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

File #: 2015-0863, **File Type:** Contract **Agenda Number:** 58.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTTEE
JULY 16, 2015

SUBJECT: REPAIR/REPLACE GATEWAY FIRE SPRINKLER SYSTEM

ACTION: APPROVE USE OF DESIGN-BUILD CONTRACTING DELIVERY APPROACH

RECOMMENDATION

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE RECOMMENDED (4-0) finding that awarding this low-bid design-build contract pursuant to **Public Utilities Code Section 130242 (a)** will achieve private sector efficiencies by integrating the design project work and components, obtaining Los Angeles County Fire Department approval for project work, and replacing the **Fire Sprinkler System in Metro's Gateway Headquarters Building;**

REQUIRES TWO-THIRDS VOTE

ISSUE

The Fire Sprinkler Piping Replacement Project will remove existing compromised fire sprinkler piping and replace with new piping. Metro is authorized to enter into design-build contracts pursuant to Public Utilities Code Section 130242 upon approval from the Board as set forth in the Recommendation.

DISCUSSION

The primary benefit of the design-build process is a shortened project schedule where the design-builder is able to start repairs of critical components while the design is being completed for any modifications to the system. 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.

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 improve the schedule and

management efficiency on the implementation of the project;
- An integrated team that provides engineering, construction management, and administrative resources will result in cost savings;
- Adding design-build capability facilitates project delivery where staff project development resources are limited; and
- Design risks are shifted to Design-Builder, while changes related to design are minimized.

Renovation of the headquarters building fire sprinkler system is an element of the Board approved USG Building Renovation Project (CP# 210131). Sprinkler system renovation is required to ensure the integrity of the building fire-life-safety system and that it operates properly in case of emergency.

A preliminary engineering study, including ultrasonic wave scanning, determined that approximately 65% of building fire sprinkler lines have enough corrosion to warrant replacement. The report from the engineering survey also identified the following issues:

- Some of the piping was thinner than was the standard expected;
- Seeping moisture was found throughout the entire building;
- The 3” main vertical drain running the length of the building showed excessive corrosion;
- Air was found on every floor throughout the building. Trapped air and water within a pipe system creates an environment for additional corrosion;
- Water was found in dry systems; and
- A corrosion inhibitor should be used to extend the life of the existing piping; however severely pitted (corroded) pipes should be replaced with new.

The design build contractor will work with Metro staff and the engineering consultant to design and schedule the replacement of the compromised fire sprinkler piping with little to no impact on the building occupants.

DETERMINATION OF SAFETY IMPACT

Approval of this item will ensure the integrity of the building fire-life-safety system as well as the safety of our patrons and employees.

FINANCIAL IMPACT

The estimated cost of this project element is $8.3 million and is included within the Life of Project budget for the USG Building Renovation Project (CP 210131). FY16 funding of $996,000 is budgeted in cost center 6430 (Building Services), account 53102 (Acquisition of Equipment), project 210131 (USG Building Renovation Project). Since this will be a multi-year contract, the cost center manager and Executive Director will be responsible for budgeting the cost in future years.

Impact to Budget

Funding for this project is from the General Fund which can be used to fund Bus and Rail Operations. Funding for this action is within the existing LOP budget and no additional funds are required.

ALTERNATIVES CONSIDERED

The first alternative would be not to continue with this project, however this is not recommended because this would compromise USG Building fire-life-safety system. A second alternative is to replace damaged piping when it leaks or floods an office area. This alternative is not recommended because inevitable but unscheduled leaking or flooding will disrupt the work of building occupants and damage the building and equipment. The third alternative would be to pursue a Design-Bid-Build approach to the contract. This alternative is not recommended because it would provide none of the schedule, accountability, cost and risk advantages discussed in the body of the report.

NEXT STEPS

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.

ATTACHMENT

Attachment A - Observations from Ultrasonic Inspection

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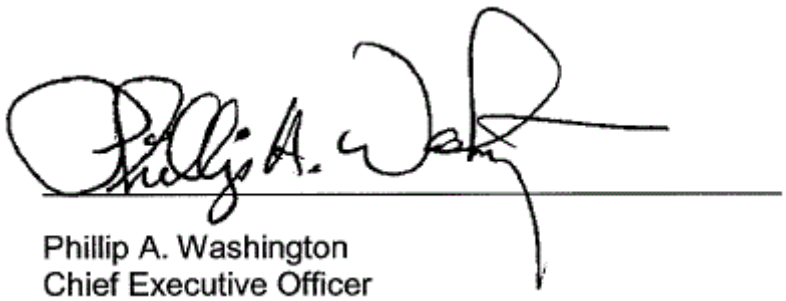

Phillip A. Washington
Chief Executive Officer

ATTACHMENT A

Key Observations from Ultrasonic Inspection

- Seeping seams found throughout building on threaded branch lines.
- 3-inch drain pipes running the length of the building showed severe issues..
- Over 65% of piping has interior wall loss of 11% or more.
- Air found within wet pipes on all floors.
- Trapped water found within pipes in the dry systems.

Photos of Fire Sprinkler System Components at Time of Ultrasonic Testing