



Board Report

File #: 2022-0296, File Type: Project

Agenda Number: 5.

CONSTRUCTION COMMITTEE JUNE 16, 2022

SUBJECT: SYSTEMS ENGINEERING AND SUPPORT SERVICES CONTRACT

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

CONSIDER:

- A. APPROVING an increase in total authorized funding for Contract No. AE47810E0128 with SECOTrans (Joint Venture of LTK Engineering Services, NBA Engineering Inc., Pacific Railway Enterprises Inc., and Ramos Consulting Services, Inc), for pending and future Task Orders to provide systems engineering and support services for Metro Rail and Bus Transit projects, in the amount of \$28,850,000 increasing the total contract authorized funding from a not-to-exceed amount of \$66,432,000 to a not-to-exceed amount of \$95,282,000 through Fiscal Year 2024; and
- B. AUTHORIZING the Chief Executive Officer (CEO) or their designee to execute individual Task Orders and Contract Modifications within the Board approved contract funding amount.

ISSUE

In April 2018, the Board approved awarding a seven-year cost reimbursable fixed fee, Task Order (TO) based Contract No. AE47810E0128, plus three one-year options, to SECOTrans, a Joint Venture for Systems Engineering and Support Services (SESS) consultant. Board approval included the staff request to return to the Board on a biennial basis as projects progressed and new project requirements were identified to update contract expenditure authorization. Previous Board actions provided total authorization of \$66,432,000, of which \$15,000,000 was included to support the future Rail Operations Center and Bus Operations Center (ROC/BOC) Project. Additionally, due to the ongoing requirements of the agency's Measure M and R programs, staff is seeking an additional \$28,850,000 in total contract authority. Board approval of the staff recommendation will increase contract value by \$28,850,000 to a new NTE amount of \$95,282,000 through Fiscal Year 2023-2024 (FY24).

Staff will continue to return to the Board on a biennial basis to request any additional contract authorization as conditions, program, and project requirements warrant.

BACKGROUND

To date, staff has awarded TO's and Contract Modifications (MODS) totaling \$50,046,117 with \$16,385,883 in authorized funding remaining. The SESS Consultant has exceeded their DBE commitment by 12.73% percent based on the TOs executed to date. Examples of projects supported by this contract include Metro Operational Simulation Analyses (Washington/Flower junction delays, LRT network recovery analyses, street running delay reduction strategies for A & E lines), Metro G (Orange) Line BRT Improvements, Westside D (Purple) Line 1/2/3, Metro A (Blue) Line Upgrades, East San Fernando Valley Light Rail Transit, Eastside Phase 2 and West Santa Ana Branch Transit. Attachment C includes a complete listing of the TO's and MODS executed since the beginning of the SESS contract. As indicated during initial approval, staff is now seeking an additional two-year funding authorization to support Systems Engineering, Measure R, and Measure M projects.

DISCUSSION

With the approval of Measure M, the ongoing implementation of the Measure R program required State of Good Repair initiatives, and the Board's desire to accelerate eligible projects before the 2028 Olympics, staff has engaged a SESS to provide a broad range of systems engineering design and related support services to supplement current Systems Engineering Department resources. Metro's capital program is over \$23 billion and requires extensive resources with the ability to react quickly to a wide range of complex technical issues. With a strong core staff located in Los Angeles, the SESS can apply and withdraw resources as project workloads fluctuate over time. The SESS has the extensive experience and capability to support the complete project lifecycle, from the conceptual phase to final design and construction.

Due to the intensive system integration requirements and length of time needed to deliver major capital improvement projects, this contract has allowed Metro to efficiently and effectively augment Program Management staff where appropriate to ensure the proper project resources are available to Metro in terms of additional staff and technical expertise.

The SESS provides a single systems engineering team and associated sub-specialties with the necessary resources to assist in the planning, development, and delivery of Metro's aggressive schedule of projects for the next decade. Examples of systems engineering disciplines include traction electrification, overhead contact systems (OCS), train control, communications, supervisory control and data acquisition (SCADA), rail simulations, corrosion control, systemwide electrical and other specialized disciplines.

Other Considerations

The challenge presented by the simultaneous implementation of numerous projects is to ensure the integration and standardization of the systems elements within and across the current Metro system. Consistent development and design are necessary to ensure that the required integration is achieved with respect to civil and electrical infrastructure, vehicles, control systems, communications, operations, maintenance, security, training, etc.

Prior to the procurement of the SESS, each project would use a different consultant for this work,

resulting in inconsistent applications. This approach was no longer feasible or advisable with the large volume of projects now underway. With a single SESS design team on staff, the standardization of design, construction and functionality of systems elements will keep Metro's long-term interest in system interoperability, maintainability and safety at the forefront. A fully-integrated network requires consistency of systems design and not a collection of potentially incompatible independent designs arising from separate projects. This approach has been implemented successfully in other transit agencies nationwide and the benefits of full systems standardization include:

- Interoperability and efficient maintainability
- Improved commercial viability
- Reduced spares requirements
- Reduced training requirements
- Flexibility to adapt to changing circumstances

In addition to the projects listed above and in Attachment C, staff expects the SESS to provide systems engineering services for current and future rail and bus transit projects and other capital improvement projects, including, but not limited to, the following:

- East San Fernando Valley Transit Corridor
- L (Gold) Line Eastside Phase 2 Extension
- C (Green) Line South Bay Rail Extension
- West Santa Ana Transit Corridor
- Sepulveda Pass Transit Corridor
- Vermont Transit Corridor
- G (Orange) Line BRT Improvements
- Westside D (Purple) Line Extension Section 1/2/3

DETERMINATION OF SAFETY IMPACT

A consistent systems design process has a positive safety benefit during the construction and subsequent operations of Metro's Bus and Rail transit network.

FINANCIAL IMPACT

The requested not-to-exceed contract funding is based on the anticipated level of services that will be required through FY24. Funding for the individual TOs is included in the Board approved life-of-project (LOP) budgets; therefore, this work is within the various project budgets.

Since this is a multi-year contract, project managers, cost managers, and the Chief Program Management Officer will be responsible for budgeting costs in future years.

Impact to Budget

Funding for TOs issued under this contract is provided by the specific project(s) requiring those services, as well as project studies, other general system engineering issues, and small-scale analyses. The current funds allocated to this effort consist of federal, state, and local sources, including Measure R and Measure M. Using these funding sources maximizes the project funding parameters allowed by approved provisions and guidelines. Alternative funding sources will be applied as additional revenue funding opportunities become available.

EQUITY PLATFORM

The Systems Engineering and Support Services funds Conceptual Engineering, Preliminary Design and Specifications, Final Design, including Design Services During Construction of Transit Rail and Bus Projects for various Metro projects including West Santa Ana Branch, East San Fernando Valley transit projects and other Metro Transit projects throughout the County of Los Angeles. These services are essential for the support and on-time delivery of Metro projects across the greater Los Angeles area. All services supported by this contract are centered on avoiding project delays and promoting cost-saving measures to effectively deliver the projects with minimal impacts on the communities and provide benefits of enhanced mobility and regional access to underserved populations within the respective project areas.

SECOTrans Joint Venture made a 15% DBE overall commitment for this contract and based on payments reported, is exceeding its commitment by 12.73% with a total DBE participation of 27.73%.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Systems Engineering Support Services contract supports the following strategic goals. Strategic Goal 1: Provide high-quality mobility options that enable people to spend less time traveling. Through this contract, the systems engineering consultant team will continue to implement innovative and state of the art engineering solutions to provide efficient mobility options throughout the LA County area. Strategic Goal 2: Deliver outstanding trip experiences for all users of the transportation system. The contract ensures the timely delivery and implementation of systems that provide essential communications, security, comfort, and reliability to all users. These factors are important areas of concern identified by Metro management and annual customer surveys. Strategic Goal 5: Provide responsive, accountable, and trustworthy governance within the Metro organization. With a regular 2-year authorization update to the Board, Metro staff will offer transparency and accountability of Systems related work involved in the Measure M program and other major capital projects.

ALTERNATIVES CONSIDERED

The Board may choose to reject the recommendation and request staff to re-procure these services through an RFP, choose to authorize an alternative amount or approve an alternative term of financial authorization. Staff does not recommend these alternatives. The use of a qualified SESS consultant has allowed the agency to secure highly technical expertise without the necessary increase in Metro's long-term labor costs. Further, by providing for an extended term contract, the Board has afforded staff the resources that seek to provide an integrated and consistent network design that

serves Metro's interests. Finally, by limiting the funding authorization to two years, greater accuracy of project scope and cost requirements are provided to the Board on a biennial basis.

NEXT STEPS

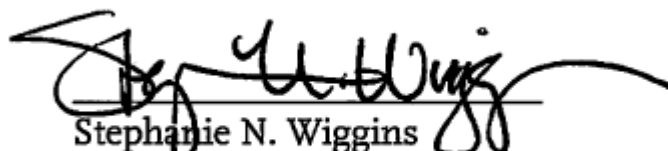
Upon Board approval, specific task orders will be issued on an as-needed basis.

ATTACHMENTS

Attachment A: Procurement Summary
Attachment B: Proposed Task Order Work List
Attachment C: DEOD Summary

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