

STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: December 13, 2023
SUBJECT: Metropolitan Water Tunnel Program
Program Support Services, JCK Underground, Inc.
Contract 7655, Amendment 2 – First Optional 24-Month Renewal

COMMITTEE: Water Policy and Oversight

 INFORMATION
 X VOTE

Paul V. Savard, P.E., Director, Design and Construction
Preparer/Title


Kathleen M. Murtagh, P.E.
Director, Tunnel Redundancy

The current Program Support Services Contract expires on April 1, 2024. The contract with JCK Underground, Inc., approved by the Board of Directors in March 2019, included two additional 24-month terms subject to further approval by the Board of Directors. This staff summary requests approval to exercise the first of two options to renew the contract for 24 months.

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 7655, Program Support Services for the Metropolitan Tunnel Redundancy Program, with JCK Underground, Inc., to exercise the first optional 24-month renewal, increasing the contract amount by \$7,000,000, from \$10,247,877 to \$17,247,877, and extending the contract term by 24 months, from April 1 2024 to April 1 2026.

DISCUSSION:

The Program Support Services (PSS) contract has provided assistance with program-wide activities such as risk management, quality management, design criteria and standardization, design and construction package planning, independent technical reviews, field investigation oversight, document management, contract practices review, independent cost estimating, critical path scheduling, and budget planning. This consultant provided advice on early engineering activities and prepared early work products in advance of MWRA procuring the Preliminary Design Engineering Contract. The Program’s five member Expert Review Panel (ERP), as well as several Subject Matter Experts (SMEs) in the fields of geology and risk management are engaged through this contract.

Engagement of a program-wide, independent consultant to support very large, long duration, complex projects is a common practice in the industry and generally consistent with past MWRA programs, such as: (1) the Lead Design Engineer and Program Manager/Construction Manager on the Boston Harbor Project; (2) Design Management Support on the John J. Carroll Water Treatment Plant project; and the (3) Owner’s Representative on the Norumbega, Blue Hills, and

Spot Pond Covered Storage projects. In addition, most ongoing, very large tunnel projects being conducted by other agencies and authorities across the country include an independent consultant(s) in the form of an Owner's Representative, Owner's Advisor, Program Manager, Geotechnical Consultant, Tunnel Consultant, or Program Support Services consultant.

The PSS consultant was selected in 2019 in a competitive procurement process in which cost was a key selection criterion. Financial terms (overhead, profit, and rate cap) of the existing contract will carry forward as part of the renewal. The initial contract term provided approximately 48,000 hours of effort over five years (ranging from 6,000 to 12,500 hours per year). An allowance for the cost of two optional 24-month renewal periods was estimated by MWRA staff in 2019 at \$3,500,000 and \$3,750,000 for the first and second renewals, respectively, with the actual costs to be determined at the time of renewal. The PSS consultant and its team members are precluded from participating in either the design or the construction phase of the project. Precluding the consultant from other phases of the project provides independence from the interests of other program participants, and encourages long-term commitment to MWRA.

The Tunnel Program is on schedule to achieve a significant milestone with the completion of preliminary design and environmental reviews in 2024. Passing this milestone will shift the focus of work to final designs with additional emphasis on completing land acquisition, expanding outreach efforts, achieving stakeholder agreements, and preparing for tunnel construction.

Based on the FY24 Capital Improvement Plan (CIP), it is projected that in the coming years, over \$1.5 billion in professional services contracts and construction contracts will be awarded. This significant increase in contract awards will require an increased level of effort from the Tunnel Department, other MWRA departments, and the PSS consultant in order to maintain the Program schedule.

The Tunnel Department has experienced staff losses associated with promotions, retirements, and resignations. Backfilling staff losses, as well as adding staff to match the expansion of the Tunnel Program has been difficult. The PSS consultant has provided skilled professionals on an as needed basis, which has been instrumental in maintaining the Program schedule to date. All current contracts for the Tunnel Program, including the initial PSS contract, are on schedule and on budget. It is anticipated that continued reliance on the PSS staff will be required to maintain the Program schedule.

The 24 month renewal of the PSS contract would provide the following services, with approximate budgets:

1. Continued core assistance to program-wide activities such as risk management, quality management, design and construction package planning, independent technical reviews, contract practices review and implementation, independent cost estimating, critical path scheduling, and budget tracking. (~\$3,150,000)
2. Continued ERP engagements over the next two years. All or portions of the five member panel will be asked to review program documents or attend workshops over the next two years on a variety of topics including program schedule, geology, final design basis, and initial tunnel design submittals. (~\$350,000)

3. Provide additional staff experienced in tunnel design and tunnel construction to support the final design. It is anticipated that both the North and South Tunnel contract packages will be in the final design phase during this two-year renewal period. (~\$1,300,000)
4. Provide staff to fill roles that are intermittent and/or have proven difficult to fill with MWRA staff (e.g., field investigation oversight and project controls). (~\$600,000)
5. Provide SME support in the areas of geology, tunnel engineering, and risk management. (~\$600,000)
6. If needed, assist the Tunnel Department and/or provide supplemental staff for MWRA lead initiatives that are time sensitive (e.g., land acquisition, outreach, and stakeholder agreements) and, if not completed in alignment with the overall Program schedule, would result in Program delays and added costs. Also, if needed, provide supplemental staff to support the Program in the event that the MWRA is not able to hire new staff into the Tunnel Department in a timely manner (i.e., design managers and document control). (~\$1,000,000)

The recommended first renewal for the PSS contract is for \$7,000,000, which will provide the Tunnel Program with approximately 28,000 hours of labor, plus cover expenses, costs for the ERP, and costs for SMEs over two years. The continuation of core support, along with the above described supplemental support, results in an approximately 20% higher level of effort (hours) per year than the level of effort provided by the PSS during the last 2 years of the initial five-year term of this contract. The original estimate for the renewals did not contemplate the need for continuing the PSS level of support at (or above) the level of the original contract. However, this level of support is recommended to maintain the Program schedule.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Contract Award:	\$10,247,877	60 months	04/20/2019
*Amendment 1:	\$0	0 months	04/05/2022
Proposed Amendment 2:	<u>\$ 7,000,000</u>	<u>24 months</u>	Pending
Adjusted Contract Amount:	\$17,247,877	84 months	

*Approved under delegated authority

BUDGET/FISCAL IMPACTS:

The FY24 CIP includes \$17,497,877 for Contract 7655. The current CIP has sufficient funds allocated to Contract 7655 for this first contract renewal. Funds for a second renewal, if approved by the Board of Directors, would require reallocation from the Administration, Legal and Public Outreach subphase for the Tunnel Program.

MBE/WBE PARTICIPATION:

Due to the specialized nature of this work, no minimum MBE or WBE participation requirements were established for the initial contract term. However, JCK Underground, Inc. identified a commitment of 5% MBE during the 24-month contract renewal term.