



Board Report

File #: 2022-0459, File Type: Contract

Agenda Number: 41.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE SEPTEMBER 15, 2022

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

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to execute Modification No. 19 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 \$1,231,187.71 from \$5,829,626 to \$7,060,813.71 to support project activities for 9 months, through June 30, 2023.

ISSUE

This Contract provides program and technical consultant support for the P2000 LRV Modernization/Overhaul Contract that was awarded in March 2017. Due to the global pandemic which impacted the supply chain, availability of resources, and the limited opportunity for staff to travel to support design review meetings, inspections, and test activities, the project schedule has been impacted and final acceptance of all existing P2000 LRVs (fifty-two LRVs total) were deferred from November 2021 to December 2023.

To provide program and technical consultant support to the P2000 LRV Modernization/Overhaul contract staff requests approval of Modification No. 19 to increase the contract NTE amount by \$1,231,187.71 to provide consultant support through June 30, 2023.

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 for technical and program management services in support of the P2000 LRV Overhaul/Midlife Modernization Project. This contract provides technical and program management support to Metro staff engaged in managing the overhaul/midlife modernization of the existing P2000 fleet ensuring all fifty-two (52) LRVs and project deliverables comply with the contract requirements.

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 issuing Task Orders using fixed labor rates. The Consulting staff are managed daily by Metro's P2000 Project Manager.

DISCUSSION

Findings

Since the contract award of the P2000 LRV Overhaul/Midlife Modernization Project 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, a witness of verification and validation tests, and inspection of workmanship at the production/ Modernization site. The Project is now entering the Conditional Acceptance phase, an essential gateway to allow the Modernized LRVs to enter revenue service in Metro.

The Project schedule was and continues to be impacted by the pandemic. Examples of the impacts include:

- Supply chain disruptions which delayed the start and completion of manufacturing, assembly, inspection, and test activities.
- Ability of staff to travel to support in-person events such as design review meetings, inspections, tests, and audits. As a result, these events had to either be rescheduled or performed virtually with reduced efficiency.
- Complying with pandemic measures, including quarantine for two weeks when traveling and limiting close contact when supporting test & inspection activities, also impacted completing tasks efficiently.

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

This is an existing professional services support contract required to ensure continuity, proper project execution, and completion of the LRV Overhaul/Midlife Modernization project and does not have any impact on the previously approved Life-of-Project (LOP) budget. Approving the recommendation ensures the successful completion of the Overhaul/Midlife Modernization Project,

which provides accessible and affordable transportation for all who ride our 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 contract value of \$7,060,813.71 is within the Board-approved LOP budget of \$7,969,680 for consultant services.

The Contract Price increase of \$1,231,187.71 has been included in the Cost Center 3043, Rail Vehicle Acquisition, Account 50316, under project number CP 206044, P2000 LRV Overhaul Program. This Contract Price increase is within the overall available Consulting Services expenditure.

Since this is a multi-year contract, the Cost Center Manager and Project Manager will be responsible for allocating and budget the overall expenditure across subsequent years until project completion, including any options exercised.

Impact to Budget

The current source of funds for the Modernization program and Consulting Services is Proposition A (35%). Federal funds from the Transportation Improvement Program (TIP) will make up 90% of the source of funds for this Consulting Services Contract. Staff will pursue additional federal funds that may become available through MAP-21 and/or other federal sources for this project to maximize and conserve the use of local funding sources before considering debt financing.

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.

EQUITY PLATFORM

This is an existing Consulting Services contract needed to ensure continuity and proper project closeout of the P2000 LRV Overhaul/Midlife Modernization 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 jobs. EFC areas along the light rail alignments included areas in Downtown LA, Chinatown, parts of Long Beach, etc. 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 89.69% complete based on payments, and the current DBE participation is 13.38%, representing an 11.43% shortfall. CH2M Hill Inc. submitted an updated shortfall mitigation plan on July 8, 2022, and projects to exceed the 24.81% utilization by the end of all anticipated contract and task extensions. CH2M Hill Inc. remains committed to meeting the 24.81% DBE commitment by the end of vehicle production.

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, directly impacting 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.

Disapproving 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 a reduced number of available LRVs for rollout to meet the passengers' demand that is trending positively towards the pre-pandemic levels.

NEXT STEPS

Upon Board approval, staff will execute Contract Modification No. 19 to increase the contract NTE amount by 1,231,187.71 with CH2M Hill, Inc. for the continuation of services.

ATTACHMENTS

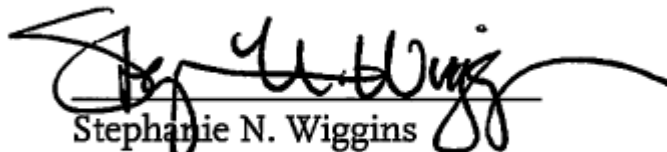
Attachment A - Procurement Summary
Attachment B - Contract Modification Log
Attachment C - DEOD Summary
Attachment D - Metro Rail Line Map

Prepared by: Jason Yaw, Sr. Manager, Project Control, (213) 922-3325
Annie Yang, Sr. Director, Rail Vehicle Acquisition, (213) 922-3284
Jesus Montes, Sr. Executive Officer, Vehicle Engineering & Acquisition, (213) 418-3277

Debra Avila, Deputy Chief Vendor/Contract Management Officer, (213) 418-3051
Lilia Montoya, Deputy Chief Operations Officer, Admin & Development, (213) 922-4061

Reviewed by:

Conan Cheung, Chief Operations Officer, (213) 418-3034



Stephanie N. Wiggins
Chief Executive Officer