

**Board Report**

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**File #:** 2023-0161, **File Type:** Contract**Agenda Number:** 20.

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**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE  
MAY 18, 2023****SUBJECT: TECHNICAL AND PROGRAM MANAGEMENT SUPPORT SERVICES****ACTION: APPROVE RECOMMENDATION****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to execute Modification No. 24 to Contract No. PS20113000, a cost plus fixed-fee contract with CH2M Hill, Inc. for technical and program management support services in support of the P2000 Light Rail Vehicle (LRV) Overhaul/Midlife Modernization Program, to increase the Not-To-Exceed (NTE) contract price by \$1,861,372.68 from \$7,060,813.71 to \$8,922,186.39 to permit continued consultant support through June 30, 2024.

**ISSUE**

This Contract provides the agency with program and technical consultant support for the P2000 LRV Modernization/Overhaul Contract that was originally awarded in March 2017. Due to the global pandemic, which continues to impact the supply chain, availability of resources, inspections, and test activities, the project schedule continues to be impacted and the final acceptance of all existing P2000 LRVs (fifty-two LRVs total) is deferred from December 2023 to June 2024.

**BACKGROUND**

In March 2017, the Board approved (#2017-0149) Contract No. PS20113000, a cost plus, fixed fee contract to CH2M Hill, Inc. in the amount of \$5,829,626 (base contract) for technical and program management services in support of the P2000 LRV Midlife Modernization/Overhaul Project. The base contract duration was five years. A no cost contract modification was issued in February 2022, extending the base contract from March 2022 through September 2022.

In September 2022, the Board approved (#2022-0459) to extend project support activities for the additional amount of \$1,231,187.71, from October 1, 2022, through June 30, 2023. This contract modification was issued through June 2023 to align with anticipated project activities and Metro's fiscal year for project budgeting purposes.

CH2M Hill Inc. currently provides staff support in the following disciplines, as directed by Metro:

- Project Management
- Systems Engineering
- Systems Integration
- Design Conformance Tests
- Inspection Activities at LRV Production/Modernization Site
- LRV Commissioning and acceptance Activities.
- Quality Assurance
- Document Control

All work and assignments are on an as-needed basis and directed by the Metro P2000 Project Team through issued Task Orders using fixed labor rates. The Consulting staff are managed daily by Metro's P2000 Project Manager.

## **DISCUSSION**

### Findings

Since the subject contract was awarded in March 2017, CH2M Hill, Inc. has been providing Metro's Project Team with technical and program management support, including review of all technical documents, oversight of system and combined-system level integration efforts, witness of verification and validation tests, and inspection of workmanship at the production/ modernization site. The Project is now in the Conditional Acceptance phase, an essential gateway to allow the Modernized LRVs to enter revenue service. The next phase includes the LRV's Reliability Demonstration which measures the performance of the Conditionally Accepted LRVs in revenue service against contractual reliability targets.

The Project schedule continues to be impacted by the remaining effects of the pandemic. Examples of the impacts include supply chain disruptions which delayed the start and completion of manufacturing, assembly, inspection, and test activities.

Approval of the recommendation modifies Contract No. PS20113000 to allow for the continuation of technical and program management support for the P2000 LRV Midlife Modernization/Overhaul Project. Metro staff requires this Project support to navigate and mitigate the remaining technical issues to achieve final delivery and acceptance of the 52 modernized P2000 LRVs.

This is an existing professional services support contract required to ensure continuity, proper project execution, and completion of the LRV Midlife Modernization/Overhaul project. Approving the recommendation ensures the successful completion of the Overhaul/Midlife Modernization Project, which provides accessible and affordable transportation for all who ride Metro's light rail system.

## **DETERMINATION OF SAFETY IMPACT**

The approval for the additional NTE funds for the consultant services will ensure team continuity and maintain overall system safety, service quality, system reliability, maintainability, and customer satisfaction.

The P2000 LRV Modernization Project permits Metro to maintain the P2000 LRV fleet in a State of Good Repair (SGR).

### **FINANCIAL IMPACT**

The requested new NTE contract price of \$8,922,186.39 is within the overall Board approved project LOP budget of \$160.8 million.

The Contract Price increase of \$1,861,372.39 has been included in Cost Center 3043, Rail Vehicle Acquisition, Account 50316, under project number CP 206044, P2000 LRV Overhaul Program.

Since multi-year projects are funding this recommendation, the Chief Operations Officer, Chief Program Management Officer, and respective Project Managers will be responsible for future fiscal year budgeting.

#### **Impact to Budget**

The current source of funds for this project are Proposition A 35% and Federal Funds Section 5337, State of Good Repair. Also, Federal Funds Section 5307, Proposition A/C, Measure R/M, and Transportation Development Act funds will be used as required. Staff will pursue additional federal funds that may become available through the Infrastructure Investment and Jobs Act (IIJA) or other federal sources for this project, to maximize and conserve the use of local funding sources before considering debt financing. These funds are not operating eligible funds.

### **EQUITY PLATFORM**

This is an existing Consulting Services contract needed to ensure continuity and proper project closeout of the P2000 LRV Midlife Modernization/Overhaul Project and allows for the successful delivery of those vehicles for use on Metro's existing light rail vehicle lines that serve a majority of Equity Focus Communities (EFCs) who rely on public transit for their daily lives, including travel for work, school, and other activities. The rail ridership consists of 67% low-income and 82% passengers of color based on the Countywide Planning's 2022 customer satisfaction survey. EFC areas along the light rail alignments included areas in Downtown LA, Chinatown, in the vicinity of downtown Long Beach, and others. Please refer to Attachment D for Metro's current rail line map showing areas of the EFCs that will benefit from this board decision.

CH2M Hill Inc. made a 24.81% Disadvantaged Business Enterprise (DBE) commitment. The project is 81% complete based on payments, and the current DBE participation is 12.91%, representing an 11.90% shortfall.

The current shortfall to date is anticipated as the majority of the DBE participation is planned for the latter part of the project when more vehicles are in production and are being delivered at a higher rate.

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## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendation supports strategic plan Goal #1.2 - Optimize the speed, reliability, and performance of the existing system by revitalizing and upgrading Metro's transit assets. The completion and rollout of the P2000 LRVs are state-of-the-art assets that will significantly reduce trip disruptions on rail networks and improve the integrity of the overall network.

## **ALTERNATIVES CONSIDERED**

The Board may choose not to approve the recommendation for increasing the contract amount. This is not recommended as critical project activities currently supported by consulting staff will be interrupted, with direct impacts on the overall project schedule. These activities include but are not limited to; inspection at the production/modernization site, witnessing commissioning tests, reviewing test reports, reviewing Project Schedule, and providing LRV commissioning acceptance, and warranty support. The Metro Project Team does not have the in-house resources to undertake all the necessary Project tasks as described.

Not approving the recommendation will also adversely impact the P2000 LRV Overhaul/Midlife Modernization Project completion due to the loss of the required technical expertise, labor, and manpower provided through this Consulting Services contract. The potential adverse impacts may include compromised quality and SGR of the Modernized LRVs, and reduced number of available LRVs for rollout to meet the passengers' demand that continues to trend positively towards the pre-pandemic levels.

## **NEXT STEPS**

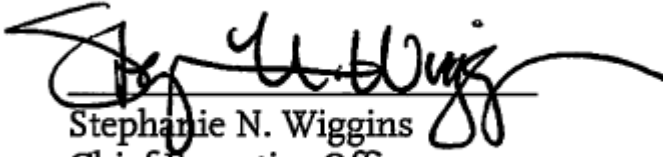
Upon Board approval, staff will execute Contract Modification No. 24 to increase the contract NTE amount by \$1,861,372.39 with CH2M Hill, Inc. for continuation of services.

## **ATTACHMENTS**

Attachment A - Procurement Summary  
Attachment B - Contract Modification Log  
Attachment C - DEOD Summary  
Attachment D - Metro EFC Map

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Stephanie N. Wiggins  
Chief Executive Officer

## PROCUREMENT SUMMARY

TECHNICAL AND PROGRAM MANAGEMENT SUPPORT SERVICES  
/ CONTRACT NO. PS20113000

|    |  |          |  |
|----|--|----------|--|
| 1. | <b>Contract Number:</b> PS20113000   |          |  |
| 2. | <b>Contractor:</b> CH2M Hill, Inc.   |          |  |
| 3. | <b>Mod. Work Description:</b> Increase the not-to-exceed contract price by \$1,861,372.68 from \$7,060,813.71 to \$8,922,186.39.   |          |  |
| 4. | <b>Contract Work Description:</b> Provide technical and program management support to Metro Project Team on managing of the existing P2000 Light Rail Vehicle (LRVs) Midlife Modernization Project to ensure timely modernization work and successful delivery of the modernized P2000 LRVs and the associated deliverables. |          |  |
| 5. | <b>The following data is current as of:</b> 04.05.23   |          |  |
| 6. | <b>Contract Completion Status</b>  |          | <b>Financial Status</b>  |
|    | <b>Contract Awarded:</b>   | 04.17.17 | <b>Not-to-Exceed Contract Award Amount:</b> \$5,829,626.00       |
|    | <b>Notice to Proceed (NTP):</b>  | N/A      | <b>Total of Modifications Approved:</b> 23                       |
|    | <b>Original Complete Date:</b>   | 12.31.21 | <b>Pending Modifications (including this action):</b> 1          |
|    | <b>Current Est. Complete Date:</b>   | 12.31.25 | <b>Current Contract Value (with this action):</b> \$8,922,186.39 |
| 7. | <b>Contract Administrator:</b><br>Nicole Banayan   |          | <b>Telephone Number:</b> 213-922-7438                            |
| 8. | <b>Project Manager:</b><br>Jason Yaw   |          | <b>Telephone Number:</b> 213-922-3325                            |

**A. Procurement Background**

This Contract was executed on April 17, 2017 to CH2M Hill, Inc. (CH2M) for a 55 month and 14 day period of performance for a total not-to-exceed contract price of \$5,829,626 to provide technical and program management support to Metro's P2000 Project Team on the P2000 LRV Midlife Modernization Project. The contract period of performance was extended twice due to various reasons including COVID-19 pandemic schedule relief.

- Contract Modification No. 15 dated July 12, 2021 – Extended the Period of Performance to December 31, 2023 from December 31, 2021.
- Contract Modification No. 23 dated April 5, 2023 – Extended the Period of Performance to December 31, 2025 from December 31, 2023.

A Request for Proposal was issued to CH2M on January 12, 2023. Metro received a proposal on February 10, 2023. Metro completed its negotiation on March 31, 2023.

In an effort to allow for continued support of the midlife modernization project, this board action approval is requested to allow staff to execute Contract Modification No. 24 and issuance of Task Order No. 8 to CH2M from July 1, 2023, through June 30, 2024. This will increase the contract value from \$7,060,813.71 to \$8,922,186.39 with an increase of \$1,861,372.68.

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

(Refer to Attachment B – Contract Modification/Change Order Log)

**B. Cost/Price Analysis**

The recommended price has been determined to be fair and reasonable based upon an Independent Cost Estimate (ICE) and technical evaluation. The not-to-exceed price of \$1,861,372.68 comprises of CH2M and its subcontractor’s labor rates, audited labor overhead, fees negotiated at the time of contract award, and expenses as this is a cost-plus-fixed-fee contract type. The approved labor rate for each consultant is based on experience and education, which has been determined to be fair and reasonable. The only factor affecting the not-to-exceed price of \$1,861,372.68 was labor hours, which has been reviewed and negotiated by Metro staff to align with the P2000 LRV Modernization Program’s project schedule from July 1, 2023, through June 30, 2024. The Metro ICE is \$96,399.72 (4.9%) higher than the negotiated amount because the ICE included an extra test engineer for backup to provide additional support and oversight on the LRV testing.

| <b>Proposal Amount</b> | <b>Metro ICE</b> | <b>Negotiated Amount</b> |
|------------------------|------------------|--------------------------|
| \$1,884,496.82         | \$1,957,772.40   | \$1,861,372.68           |

**C. Contractor Information**

CH2M has a local office in Los Angeles, and is an engineering company that provided consulting, design, construction, and operation services for corporations and governments. In 2017, it was acquired by Jacobs Engineering Group but kept its name for existing contracts. Under this Contract, they requested to keep CH2M.

In addition to providing technical and program management support for the P2000 LRV Modernization Project, CH2M currently provides program management support for the P3010 LRV Project and is also one of the qualified consulting firms on the Rail Vehicle Bench.

**CONTRACT MODIFICATION/CHANGE ORDER LOG**

**TECHNICAL AND PROGRAM MANAGEMENT SUPPORT SERVICES  
/ CONTRACT NO. PS20113000**

| <b>Mod. no.</b> | <b>Description</b>   | <b>Status (approved or pending)</b> | <b>Date</b> | <b>\$ Amount</b> |
|-----------------|--|-------------------------------------|-------------|------------------|
| 1               | Administrative Changes   | Approved                            | 11.16.17    | \$0.00           |
| 2               | Update Exhibit 1 with Exhibit 1.1 to add new staff   | Approved                            | 12.21.17    | \$0.00           |
| 3               | Update Exhibit 1.1 with Exhibit 1.2 to add new staff   | Approved                            | 07.11.22    | \$0.00           |
| 4               | Update Exhibit 1.2 with Exhibit 1.3 to add new staff   | Approved                            | 04.18.18    | \$0.00           |
| 5               | Update Exhibit 1.3 with Exhibit 1.4 to add new staff   | Approved                            | 08.16.18    | \$0.00           |
| 6               | Update Exhibit 1.4 with Exhibit 1.5 to add new staff   | Approved                            | 04.12.19    | \$0.00           |
| 7               | Update Exhibit 1.5 with Exhibit 1.6 to add new staff   | Approved                            | 04.16.19    | \$0.00           |
| 8               | Update Exhibit 1.6 with Exhibit 1.7 to add new staff   | Approved                            | 07.24.19    | \$0.00           |
| 9               | Update Exhibit 1.7 with Exhibit 1.8 to add new staff   | Approved                            | 09.05.19    | \$0.00           |
| 10              | Update Exhibit 1.8 with Exhibit 1.9 to add new staff   | Approved                            | 11.13.19    | \$0.00           |
| 11              | Update Exhibit 1.9 with Exhibit 1.10 to add new staff  | Approved                            | 03.13.20    | \$0.00           |
| 12              | Update Exhibit 1.10 with Exhibit 1.11 to add new staff   | Approved                            | 03.20.20    | \$0.00           |
| 13              | Update Exhibit 1.11 with Exhibit 1.12 to add new staff   | Approved                            | 09.09.20    | \$0.00           |
| 14              | Update Exhibit 1.12 with Exhibit 1.13 to add new staff   | Approved                            | 11.03.20    | \$0.00           |
| 15              | Update Exhibit 1.13 with Exhibit 1.14 to add new staff and Extend the Period of Performance through December 31, 2023. | Approved                            | 07.12.21    | \$0.00           |
| 16              | Update Exhibit 1.14 with Exhibit 1.15 to add new staff   | Approved                            | 02.15.22    | \$0.00           |



|           |   |                |                |                       |
|-----------|---|----------------|----------------|-----------------------|
| 17        | Update Exhibit 1.15 with Exhibit 1.16 to add new staff  | Approved       | 05.11.22       | \$0.00                |
| 18        | Update Exhibit 1.16 with Exhibit 1.17 to add new staff  | Approved       | 07.06.22       | \$0.00                |
| 19        | Increase \$1,231,187.71 to the Not-to-Exceed Contract Price. Update Exhibit 1.17 with Exhibit 1.18 with increase Not-to-Exceed Contract Price | Approved       | 09.27.22       | \$1,231,187.71        |
| 20        | Update Exhibit 1.18 with Exhibit 1.19 to add new staff  | Approved       | 09.27.22       | \$0.00                |
| 21        | Update Exhibit 1.19 with Exhibit 1.20 to add new staff  | Approved       | 11.16.22       | \$0.00                |
| 22        | Update Exhibit 1.20 with Exhibit 1.21 with years 8 and 9 labor rates  | Approved       | 02.28.23       | \$0.00                |
| 23        | Extended the Period of Performance through December 31, 2025.   | Approved       | 04.05.23       | \$0.00                |
| <b>24</b> | <b>Increase \$1,861,372.68 to the Not-to-Exceed Contract Price</b>  | <b>Pending</b> | <b>Pending</b> | <b>\$1,861,372.68</b> |
|           | <b>Modification Total:</b>  |                |                | <b>\$3,092,560.39</b> |
|           | <b>Original Contract:</b>   |                |                | <b>\$5,829,626.00</b> |
|           | <b>Total:</b>   |                |                | <b>\$8,922,186.39</b> |

## DEOD SUMMARY

**TECHNICAL AND PROGRAM MANAGEMENT SUPPORT SERVICES FOR THE  
P2000 LIGHT RAIL VEHICLE OVERHAUL/MIDLIFE MODERNIZATION  
PROGRAM/PS20113000**

**A. Small Business Participation**

Jacobs Engineering Group, Inc. (formerly known as CH2M Hill) (CH2M) made a 24.81% Disadvantaged Business Enterprise (DBE) commitment. As mentioned in the Board Report, for purposes of this contract CH2M is the name they are utilizing for the contract. The overall DBE participation is based on the cumulative value of all task orders issued. To date, seven (7) task orders have been awarded. Based on payment the project is 81% complete and the current DBE participation is 12.92%, representing a 11.89% shortfall.

CH2M has a shortfall mitigation plan on file. CH2M contends that the project presented various challenges in achieving the DBE target. CH2M reported that a major reason for the DBE shortfall is the decreased amount of light rail vehicle (LRV) inspection work to date on the project (Task Orders 4 and 5). CH2M indicated that Inspection work is the primary activity of DBE firms Virginkar and RailCar Quality Services. For DBE firm Langford & Carmichael, CH2M noted that the firm was not utilized to date. Additionally, CH2M stated that they expect to resolve the shortfall during Task Order No. 7 and beyond by increasing their DBE subconsultant capacity on upcoming work as the project progresses into the serial production phase, specifically an increase in inspection activities.

DEOD staff will continue to track and monitor CH2M's efforts to meet or exceed their commitments.

|                                  |                   |                                     |                   |
|----------------------------------|-------------------|-------------------------------------|-------------------|
| <b>Small Business Commitment</b> | <b>24.81% DBE</b> | <b>Small Business Participation</b> | <b>12.92% DBE</b> |
|----------------------------------|-------------------|-------------------------------------|-------------------|

|    | <b>DBE/SBE Subcontractors</b>  | <b>Ethnicity</b>       | <b>% Committed</b> | <b>Current Participation<sup>1</sup></b> |
|----|--------------------------------|------------------------|--------------------|--|
| 1. | Langford & Carmichael          | Asian-Pacific American | 0.45%              | 0.00%                                    |
| 2. | Parthenon Corporation          | Hispanic American      | 6.00%              | 6.64%                                    |
| 3. | Virginkar & Associates         | Asian-Pacific American | 18.36%             | 1.85%                                    |
| 4. | Railcar Quality Services, Inc. | Black American         | Added              | 4.43%                                    |
|    | <b>Total</b>                   |                        | <b>24.81%</b>      | <b>12.92%</b>                            |

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

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

A review of the current service contract indicates that the Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) was not applicable at the time of award. Therefore, the LW/SCWRP is not applicable to this modification.

**C. Prevailing Wage Applicability**

Prevailing wage is not applicable to this modification.

**D. Project Labor Agreement/Construction Careers Policy**

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

# Attachment D: Metro EFC Map

ArcGIS Metro EFC Map 2022 (Web Map)

Open in Map Viewer Modify Map Sign In

Details Basemap

Share Print Measure Find address or place

About Content Legend

## Legend

### Metro Rail and Busway

#### Metro Rail

- A Line (Blue)
- B Line (Red)
- C Line (Green)
- D Line (Purple)
- E Line (Expo)
- L Line (Gold)

#### Metro Busway

- G Line (Orange)
- J Line (Silver)

### Metro EFC Map 2022

- EFCs (Updated 2022)



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