks now required the negotiation of a contract with them to design and install the active gating, to widen and improve crosswalks, and to engineer gating/signal systems in coordination with our own. Further, consistent with their practice, UPRR will not agree to perform this work with a firm completion schedule nor to a firm fixed price. The Public Highway at-Grade Crossing Improvement Agreement with UPRR will be written on a time and material (T&M) basis only and the estimates included in the term sheet may change. Metro has entered into such T&M type agreements with UPRR in the past including the original MBL Construction and Maintenance Agreement and the highly successful MBL four-quadrant



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gate improvement agreement. The Alameda Corridor Agency, Caltrans and other public entities have also entered into such agreements with UPRR. However, absent a fixed price and a firm UPRR schedule, a material risk exists for another LOP increase on this project.

Another significant increase in the scope of the project, as a result of CPUC's requirement, was the increase in the number of crossings that needed to be enhanced on Metro's side of the alignment. The field reviews concluded that with additional civil improvements, Metro would be able to improve 8 additional crossings, increasing the number to 27 crossings. Furthermore, the civil improvements would enable Metro to install both pedestrian and swing gates at all 27 crossings, instead of only installing certain improvements at 19 crossings included in the original scope.

Another much smaller improvement to the project was required by the City of Los Angeles and relates to curb cuts along both sides of the right-of-way to facilitate improved access to the mobility impaired. The City believes that such street overlay improvements and reconstruction of existing curb ramps are necessary to comply with current Americans with Disabilities Act Access Guidelines (ADAAG), and their own standards. The reconstruction of curbs, which was not identified in the original estimate, was an added requirement. The incremental costs for all of the improvements not contemplated at the time of the original LOP are as follows with a complete reconciliation of these items is provided in Attachment C.

- Design/installation of pedestrian gates at all 27 crossings on Metro's side of the alignment instead of only 19. In addition, the original project only contemplated 11 active pedestrian gates rather than the 62 active gates now planned. Active gating at these other intersections will include the installation of concrete pedestrian crosswalk panels at many intersections and other associated implementation costs. The significant increase in the number of active pedestrian other civil improvements and systems integration and testing to accommodate them cost an additional \$7,262,711.
- Additional costs of \$375,000 associated with potential utilities conflicts as a result of significant increase in the original scope of work.
- In order to comply with the City's ADA standards, street-resurfacing was required. The work associated with curb cuts and street resurfacing added an extra cost of \$468,518 to the LOP.
- Extend existing railroad concrete panels for pedestrian crosswalks and replace existing deteriorated timber crossings and impacted rubber crossings within the UPRR right of way. As a condition of enhancing their ROW, the UPRR required Metro to implement these crosswalk improvements in the amount of \$1,830,190.
- Design/installation of pedestrian gates at 23 railroad crossing intersections on the UPRR side of the alignment, in addition to the swing gates proposed during the initial preliminary engineering and planning stage. These 46 new active pedestrian gates were not included in

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the original scope. This change, required by the CPUC, necessitated Metro to redesign and reconfigure the finalized drawings that included the addition of a substantial amount of civil and signal work in order to accommodate pedestrian gates, increases costs by \$6,371,826.

- Construction activity on the UPRR side of the right of way will require UPRR flagging services in the amount of \$600,000.
- The original project did not take into consideration the costs of obtaining easement rights for the UPRR right-of-way needed to install the added swing and pedestrian gates and panels in the amount of \$470,000.
- Contingency for UPRR work in an amount of \$1,391,000.
- Design support during construction, submittal review, and Construction Management costs, which included Third Party, Project Control, and Procurement costs were increased due to the expanded construction activities as a result of the external agency requirements. The costs associated with these services amounted to \$1,783,370.
- The Contract Modification Authority (CMA) in the amount of \$810,623 was increased due to additional construction activities as a result of the external agency requirements.
- Since this was a Design Bid Build contract and as a result of the external agency requirements in increased scope of work, the design contractor's cost and design review costs for the City of Los Angeles, City of Long Beach, City of Compton, County of Los Angeles, and UPRR was increased by \$1,958,641.

In summary the new design concept improves on the safety of the initial design with the required improvements mandated by the CPUC. The new Project will cost \$30,175,000 to construct, the old project having funded design and third-party coordination and oversight at an estimated cost of \$2,865,000. Both projects together are estimated to cost \$33,040,000.

#### Mitigation of Potential Utility Conflicts

To reduce the probability of the project being affected by an overrun due to unknown utilities, Metro has completed investigation and potholing for potential impact to the project. Metro identified and notified all public and private utilities for utility conflicts within the project limits. As part of this effort, we obtained as-built and record drawings, field surveyed all the visible manholes, hand holes and above ground utilities, opened Dig Alert tickets for all grade crossings, and back checked as-built utility drawings against the paint marks located through Dig Alert tickets for every crossing. We also performed subsurface utility location services to determine all potential utilities conflicts; employed radar penetrating detection equipment to identify underground utilities conflicts. Resolution of utilities

conflict will be accomplished by using one of the following methods a) protecting the existing utility in place by installation of shallow foundations or encasement of existing underground utility, b) design around the existing utility, c) relocating the conflicted utility. Review of the utility information shows that the grade crossing pedestrian gate installations may conflict with existing signal cables or traffic signal cables at approximately 35 locations. Metro is identifying each conflict to solicit a cost from the construction contractor for relocating or working around the conflicting cable prior to construction work starting, thus reducing cost and schedule impact due to utilities conflicts.

**DETERMINATION OF SAFETY IMPACT**

Blue Line	FY10	FY11	FY12	FY13	FY14	FY15 Jan, YTD	Total
Train vs. Ped Accidents	10	5	15	7	10	4	51
Train Miles	1,650,286	1,653,894	1,929,804	2,001,290	2,122,893	1,233,546	10,591,713
Fatalities (*)	5	3	4	3	2	3	20
Accident Rate per 100,000 Train Miles	0.61	0.30	0.78	0.35	0.47	0.32	0.48

Gold Line + EXPO Line	FY10	FY11	FY12	FY13	FY14	FY15 Jan, YTD	Total
Train vs. Ped Accidents	3	6	2	0	2	2	15
Train Miles	1,311,236	1,479,204	1,658,395	2,386,628	2,482,027	1,604,431	10,921,921
Fatalities (*)	0	0	0	0	1	0	1
Accident Rate per 100,000 Train Miles	0.23	0.41	0.12	0.00	0.08	0.12	0.14

\*Excludes suicides.

The table above summarizes the pedestrian collision rates and the number of non-suicide fatalities that have occurred on our primarily at grade light rail lines. The pedestrian collision rate on the MBL is more than 3 times higher (i.e., .48 vs .13) than the Pasadena Gold Line (PGL) and Expo Line combined. The number of non-suicide fatalities from FY10 through January 2015 on the MBL is twenty times higher than the PGL and Expo Lines given very similar numbers of train miles operated. While the PGL and Expo lines have more grade separation and other different service characteristics, they also have the most up-to-date pedestrian gating (active and swing) that exists in our light rail system. Metro staff does not believe that the difference in pedestrian gating technology is coincidental to the various lines’ pedestrian safety records.

Since the MBL opened, Metro’s costs of defense and payments to injured pedestrians or survivors have been very small, because of the comparative negligence of decedents and injured parties as well as existing statutory immunities for rail design. The average annual costs total \$679,448, with \$310,424 spent on Workers’ Compensation and \$369,024 spent on third parties. These costs include legal expenses, payments to third parties, temporary and permanent disability payments to Metro

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workers, and medical costs, but exclude other unallocated expenses such as Metro staff time to administer or investigate the incident, Sheriff costs and others. Therefore, expected financial benefits to Metro from safety improvements on the MBL today are relatively small, although risks are growing.

The Federal Department of Transportation (DOT) provides guidance as to appropriate evaluation procedures for safety improvements and requires such use by the FAA and others when evaluating policy alternatives and regulations. The DOT requires its member agencies to value the *public* benefit of safety improvements which we follow here. Guidance in 2008 values a statistical life saved (VSL) at \$5.8 million. When adjusted by changes in consumer prices to 2015, that estimated VSL increases to \$6.32. The DOT guidance also provides valuation methods for non-fatal injuries ranging from minor to critical. We have rated our non-fatal MBL train collision injuries very conservatively as serious, which is below critical and severe, but above minor or moderate because of the risk of significant brain injury, amputation, other orthopedic trauma and internal injuries. A serious injury is rated as 5.75% of a fatal injury, or \$360,000 in public benefit if prevented. These estimates are not the savings to Metro from reducing legal liabilities associated with pedestrian fatalities on the MBL.

Although we have not monetized them, other significant benefits exists to reducing fatal and non-fatal pedestrian collisions including fewer service disruptions, the opportunity cost of investigation and administration and the significant expense of providing medical care and disability benefits to highly traumatized rail operators, some of whom never return to work. In an extreme case, lifetime medical care and disability benefits to a rail operator involved in a fatal accident with a pedestrian could exceed \$250,000 or more.

An offset to these expected benefits is the cost to maintain and replace damaged pedestrian gates and swing gates over time. While the obligation to maintain the equipment would be split between Metro and UPRR with UPRR maintaining their pedestrian gates and Metro maintaining the rest, Metro would be responsible for all costs to maintain and replace all the pedestrian and swing gates. We expect Metro's cost to be approximately \$150,000 annually and UPRR's according to their estimate \$200,000 annually, which will be reimbursed by Metro, for a total maintenance cost of \$350,000 every year.

If active pedestrian gating reduces the MBL pedestrian collision rate by half, the expected number of fatalities on the MBL would be reduced from 3.58 annually to 1.79 annually and the number of non-fatal collisions would be reduced from 5.55 annually to 2.78. The annual public benefit of this fatal and non-fatal injury reduction is estimated at \$12.33 million. Subtracting the costs of annual operations and maintenance, the net annual public benefit is roughly \$11.98 million. Over a 25 year useful life, the Net Present Value (NPV) benefits of the pedestrian gating project, using appropriate discounting methods, is roughly \$202 million, far exceeding the sum of the now cancelled project's design costs and the construction costs for the new project of \$33.04 million. A detailed summary of these calculations are included in Attachment D.

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## **FINANCIAL IMPACT**

The new Project 205104 will require adopting an FY16 Budget for the project of \$12,897,000 in Cost Center 3960 - Rail Transit Engineering. This increase will be partially offset by eliminating the FY16 Budget for cancelled Project 205063 in Cost Center 3960 - Rail Engineering. The net increase to the FY16 Budget in Cost Center 3960 will be \$7,894,000. Annual operating and maintenance expenses will be required beginning approximately in Fiscal Year 2018. These operating and maintenance costs will be addressed in future years' budgets and will likely require an FTE increase at that time. Since this is a multi-year project, the Project Manager, Cost Center Manager, and Executive Director of Engineering and Construction will ensure that costs will be budgeted in future years.

### **Impact to Budget**

The source of fund for this action is from Prop C 25% Cash and/or Bond funds. These funds are eligible to be used for transit capital improvement to existing rail rights-of-way. No other sources of funds were considered for this procurement. This action will not impact on-going operating expenses.

## **ALTERNATIVES CONSIDERED**

The Board may choose not to authorize the new project budget. This alternative is not recommended since rejecting this project would prohibit staff from capitalizing on a good bid for installation of pedestrian and swing gates to enhance the pedestrian safety at 27 intersections along the Metro Blue Line corridor. The rejection would also result in additional cost and time to rebid the project in the future, extending impact to pedestrian safety if this safety enhancement project is not implemented. The current bids expire at the end of September 2015.

## **NEXT STEPS**

Upon approval of the additional funding, staff will work with Procurement for awarding the Contract C1086 Pedestrian and Swing Gates Installation to the most responsive responsible contractor. Staff anticipates issuing a contract under the CEO's Authority in September 2015, and roughly estimates that the improvements can be completed within 24 months from issuance of Notice to Proceed, provided the UPRR completes their portion of the work concurrent with our schedule.

For the original project, a final LOP could not be estimated until third-party discussions were concluded with LABOE, the CPUC and UPRR. Despite verbal agreement from third parties in 2012 regarding conceptual design, no design had been fully vetted and approved by all of the parties. Going forward, staff will make clear to the Board of Directors when requesting an LOP of possible risks of an increase related to third-party approvals. Staff is also exploring significant change in our LOP process by instituting design LOPs only. A design-only LOP for this project would have eliminated the significant construction LOP increase on this project at the cost of returning to the Board a second time for approval of the construction LOP.

## **ATTACHMENTS**

Attachment A - Funding/Expenditure Plan

Attachment B - UPRR Term Sheet for Public Highway At-Grade Crossing Improvement Agreement  
(the "Agreement")

Attachment C - Reconciliation of Estimates Related To Projects

Attachment D - Incremental Costs and Benefits for Improvements

Prepared by: David Chong, Supervising Engineer, (213) 922-5213

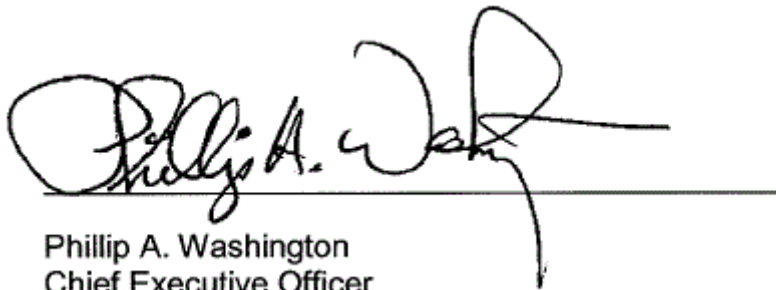
Samuel Mayman, Executive Officer, Engineering, (213) 922-7289

Greg Kildare, Executive Director, Enterprise Risk & Safety Management, (213) 922-4971

Reviewed by: Greg Kildare, Executive Director, Enterprise Risk and Safety Management, (213) 922-4971

Bryan Pennington, Executive Director, Engineering and Construction, (213) 922-7449

Nalini Ahuja, Executive Director, Finance and Budget, (213) 922-3088



Phillip A. Washington  
Chief Executive Officer

**ATTACHMENT A  
FUNDING/EXPENDITURE PLAN  
Project 205104 – MBL Pedestrian Safety Enhancement At-Grade Crossings**

Use of Funds	FY16	FY17	FY18	Capital Costs Total
<b>Construction Phase (By Metro and Contractor)</b>				
Construction Contract Bid (C1086-205063)	4,967,000	5,956,000	989,000	11,912,000
-Concrete Panels (By Metro)	561,000	673,000	112,000	1,346,000
-Flagging (By Metro)	250,000	300,000	50,000	600,000
-Utilities Conflicts (Allowance)	209,000	250,000	41,000	500,000
-Outside Curb ADA Compliance	237,000	285,000	47,000	569,000
<b>Subtotal Metro Construction Phase</b>	<b>6,224,000</b>	<b>7,464,000</b>	<b>1,239,000</b>	<b>14,927,000</b>
<b>Construction Phase (By Union Pacific)</b>				
-UPRR Concrete Panels	763,000	915,000	152,000	1,830,000
-UPRR Active Warning Devices	2,657,000	3,186,000	529,000	6,372,000
-UPRR Flagging	250,000	300,000	50,000	600,000
-UPRR ROW Acquisition/Easement	470,000	-	-	470,000
-Contingency on UP Work (T & M) @15%	621,000	660,000	110,000	1,391,000
<b>Subtotal Union Pacific Construction Phase</b>	<b>4,761,000</b>	<b>5,061,000</b>	<b>841,000</b>	<b>10,663,000</b>
<b>Construction Soft Costs</b>				
Engineering (DSDC, RFI, Submittals Review)	498,000	597,000	99,000	1,194,000
Construction Management	498,000	597,000	99,000	1,194,000
Third Party (City of LA et al.)	126,000	151,000	25,000	302,000
Agency Costs: Project Control, Procurement support, Safety, Communications, etc.	249,000	299,000	49,000	597,000
Contract Modification Authority (C1086-205063)	541,000	649,000	108,000	1,298,000
<b>Subtotal Soft Costs</b>	<b>1,912,000</b>	<b>2,293,000</b>	<b>380,000</b>	<b>4,585,000</b>
<b>Construction Phase Total</b>	<b>12,897,000</b>	<b>14,818,000</b>	<b>2,460,000</b>	<b>30,175,000</b>

Note: All itemized costs have been rounded up to a thousand  
Ped Gates Board Report-Attachment A 06-17-2015

<b>Total Project Cost</b>	12,897,000	14,818,000	2,460,000	<b>30,175,000</b>
<b>Source of Funds</b>	<b>FY16</b>	<b>FY17</b>	<b>FY18</b>	<b>Capital Costs Total</b>
Prop C 25% Bond	7,636,000	9,257,000	1,419,000	18,312,000
Prop C 25% Cash	5,261,000	5,561,000	1,041,000	11,863,000
				-
	-	-	-	-
<b>Total Project Funding</b>	12,897,000	14,818,000	2,460,000	30,175,000

Note: Union Pacific costs are not eligible for Prop C 25% Bonds. Includes \$10,663,000 and \$1,200,000 estimated Union Pacific related soft costs, equaling \$11,863,000 in Prop C 25% Cash.



**ATTACHMENT B (page 1 of 2)**  
**ESTIMATED COST FOR UPRR WORK**  
**Project 205104 – MBL Pedestrian Safety Enhancement At Grade Crossings**

Term Sheet for

Public Highway At-Grade Crossing Improvement Agreement (the “Agreement”)

The Agreement will allow LACMTA and its contractors entry on Union Pacific Rail Road (“UPRR”) property to install and maintain certain improvements needed for the pedestrian gates project. This Agreement will also obligate UPRR to perform and maintain certain work needed for the pedestrian gates project.

The work to be performed by UPRR includes signal design of the automatic pedestrian gates and installation of the grade crossing panels and the automatic pedestrian gates at 23 specified crossings (the “UPRR Work”).

LACMTA will reimburse UPRR 100% of UPRR’s actual costs (and 50% of certain other UPRR work) incurred in performing the UPRR Work.

LACMTA will purchase easement rights in the amount of \$470,000, which rights are needed –for pedestrian crossing use and for LACMTA to use and maintain certain equipment on UPRR property.

Current estimated costs to reimburse UPRR to perform the UPRR Work is approximately \$8,202,000 plus LACMTA estimated UPRR flagging cost in the amount of \$600,000. Adding in the acquisition cost of needed easement rights, and a 15% contingency, the total cost for UPRR Work is approximately \$10,663,000; provided, however such amount is an estimate only and may be subject to change.

UPRR will provide LACMTA with a heads up if UPRR believes the actual costs will exceed the above estimate. LACMTA can then decide to return to the Board for additional funds or rescope the project.

LACMTA will have rights to audit UPRR’s invoices.

LACMTA will have rights to enter UPRR property to construct, install, maintain, use and repair certain improvements needed to complete the pedestrian gates project.

UPRR will maintain the UPRR Work at an estimated cost of \$200,000 per year. LACMTA is in the process of negotiating a fixed annual maintenance fee with UPRR for these services.

**ATTACHMENT B (page 2 of 2)**  
**Estimated Cost for UPRR Work**  
**Project 205104 – MBL Pedestrian Safety Enhancement At Grade Crossings**

Crossing	Track & Surface						Install Automatic Flashing Light Crossing Signals					Real Estate	Annual Maintenance Cost
	Engineering	Signal Work	Surface Work	Recollectable	UPRR's Share	Surface Work Total	Engineering	Signal Work	Recollectable	UPRR Share	Signal Work Total		
20th St													
24th St													
41st St	\$15,408	\$89,988	\$28,994	\$134,390	\$0	\$134,390	\$25,026	\$123,292	\$148,318	\$0	\$148,318		\$3,910
Vernon	\$14,293	\$90,969	\$16,596	\$121,858	\$0	\$121,858	\$25,026	\$123,295	\$148,321	\$0	\$148,321		\$3,910
48th Pl	\$13,732	\$82,592	\$23,284	\$119,608	\$0	\$119,608	\$25,026	\$123,295	\$148,321	\$0	\$148,321		\$3,910
55th	\$16,665	\$91,739	\$54,728	\$163,132	\$0	\$163,132	\$49,831	\$385,053	\$434,884	\$0	\$434,884		\$18,190
Gage Ave	\$0	\$0	\$0	\$0	\$0	\$0	\$37,057	\$332,794	\$369,851	\$0	\$369,851		\$6,800
Florence Ave	\$0	\$0	\$0	\$0	\$0	\$0	\$35,685	\$344,339	\$380,024	\$0	\$380,024		\$12,750
Nadeau St	\$15,199	\$87,971	\$31,235	\$134,405	\$0	\$134,405	\$51,068	\$344,705	\$395,773	\$0	\$395,773		\$17,000
92nd	\$14,941	\$87,905	\$28,660	\$131,506	\$0	\$131,506	\$33,624	\$277,983	\$311,607	\$0	\$311,607		\$12,750
Century Blvd	\$9,806	\$107,182	\$17,787	\$134,775	\$0	\$134,775	\$25,026	\$163,724	\$188,750	\$0	\$188,750		\$8,160
103rd	\$13,341	\$95,226	\$15,990	\$124,557	\$0	\$124,557	\$39,832	\$317,342	\$357,174	\$0	\$357,174		\$17,850
108th	\$7,481	\$43,846	\$3,802	\$55,129	\$0	\$55,129	\$37,608	\$294,772	\$332,390	\$0	\$332,390		\$11,390
Wilmington	\$0	\$0	\$0	\$0	\$0	\$0	\$29,503	\$286,267	\$315,770	\$0	\$315,770		\$8,840
119th St	\$6,379	\$36,333	\$19,289	\$62,001	\$62,108	\$124,109	\$30,878	\$253,656	\$284,544	\$0	\$284,544		\$9,520
124th St	\$7,277	\$36,317	\$17,954	\$61,548	\$61,657	\$123,205	\$32,250	\$274,078	\$306,328	\$0	\$306,328		\$9,860
El Segundo	\$8,411	\$36,542	\$29,891	\$74,844	\$74,956	\$149,800	\$42,745	\$345,886	\$388,631	\$0	\$388,631		\$9,860
130th	\$1,670	\$35,802	\$18,474	\$55,896	\$56,005	\$111,901	\$32,250	\$259,333	\$291,583	\$0	\$291,583		\$7,310
Stockwell	\$7,638	\$36,386	\$21,546	\$65,570	\$65,683	\$131,253	\$29,503	\$245,924	\$275,427	\$0	\$275,427		\$8,500
Elm St	\$6,312	\$48,614	\$10,179	\$65,105	\$0	\$65,105	\$23,654	\$240,056	\$263,710	\$0	\$263,710		\$3,570
Compton Blvd	\$7,431	\$38,953	\$7,106	\$53,490	\$0	\$53,490	\$21,593	\$104,270	\$125,863	\$0	\$125,863		\$1,870
Myrrh St	\$7,431	\$38,953	\$7,106	\$53,490	\$0	\$53,490	\$23,683	\$151,802	\$175,485	\$0	\$175,485		\$3,910
Alondra Blvd	\$14,283	\$90,662	\$18,032	\$122,977	\$0	\$122,977	\$23,654	\$152,969	\$176,623	\$0	\$176,623		\$3,910
Greenleaf Blvd	\$11,844	\$903	\$83,162	\$95,909	\$0	\$95,909	\$23,654	\$151,684	\$175,338	\$0	\$175,338		\$3,570
Manville St	\$0	\$0	\$0	\$0	\$0	\$0	\$38,762	\$338,349	\$377,111	\$0	\$377,111		\$9,860
Wardlow Rd													
Spring St													
<b>Sub Total</b>	\$199,542	\$1,176,883	\$453,815	\$1,830,190	\$320,409	\$2,150,599	\$736,938	\$5,634,868	\$6,371,826	\$0	\$6,371,826	\$470,000	\$197,200
<b>UPRR Estimated Total</b>				\$1,830,190					\$6,371,826			\$470,000	TBD

Lump Sum Value per David LaPlante on June 04, 2015

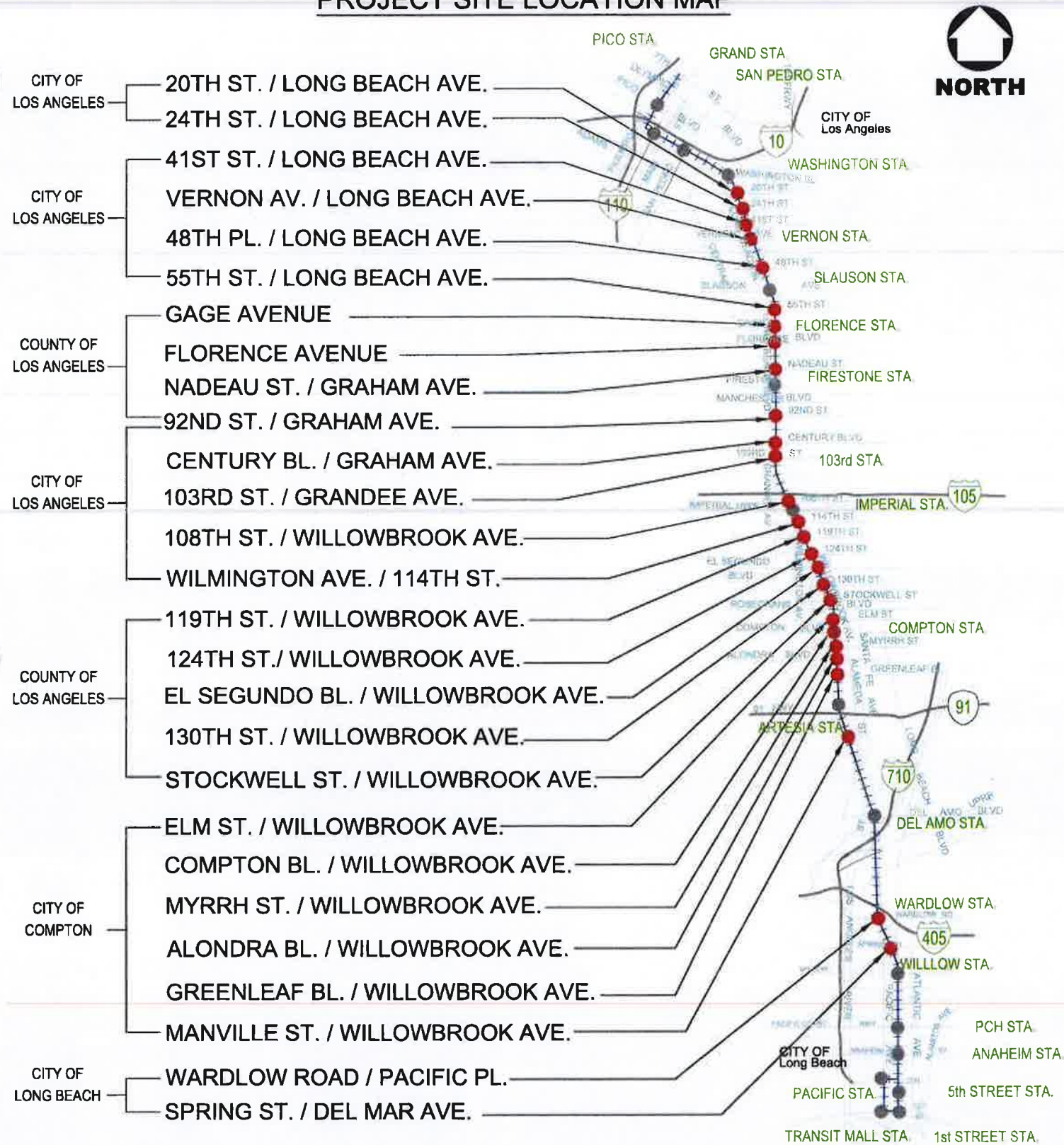
All Recollectable Costs and Real Estate Costs (Excluding Annual Maintenance Costs) **\$8,672,016**  
Metro Estimated UPRR Flagging Cost **\$600,000**  
Metro 15% Contingency **\$1,390,802**

**Total Estimated Cost for UPRR Work **\$10,662,818****

**ATTACHMENT C**  
**RECONCILIATION OF ESTIMATES RELATED TO PROJECTS**  
**205063 and 205104 - MBL Pedestrian Safety Enhancement At Grade Crossings**

Use of Funds	Original Project Estimate (19 intersections; 11 active gates)	Revised Original Project Estimate (19 intersections; 11 active gates) After Final Design	Difference	Incremental Costs for New Safety Upgrades (27 intersections, 108 active gates)	Total Costs New MBL Project (Projects 205104 and 205603)	
<b>Design Phase</b>						
Engineering Facilities and Systems	\$166,868	\$327,000	(\$160,132)		\$327,000	
Other Metro Departments	\$0	\$190,000	(\$190,000)		\$190,000	
Outside Consultants	\$0	\$389,359	(\$389,359)	\$1,958,641	\$2,348,000	
<b>Design Phase Total</b>	<b>\$166,868</b>	<b>\$906,359</b>	<b>(\$739,491)</b>	<b>\$1,958,641</b>	<b>\$2,865,000</b>	
<b>Construction Phase (By Metro and Contractor)</b>						
Crossing Panels (By Metro)	\$1,493,100	\$1,346,000	\$147,100		\$1,346,000	
Flagging (By Metro)	\$525,881	\$600,000	(\$74,119)		\$600,000	
Construction Contract Bid (C1086-205063)	\$4,648,595	\$4,648,595	\$0	\$0	\$4,648,595	
Construction Contract Bid (C1086-205063) due to CPUC Requirements	\$0	\$0	\$0	\$7,262,711	\$7,262,711	Increase in cost due to CPUC requirements for installing active pedestrian gates at all grade crossings
Utilities Conflicts (Allowance)	\$0	\$125,000	(\$125,000)	\$375,000	\$500,000	Potential utilities conflict due not anticipated in the original budget
Outside Curb ADA Compliance	\$100,250	\$100,250	\$0	\$468,518	\$568,768	
<b>Subtotal Metro Construction Phase</b>	<b>\$6,767,826</b>	<b>\$6,819,845</b>	<b>(\$52,019)</b>	<b>\$8,106,229</b>	<b>\$14,926,074</b>	
<b>Construction Phase (By Union Pacific)</b>						
UPRR Concret Panels	\$0	\$0	\$0	\$1,830,190	\$1,830,190	UPRR grade crossing cost required by UPRR and was not anticipated in the original estimate (See UPRR letter dated 03/12/15)
UPRR Active Warning Devices	\$0	\$0	\$0	\$6,371,826	\$6,371,826	UPRR active warning devices required by CPUC and was not anticipated in the original estimate (See UPRR letter dated 03/12/15)
UPRR Flagging	\$0	\$0	\$0	\$600,000	\$600,000	
UPRR ROW Easement	\$0	\$0	\$0	\$470,000	\$470,000	UPRR Right-of-Way cost was not anticipated in the original budget (See UPRR letter dated 03/12/15)
Contingency on UP Work (T&M) @15%	\$0	\$0	\$0	\$1,391,000	\$1,391,000	
<b>Subtotal Union Pacific Construction Phase</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,663,016</b>	<b>\$10,663,016</b>	
<b>Construction Soft Cost</b>						
				\$0		
Engineering ( DSDC, RFI, Submittals Review) @8%	\$0	\$545,588	(\$545,588)	\$648,498	\$1,194,086	Soft Cost were not anticipated in the original budget
Construction Management @8%	\$0	\$545,588	(\$545,588)	\$648,498	\$1,194,086	Soft Cost were not anticipated in the original budget
Third Party @2%	\$0	\$136,397	(\$136,397)	\$162,125	\$298,521	Soft Cost were not anticipated in the original budget
Agency Costs: Project Control, Procurement, etc. 4%	\$0	\$272,794	(\$272,794)	\$324,249	\$597,043	Soft Cost were not anticipated in the original budget
Contract Modification Authority ( CMA) @10%	\$765,306	\$487,385	\$277,922	\$810,623	\$1,298,007	Higher due to increase in construction cost
Subtotal Soft Costs	\$765,306	\$1,987,750	(\$1,222,444)	\$2,593,993	\$4,581,744	Higher due to increase in construction cost
<b>Construction Phase Total</b>	<b>\$7,533,132</b>	<b>\$8,807,595</b>	<b>(\$1,274,463)</b>	<b>\$21,363,238</b>	<b>\$30,170,834</b>	
<b>Total Project cost</b>	<b>\$7,700,000</b>	<b>\$9,713,954</b>	<b>(\$2,013,954)</b>	<b>\$23,321,879</b>	<b>\$33,035,834</b>	

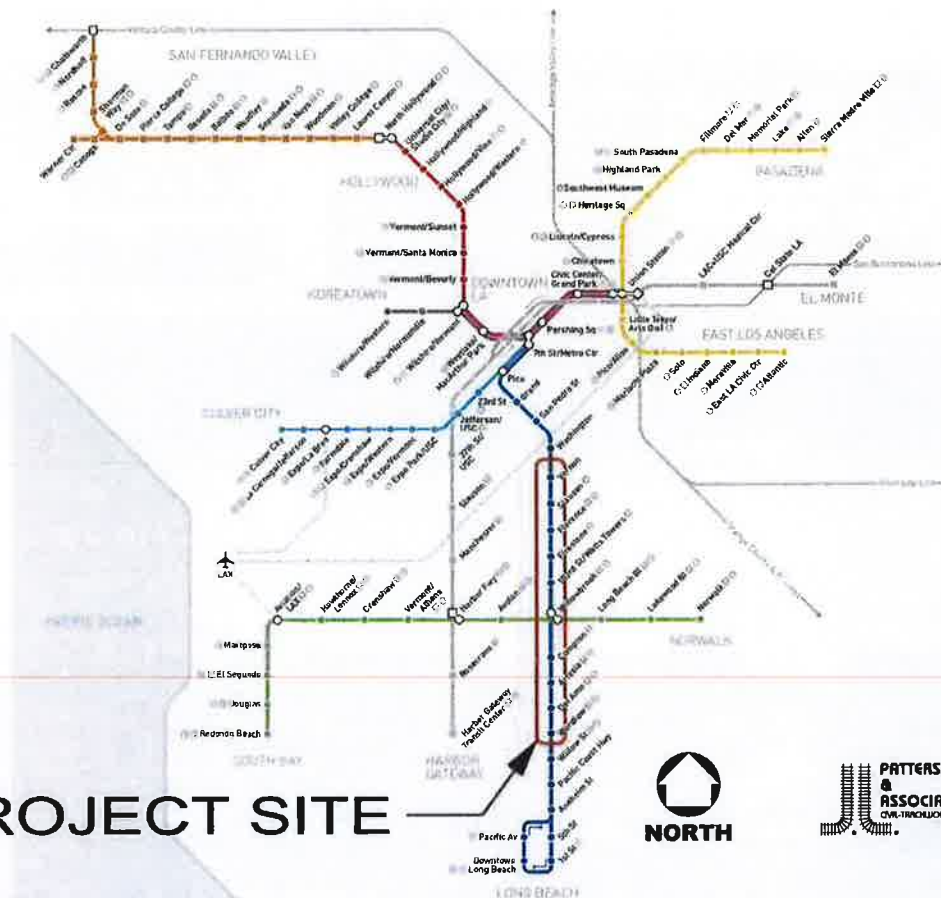
**PROJECT SITE LOCATION MAP**



**METRO BLUE LINE  
PEDESTRIAN AND SWING GATE  
INSTALLATION**

**CONTRACT NUMBER - C1086**

**JUNE 25, 2014**



**PATTERSON & ASSOCIATES, INC.**  
725 TOWN & COUNTRY RD  
SUITE 300  
ORANGE, CA 92868



**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**

*[Signature]*  
RECOMMENDED

7/28/14  
DATE

*[Signature]*  
APPROVED

7/29/2014  
DATE

**TYPICAL GRADE CROSSING IMPROVEMENT**

UPRR GRADE CROSSING PANEL EXTENSION BY UPRR FORCES

ACTIVE PEDESTRIAN GATE REQUIRED BY CPUC (UPRR INSTALLED)

UPRR PROPERTY ENCROACHMENT COST

CITY OF LA REQUIREMENT: FARSIDE ADA RAMP CONSTRUCTION

METRO

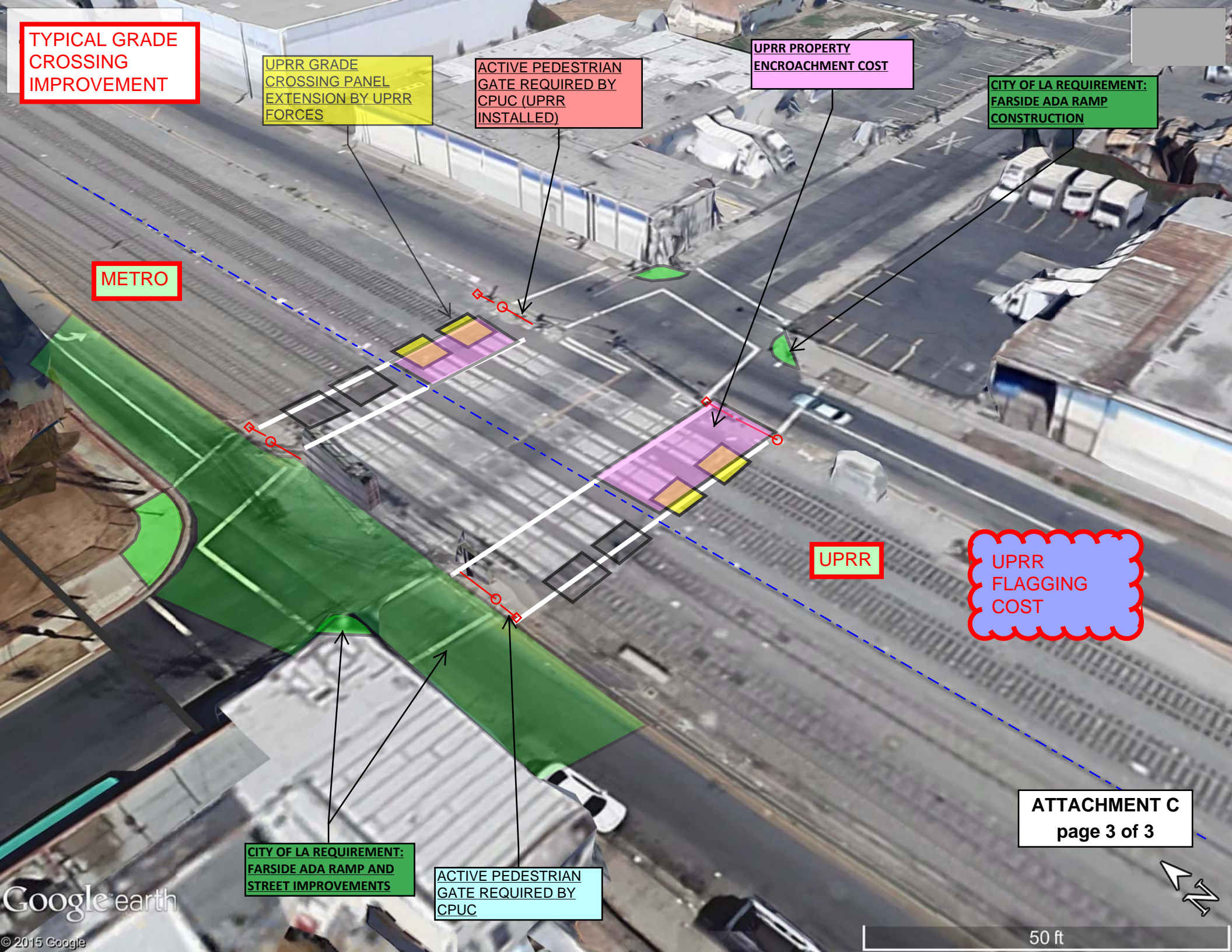
UPRR

UPRR FLAGGING COST

CITY OF LA REQUIREMENT: FARSIDE ADA RAMP AND STREET IMPROVEMENTS

ACTIVE PEDESTRIAN GATE REQUIRED BY CPUC

ATTACHMENT C  
page 3 of 3



**ATTACHMENT D**  
**INCREMENTAL COSTS AND BENEFITS FOR IMPROVEMENTS**  
**Project 205063 and 205104 – MBL Pedestrian Safety Enhancement at Grade Crossings**

Reduction Percentage	50%
Annual Non-Fatal Accidents Before Gating	5.55
Annual Non-Fatal Accidents After Gating	2.78
Annual Reduction in Non-Fatal Accidents	2.78
Value of a Non-Fatal Accident Reduction (millions)	\$ 0.36
Estimated Annual Value of Non-Fatal Accident Reduction from Pedestrian Gating (millions)	\$ 1.01
Annual Fatal Accidents Before Gating	3.58
Annual Fatal Accidents After Gating	1.79
Annual Reduction in Fatal Accidents	1.79
Value of a Fatal Accident Reduction (millions)	\$ 6.32
Estimated Annual Value of Fatal Accident Reduction from Pedestrian Gating (millions)	\$ 11.32
Total Estimated Annual Value of Reduction to Fatal and Non-Fatal Accidents (millions)	\$ 12.33
Estimated Metro Costs for Gating O&M (millions)	\$ 0.15
Estimated UP Costs for Gating O&M (millions)	\$ 0.20
Total Estimated Annual Costs for Gating O&M (millions)	\$ 0.35
Estimated Annual Public Net-Benefit for Pedestrian Gating (millions)	\$ 11.98
NPV of Public Net-Benefit Over 25 Year Life (3% discount rate) (millions)	\$ 202.50
Project Cost (millions)	\$ (33.04)
Public Benefit Net of Project Cost (millions)	\$ 169.46
Payback Period in Months	37 Months
Break Even Collision Reduction	9.35%
<b>Other Benefits</b>	
Reduced occupational injuries	
Improved service reliability	
Lower Metro and other public costs for investigation and administration expenses	



## Board Report

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**File #:** 2015-0577, **File Type:** Budget

**Agenda Number:** 75.

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### CONSTRUCTION COMMITTEE JULY 16, 2015

**SUBJECT: CRENSHAW/LAX TRANSIT PROJECT**

**ACTION: AMEND FY16 BUDGET**

#### **RECOMMENDATION**

CONSTRUCTION COMMITTEE FORWARDED WITHOUT RECOMMENDATION amending the FY 16 Budget to add \$800,000 to Project 405556 Systemwide Planning in Cost Center 4330, Countywide Planning and Development to cover the design costs for modifications to the Crenshaw/LAX (C/LAX) station design for consistency with the Systemwide Station Design.

#### **ISSUE**

A notice-to-proceed was issued to Walsh/Shea Corridor Constructors (WSCC) on September 10, 2013 for the C0988 contract. The C0988 contract included the Metro Systemwide Station Design Concept report as a requirement. Since that time, Metro has further developed the Systemwide Station Design into drawings and adopted the new standard drawings as part of Metro Baseline documents that is required for all future light rail stations. Additionally, Board policy requires that all Light Rail Stations have fare gates which were not included in the Systemwide Station Design Concept report or the C0988 contract. For the most part, the C/LAX stations incorporate the intent of the Systemwide Station Design. The design modifications recommended will bring four of the C/LAX stations into better conformity with the Systemwide Station Design. Staff is requesting Board authorization to amend the FY16 Budget to add \$800,000 using Countywide Systemwide Planning funds to modify portions of the platform configuration and the Florence/La Brea ticketing structure design as shown in Attachment.

#### **DISCUSSION**

Throughout the Los Angeles region, Metro's station architecture and finishes vary dramatically from station to station, resulting in the lack of a clear architectural identity for Metro Rail, not to mention higher maintenance costs. With Metro's rail system rapidly expanding, staff procured an architectural design team to conduct an independent review of existing Metro rail stations, conduct interviews with Metro personnel, survey other transit systems, and establish a list of best practices and lessons learned related to design, functionality and maintainability of urban rail stations. With information gathered during the initial review phase, the design team established a set of design objectives,

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based on a modular approach that allowed station components to be arranged in multiple ways to accommodate different station types (i.e. at-grade, aerial and subway) and site conditions. Other key design objectives include: the consistent application of highly durable materials to reduce maintenance costs; better integration of signage and equipment to improve the customer experience; and a distinctive and recognizable architecture that conveys high quality, yet does not reference a specific style, time period or geographic location. The station's art and landscape components are intended to be the strongest mediums for community expression.

The Systemwide Station Design has been presented and discussed at public meetings for the Crenshaw/LAX, Regional Connector and Purple Line Extension projects. The systemwide approach was also the subject of articles in the Los Angeles Times, Metro's Source and other local publications.

For the most part, C/LAX stations conform. However, design changes are required at four at-grade stations to change elements at the platform area and the Florence/La Brea fare gate zone to ensure that the C/LAX project has the same "quality of design" as the upcoming emerging system and is more compliant with Board policy. The \$800,000 will not address all design changes for full compliance with the Systemwide Station Design, but will address inclusion of more durable materials and better integration of fare gate equipment at the La Brea station. Implementation of these changes after the C/LAX Transit Project is constructed would be cost prohibitive and disruptive to service.

### **DETERMINATION OF SAFETY IMPACT**

This Board action will not have an impact on safety of our employees and/or patrons.

### **FINANCIAL IMPACT**

Staff is requesting to add \$800,000 to the FY2016 Budget in Project 405556, Cost Center 4330 (Systemwide Planning) to cover the design costs associated with the changes. Since the funding is separate from the C/LAX budget, the life-of-project budget for the C/LAX Transit Project will not be impacted. Since this is a multi-year project, the Chief Planning Officer and Executive Director Engineering and Construction will be responsible for requesting funding in future years.

### **Impact to Budget**

The source of funds for this modification is Propositions A and C and Transportation Development Act (TDA) Administration or Measure R Administration. These funds are not eligible for bus and rail capital and operations expenses.

### **NEXT STEPS**

A request for rough order magnitude construction cost and schedule impact has been requested from the C/LAX project contractor in parallel with this action. Upon receipt of the rough order magnitude construction costs and potential schedule impacts, staff will determine if the C/LAX project can proceed with these changes without impacting the project schedule and whether the project can absorb the construction cost impacts using project contingency or if supplemental funding mechanisms are required.

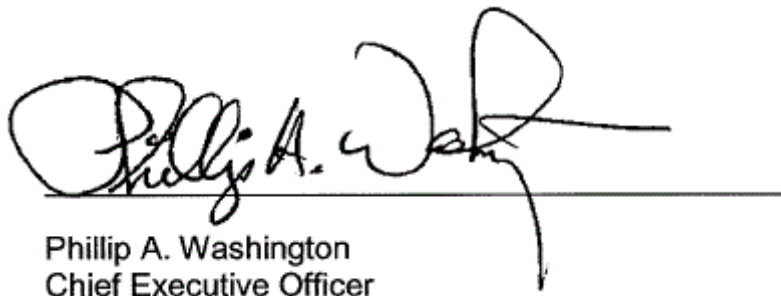


**ATTACHMENTS**

Attachment A - Crenshaw/LAX Ticketing Area

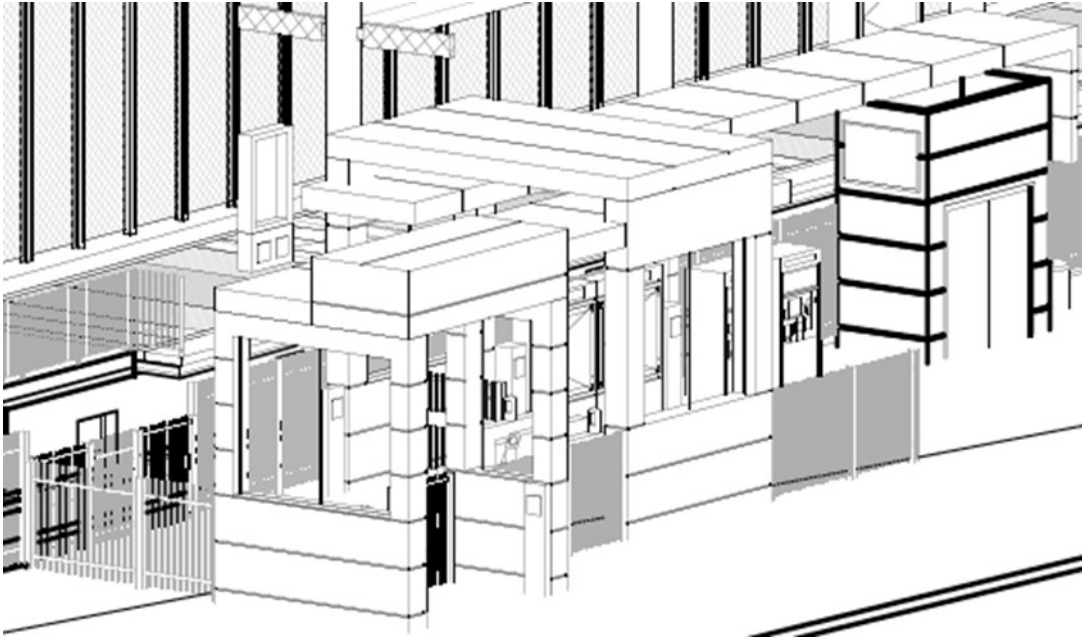
Prepared by: Charles H. Beauvoir, DEO, Project Management  
(213) 922-3095  
Frederick Origel, Director, Contract Administration  
(213) 922-7331  
Kimberly Ong, Interim DEO, Project Management  
(213) 922-7308  
Renee Berlin, Managing Executive Officer, Countywide Planning  
and Development, (213) 922-3035.  
Cory Zelmer, Transportation Planning Manager  
(213) 922-1079

Reviewed by Nalini Ahuja, Executive Director, Finance & Budget (213) 922-3088  
Bryan Pennington, Executive Director, Engineering and Construction  
(213) 922-7449  
Martha Welborne, FAIA, Chief Planning Officer, Countywide Planning and  
Development (213) 922-7267

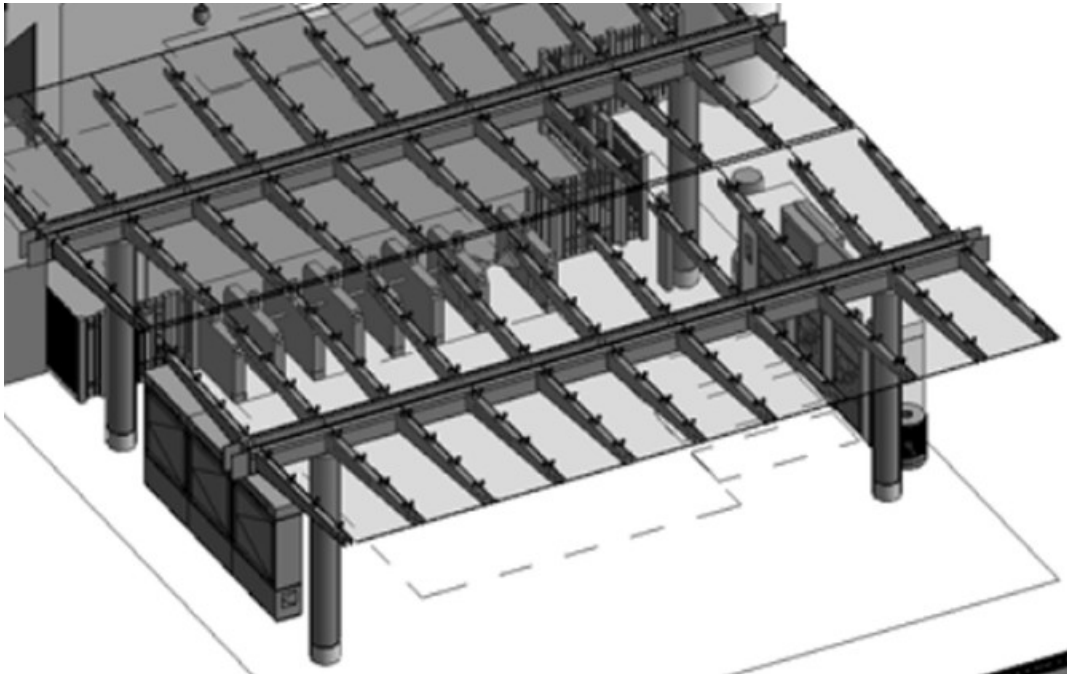


Phillip A. Washington  
Chief Executive Officer

Attachment A  
Crenshaw/LAX Plaza Ticketing Area



Current Florence/La Brea Ticketing Area Design



Current Aviation/Century Ticketing Area Design



**Board Report**

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**File #:** 2015-0844, **File Type:** Informational Report

**Agenda Number:** 51.

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**CONSTRUCTION COMMITTEE  
JULY 16, 2015**

**SUBJECT: SAFETY REPORT ON CRENSHAW/LAX PROJECT**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE the **monthly report on Crenshaw/LAX Safety**.

**ISSUE**

The Metro Board of Directors at its April 30, 2015 meeting directed Metro Staff to report monthly on safety-related matters on the Crenshaw/LAX Project. This report is responsive to the Board directive, and represents the third of such reports, with the first report being submitted in May and the latest report submitted in June 2015.

**DISCUSSION**

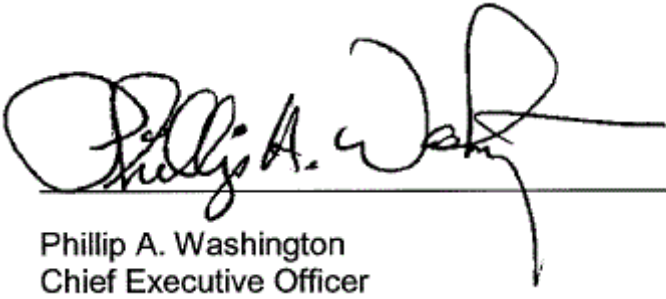
This monthly report provides an update on safety related issues and activities on the Crenshaw/LAX project for the months of May and June 2015. The details of these issues and activities are shown in Attachment A.

**ATTACHMENTS**

Attachment A - Safety Report on Crenshaw/LAX Project - July 2015

Prepared by: Greg Kildare, Executive Director, Enterprise Risk and Safety Management, (213) 922-4971

Reviewed by: Greg Kildare, Executive Director, Enterprise Risk and Safety Management, (213) 922-4971



Phillip A. Washington  
Chief Executive Officer

# WSCC's Safety Update on Crenshaw/LAX Project

Construction Committee Meeting  
July 16, 2015

Greg Kildare, Executive Director, Enterprise  
Risk and Safety Management



**Metro**

# Injury Incidents – May 2015

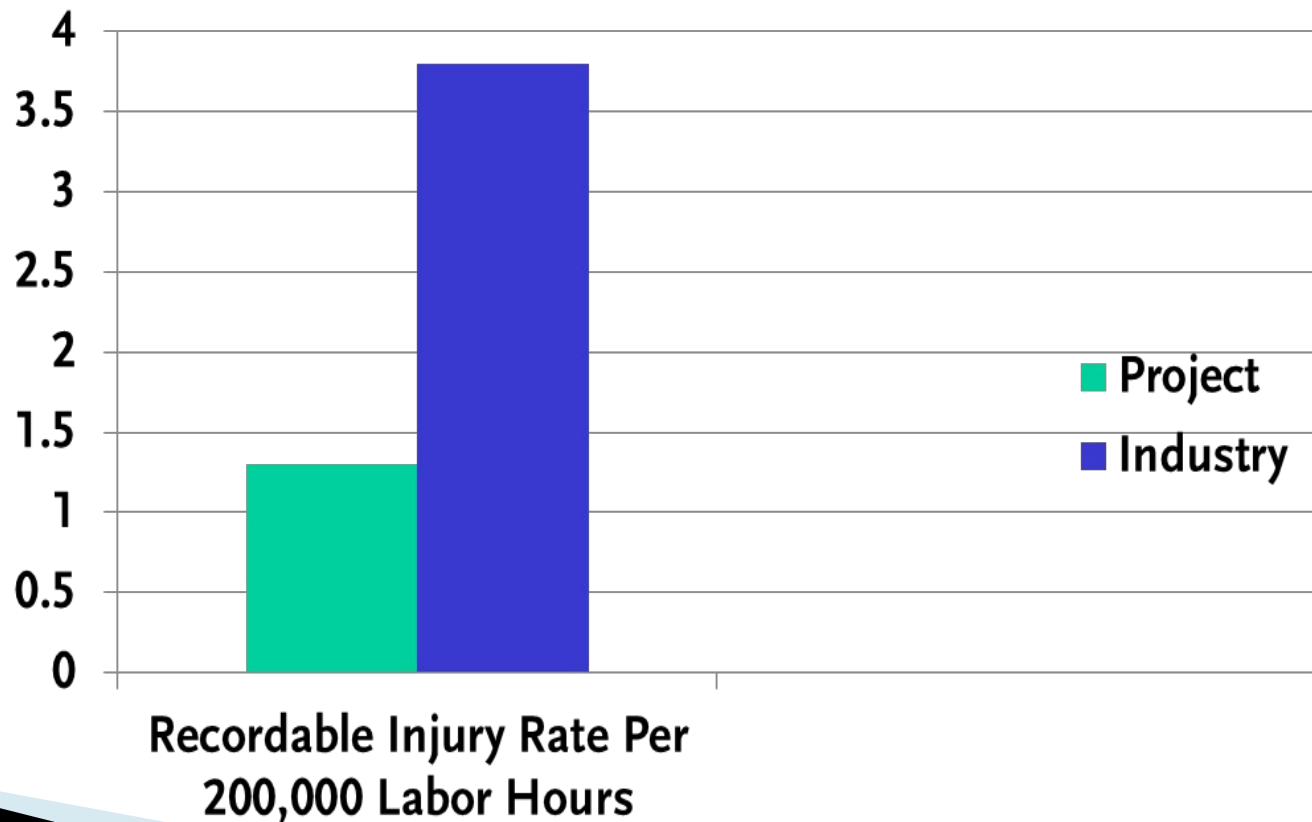
- Project to Date Total Recordables = 7
- Three (3) of the seven (7) recordable incidents were restricted/modified duty
- WSCC reported one (1) recordable incident (fractured fingers) in May

# Metro/WSCC Joint Safety Activities

- Metro staff participated in WSCC's Tool-Box safety meetings on May 11, June 15, and June 22.
- Metro participated in WSCC's Executive Safety meetings on May 18, and June 3.
- On June 23, Metro's CM/Safety team met with WSCC's Executive Safety management team during a Safety-Huddle meeting.
- On June 25, Metro Safety conducted a monthly All-Hands Safety meeting with WSCC's management team.
- CEO and Executive Team discussed safety matters with the Presidents of the Walsh Group and J. F. Shea on May 21.
- CEO briefed on WSCC safety program and conducted a safety inspection on the north end of the alignment on June 10.
- WSCC's Executive Staff participated in Metro's All-Hands Safety Meeting on May 28.
- Safety audits conducted by WSCC's Project Manager and Metro's Executive Director of Safety/Risk Management:
  - North end of alignment June 9
  - South end of alignment June 15

# Project To Date Recordable Injury Rate – May 2015

- ▶ Rate per 200,000 Labor Hours: 1.30
- ▶ Average National Construction Rate: 3.80





# Other Safety Efforts

- WSCC shared employee and subcontractor discipline data for safety violations
- WSCC has begun supplying its internal REAP (Review Employees Actions & Performance) records

# Metro Safety Efforts

- Metro is currently working to fill additional Metro safety staff positions approved in the FY16 budget
- In the interim, consultant safety staff are being used to augment contract compliance activities
- Consultant safety staff will be released as each vacancy is filled via the on-going recruitment process



**Board Report**

**File #:** 2015-0886, **File Type:** Informational Report

**Agenda Number:** 52.

**CONSTRUCTION COMMITTEE  
JULY 16, 2015**

**SUBJECT: ENGINEERING AND CONSTRUCTION EXECUTIVE DIRECTOR’S REPORT**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE **Engineering and Construction Executive Director’s report.**

**DISCUSSION**

The Engineering and Construction Executive Director’s Report is a monthly status report presented by Bryan Pennington, Executive Director Engineering and Construction.

**ATTACHMENTS**

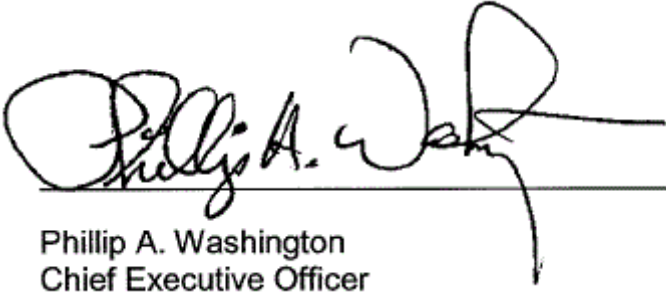
Attachment A - Engineering and Construction Executive Director’s Report

Prepared by:

- **Crenshaw/LAX** - Charles Beauvoir, Deputy Executive Officer, Project Mgmt., (213)299-3095
- **Regional Connector** - Girish Roy, Deputy Executive Officer, Project Mgmt., (213)893-7119
- **Westside Purple Line Ext 1 and 2** - Dennis Mori, EO Project Mgmt., (213)922-7238
- **I-405** - Michael Barbour, Deputy Executive Director, Transit, (213)922-2261
- **Division 13** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **MRL - MOL North Hollywood Station** - Samuel Mayman, EO Project Engr., (213)922-7289
- **Universal Pedestrian Bridge** - Samuel Mayman, EO Project Engr., (213)922-7289
- **Metro Blue Line Station** - Samuel Mayman, EO Project Engr., (213)922-7289
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213)922-7592

Reviewed by:

Bryan Pennington, Executive Director, Engineering and Construction, (213) 922-7449



Phillip A. Washington  
Chief Executive Officer

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# Engineering & Construction -- Transit Status Report

## Significant Issues

Presented By

**Bryan Pennington**

Executive Director

Engineering and Construction

# CRENSHAW/LAX TRANSIT PROJECT

## SIGNIFICANT HIGHLIGHTS

- Overall Project 33% complete. Design-builder's design is 91% and construction is 16% complete. Discussion underway with design-builder regarding expediting work efforts
- Expo Station – Tier two strut installation ongoing and excavation to tier three level beginning
- Green Line Connection & Aviation/Century Station – Beginning installation of falsework to support upcoming concrete pour for station structure



Green Line Connection & Aviation/Century Station



Vernon Station Decking

July 2015

Construction Committee  
Los Angeles County Metropolitan Transportation Authority



# REGIONAL CONNECTOR TRANSIT CORRIDOR

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## SIGNIFICANT HIGHLIGHTS

### Design Build Contract (DB)

- DB overall contract is 21% complete as of the end of June 2015. The overall final design is 72% complete as of the end of June 2015
- Piling work at Mangrove site for Tunnel Boring Machine(TBM) Launch Pit site completed in June 2015 →
- Supplemental Environmental Impact Statement(SEIS) was issued for public comments on June 12, 2015



# WESTSIDE PURPLE LINE – SECTION 1

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## SIGNIFICANT HIGHLIGHTS

Overall Section 1 Advanced Utility Relocations work is 48% complete.

- The Wilshire/Fairfax Advanced Utility Relocations Contractor is continuing with power and water work, and is on schedule to complete in October 2015.
- The Wilshire/La Cienega Advanced Utility Relocations Contractor continues with the Southern California Edison (SCE) power relocation work along the westbound lanes of Wilshire Boulevard. AT&T relocation work in the same area is underway.



Setting Power Vault on Wilshire

Design-Build is 2% complete.

- The Design/Builder for Tunnels, Stations, Trackwork, Systems and Systems Integration Testing is continuing with final design and site preparation work at various construction staging areas.
- The permit required for design survey and mapping, and geotechnical field investigation work within the City of Beverly Hills has been approved by the City Council.



# WESTSIDE PURPLE LINE – SECTION 2

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## **SIGNIFICANT HIGHLIGHTS**

- An Industry Review with the prime contracting community was held on June 4, 2015, which provided an overview of the Project to the contracting community.
- Advanced Preliminary Engineering continues to support the advertisement of a Request for Qualifications/Request for Proposal in early September 2015.
- Escrow closed on June 18, 2015, for Metro's purchase of the Ace Gallery Building property required for the Wilshire/Rodeo Station entrance.

# I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT

## SIGNIFICANT HIGHLIGHTS

- Punchlist items 99% complete
- Issuance of substantial completion and acceptance by Caltrans is subject to resolution of Kiewit Retaining Wall design issue
- Project is working with Kiewit to settle merited claims, Request for Changes (RFCs), and Provisional Sum Items prior to going to Arbitration



July 2015

**Construction Committee**  
Los Angeles County Metropolitan Transportation Authority



# DIVISION 13 BUS O&M FACILITY

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## SIGNIFICANT HIGHLIGHTS

- Project 96% Complete. Project completion estimated for September 2015
- Primary work at present includes mechanical, electrical, equipment installation, IT, interior finishing, furnishings, exterior skin, and landscaping
- Commissioning of building systems started in May 2015



July 2015

**Construction Committee**  
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# PATSAOURAS PLAZA BUSWAY STATION

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## SIGNIFICANT HIGHLIGHTS

- Project approximately 5% complete, construction start likely to slip to Fall 2015
- Pending issues include timely approval of 100% design package with Caltrans, Caltrans permits and ROW certifications to start construction, and resolution of change order for Red Line tunnel foundation conflicts
- Project scheduled to be completed January 2017, although slippage is likely due to above issues



July 2015

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# CIP PROJECTS

## MRL-MOL N. Hollywood Station West Entrance:

### Progress:

- Construction 42% complete. Construction completion Spring 2016
- Ongoing activities include the following:  
Elevator Casing, Knockout Panel(KOP)  
Invert Foundation, installation of High-density Polyethylene(HDPE) Membrane, Escalator Rebar, grounding, conduit, and Bulkhead/Water-stop work



July 2015

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# CIP PROJECTS

## Universal Pedestrian Bridge:

### Progress:

- Construction 34% complete. Project completion targeted for January 2016
- Ongoing foundation work consist of transformer installation at Station # 0, Forms & Rebar cages at Station # 1, and excavation work at Station # 3. Fabrication shop activities are about 50% complete
- Schedule Risk: Escalators must be delivered by September 2, 2015 to make schedule. Staff/contractor working to get hard commitment from Schindler on delivery date



July 2015

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# CIP PROJECTS

## MBL Stations Refurbishment:

- Project 86% complete (total of 18 out of 21 stations completed)
- Working on Slauson and Vernon currently
- Project almost 4 months ahead of baseline schedule
- Targeting substantial completion at end of July prior to start of the Special Olympics



Washington/San, Pedro/Grand, and Canopies; all three set on June 6, 2015

July 2015

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