

**Board Report**

File #: 2020-0620, **File Type:** Informational Report**Agenda Number:** 34.

**CONSTRUCTION COMMITTEE
OCTOBER 15, 2020****SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER CONSTRUCTION SPOT CHECKS****ACTION: RECEIVE AND FILE****RECOMMENDATION**

RECEIVE AND FILE Office of the Inspector General Change Order Construction Spot Check Report for the period June 1 to August 31, 2020.

ISSUE

On January 25, 2018, the Metro Board directed the Office of the Inspector General (“OIG”) to conduct random spot checks on change orders for the projects listed in the quarterly program management report to ensure that the CEO Delegation of Authority to approve Construction Change Orders Policy is performing in the manner desired by the Board of Directors.

BACKGROUND

The OIG’s Construction Change Order Spot Check Program (“Spot Checks”) focuses on approved change orders and modifications that exceed \$500,000. The five change orders in this report were selected from the October 2020 Program Management Major Project Status Report covering June 1 to August 31, 2020. The information for the Spot Checks was collected from the Program Management Information System (PMIS) which is the department’s database system. Also, TEAM meetings and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff from each project office.

We found that all five of the change orders in this report were negotiated and executed more expeditiously than would have occurred pursuant to the former Board approval process, and all five were approved faster with the new delegation of authority. In addition all five change orders were negotiated at lower cost than the contractors’ proposed price. This quarter’s Spot Checks of change orders found the delegation of authority has resulted in:

- A negotiated amount that was less than the contractors’ proposed price for the work to be done,
- Enabled the contractor to immediately order parts and materials, reducing delay,
- Contractor and was able to continue working without stoppages related to these change

- orders, and
- Zero construction delay costs were incurred for these changes.

Each Spot Check summarizes the following areas:

- Description of the change order,
- Change order detail,
- Scope of Work,
- Budget,
- Schedule: Time to execute the change order, and
- Recommendations if any.

Metro's Program Control department will provide responses to the recommendations in this report of OIG Spot Checks within 30 days after this Board report. Included with this report is a separate spreadsheet of recommendations and the status of responses concerning former OIG Spot Check recommendations.

DISCUSSION

Spot Checks Performed in this Quarter

A. Spot Check #1 - Crenshaw/LAX Transit Corridor Project

This OIG Spot Check report concerns the Crenshaw/LAX Transit Corridor Project (Contract C0988 MOD-00485) Case 5 Bedding Required by Los Angeles Bureau of Engineering (LABOE).

Change Order Detail

See Attachment A Spot Check #1 chart.

Summary #1

Scope of Work - This change order is for an additional requirement by Los Angeles Bureau of Engineering (LABOE) to increase supporting material for City owned sewers and storm drain utility pipes along the at-grade sections of the Crenshaw project and at the underground stations in lieu of the Metro rail standard amount and type of material.

The contract does not list the exact supporting material to be used, but it does reference Metro standard drawing US-014 "Backfill Operations" and states "type A", which provides limited supporting materials underneath the utility pipe. The materials required by LABOE is full concrete encasement placed under, around and over the top of the pipe which extends 5-inches minimum above the top of pipe. The City LABOE references a source for their standards, the Green book - Standard Specifications for Public Works Construction.

Prior to the award of this contract, bidders asked Metro whether this LABOE higher standard of supporting materials would be required. Metro's responses states that it would not be required and to use the Metro standard detail (this reference is found in pre-bid Q&A numbers 271 & 272).

Even though the request is made by LABOE, the Metro project management team decided not to pursue a betterment claim against the City for requiring this higher support standard as it was known to Metro prior to the contract award. The City has the responsibility to determine how the city's

utilities should be protected and therefore no betterment notification form was filed. The contractor is to provide all material, equipment, and labor to complete this modification.

Budget - The cost for this modification is \$687,500. The contractor's proposal was \$740,664. The independent cost estimate (ICE) was \$494,125. The award amount was \$53,164 (7.2%) less than the contractor's proposal. The negotiated amount was \$193,375 (39.1%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new CEO Delegation of Authority method was utilized for this modification. The agreed upon scope of work occurred on June 1, 2020. The modification was executed on July 10, 2020, and process was completed in 29 work-days. If the modification had gone to the August Board (July was a dark month with no meetings) for approval the process would have been 63 work-days later than under the CEO Delegated Authority method.

Recommendation - Since the 'Green book' states the support and materials for sewer and storm drain pipe are to be encased in concrete, the OIG recommends that the LA Metro rail standard drawing US-014, be updated to reflect the required City standard and Metro may negotiate with the LABOE to adopt a different standard for specific projects as warranted.

We further recommend, as discussed in previous reports, that Metro study the large discrepancies between the Metro ICE and the award amounts to determine if there is a method by which those discrepancies can be narrowed. This recommendation applies to many of the Spot Checks reviewed in this Report, and is based also on a Metro audit completed by the Management Audit Services Department that noted significant discrepancies in these amounts to be a frequent occurrence.

B. Spot Check #2 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00111), Fairfax Paleo Zone Modified Limits

Change Order Detail

See Attachment A Spot Check #2 chart.

Summary #2

Scope of Work - This change order is to extend the limits of excavation downward at the Fairfax station. The reason for this change is this paleo geological zone is larger than what was anticipated in the contract.

During the excavation of the Fairfax station the Metro paleontologist precisely identified the paleo geological zone to be deeper than what was specified in the Geotechnical Baseline Report (GBR) of the original contract documents. Digging in this expanded zone was restricted to removal of 6-inches at a time to protect the potential artifacts and less likely to destroy fossils. This extra tedious excavation resulted in removal of approximately 50,000 cubic yards of dirt as compared to the original 19,000 cubic yards as stated in the GBR contract documents.

Budget -The cost for this modification is \$4,917,392. The contractor's proposal was \$9,518,316. The ICE was \$ 3,631,303. The award amount of \$4,600,924 was 48.3% less than the contractor's

proposal. The negotiated amount of \$1,286,089 was 35.4% over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The CEO Delegation of Authority process was utilized for this modification. The agreed upon scope of work occurred on April 10, 2020. The modification was executed on June 2, 2020, and process was completed in 38 work-days. Under the prior Board approval method for change orders, assuming a June Board meeting date, it would have taken 55 work-days to complete the process.

Recommendation - The OIG recommends future GBR's include a more comprehensive underground site assessment to determine a better approximation of the marine and paleo geological layers. In this instance, a robust underground assessment would have avoided the costly change order. However, the additional excavation costs would have been included in the higher base bid value.

C. Spot Check #3 - Purple Line Extension Section 2 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 2 Transit Project (Contract C1120 MOD-0080), Demobilization and Remobilization due to COBH Moratorium

Change Order Detail

See Attachment A Spot Check #3 chart.

Summary #3

Scope of Work - This change order compensates the contractor's cost to demobilize and remobilize within the City of Beverly Hills (COBH) for the new holiday moratorium.

COBH required the contractor to clear and restore their streets during the holiday season from Thanksgiving through New Year's Day. They required that all equipment, barriers, traffic control signs, lighting, signals, and pavement striping be removed from Wilshire Blvd. and to restore the streets to their original state. This holiday moratorium is not part of the municipal code, but it is a requirement of the Memorandum of Agreement (MOA) between Metro and COBH, which was not agreed upon nor incorporated into the Contract C1120 at the time of award. The request for proposal for the Contract was based on the requirements of the draft final MOA for Section 1 of the Purple Line Extension, which did not include a holiday moratorium from Thanksgiving through New Year's Day.

This new holiday moratorium imposes additional restrictions and costs on the contractor beyond the original Contract by prohibiting work in the public right of way during the moratorium. While it prohibits construction work above ground in the city streets, the moratorium does not stop work in the staging yards or under the deck.

Metro plans to request an exemption from this year's moratorium (2020/2021 holiday season), following the steps outlined in the MOA. The direct costs associated with demobilizing and remobilizing traffic control should be less than last year's cost because there are fewer traffic control devices on this section of the street, and the work is primarily underground. It is important for the exemption to be approved, for the truck loading zones associated with the section of street where excavation will be occurring.

Budget -This modification was negotiated and the award amount is \$1,698,253. The contractor's proposal was \$1,854,510 and the ICE was \$924,038. The award amount was \$156,257 (8.4%), under the contractor's proposal. The negotiated amount was \$774,215 (83.8%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget

Schedule - The project procurement group confirmed that negotiations for MOD-0080 did take more internal and contractor discussion/document review than some of the other change actions. Additionally they stated that, "The additional effort ensured we were properly valuing a contract change." The new CEO Delegation of Authority process was utilized for this modification. The agreed upon scope of work occurred on January 31, 2020, but the negotiations to an agreed cost did not occur until June 10, 2020. The modification was executed on June 19, 2020, and was completed in 9 work-days. Under the prior Board approval method for change orders, assuming an August Board meeting date (July was a dark month for the board), it would have taken 56 work-days to complete the process.

Recommendation - The MOA between Metro and COBH imposes additional restrictions on Metro and adds costly change orders to the original contract.

The OIG recommends Metro adopts a standardized MOA for use in negotiations with all jurisdictions within Los Angeles County and utilizes this agreement for every construction project going forward in each respective jurisdiction and that budget estimates for projects should be revised as necessary to take into consideration MOAs entered into.

Spot Check #4 - Purple Line Extension Section 3 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 3 Transit Project (Tunnels Contract C1151 MOD-0004.1), Increase Ground Water Treatment Plant Capacity at Tail Track Exit Shaft

Change Order Detail

See Attachment A Spot Check #4 chart.

Summary #4

Scope of Work - This change order requires the contractor to provide and install three additional wells and a second water treatment system for treatment of PCE (Perchloroethylene and Tetrachloroethylene) and copper, and dewater up to 1,000 gallons per minute. The contract calls for one onsite water treatment system to extract trace metals (copper) and PCE's, and process 330 gallons per minute of dewatering from the tail track excavation shaft.

The contractor performed several water tests which indicated a larger volume of groundwater and higher traces of copper levels and PCEs than expected that must be reduced to an amount required by the National Pollutant Discharge Elimination System (NPDES) permit

From these tests it was determined that the onsite water treatment system needs to be larger and more sophisticated to reduce the associated contaminants to below that required by the NPDES

permit.

Budget -This modification was negotiated and the award amount is \$1,087,504. The contractor's proposal was \$1,411,157 and the ICE was \$867,390. The award amount was \$323,653 (22.9%), under the contractor's proposal. The negotiated amount was \$220,114 (25.4%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The CEO delegation of authority process was utilized for this modification. The agreed upon scope of work occurred on June 14, 2020. The modification was awarded on June 30, 2020, and was completed in 12 work-days. Under the prior Board approval method for change orders, assuming an August Board meeting date (July was a dark month), it would have taken an additional 53 work-days to complete the work.

Recommendation - It is the OIG's understanding that water pump tests and water quality tests were performed, but they were performed at the original location, the Army Reserve site, which is no longer the correct shaft location. Now the site is at the Veterans Administration property. A change in location can greatly affect both the levels and quality of the groundwater, thus increasing the revised dewatering process.

It is critical that the Real Estate Department be included at the earliest possible time in negotiating the property requirements for a project. Having to change location plans after a contract award can have significant scheduling and expense consequences.

Spot Check #5 - Purple Line Extension Section 3 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 3 Transit Project (Tunnels Contract C1151 MOD-0005), Addition of Sepulveda Staging Area to Compensate VA Site Reduction

Change Order Detail

See Attachment A Spot Check #5 chart.

Summary #5

Scope of Work - Under a previous modification the tail track exit shaft parcel was moved from the Army Reserve property to the adjacent Veterans Affairs (VA) property. However, the VA property is smaller and the shared access road with the VA has reduced the contractor's construction staging area by 1.1 acres.

This change order is payment for the contractor to find and secure a property lease, not exceeding 2 acres in size, for the construction staging area for the contractor and subcontractors operations related to the work on the C1151 Tunnel Contract. The property must be located near the tail track exit shaft at the VA property. The lease will terminate at the project substantial completion.

The contractor has located a staging area property to lease along Sepulveda Blvd (north of the VA site) which has been proposed as the preferred location.

Budget -This modification was negotiated and the award amount is \$2,612,951. The contractor's

proposal was \$2,908,321 and the ICE was \$1,634,911. The award amount was \$295,370 (10.2%) under the contractor's proposal. The negotiated amount was \$978,040 (59.8%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on June 29, 2020. The modification was awarded on July 31, 2020, and was completed in 24 work-days. Under the prior Board approval method for change orders, assuming an August Board meeting date, it would have taken an additional 43 work-days to complete the work.

Recommendation - The Purple Line Extension 3 was a 'next decade project' and was accelerated to be completed in the next 5 years with many project processes that had to be compressed to meet the schedule. We also understand that the real estate acquisition process is contingent on the funding being in place.

The real estate acquisition process and all other real estate arrangements must be negotiated as early as possible and negotiate those property rights strategically to ensure we have our real estate needs met at the earliest and least expensive manner possible.

FINANCIAL IMPACT

Report will have no Financial Impact to the agency.

Impact to Budget

For all of the construction change orders, Metro states the funds are within the approved budget, and will utilize the contingency funds to cover the costs.

- Spot Check #1) \$687,500 Crenshaw/LAX Transit Corridor Project
- Spot Check #2) \$4,917,392 Purple Line Extension Section 1
- Spot Check #3) \$1,698,253 Purple Line Extension Section 2
- Spot Check #4) \$1,087,504 Purple Line Extension Section 3
- Spot Check #5) \$2,612,951 Purple Line Extension Section 3

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendations that the Office of Inspector General has put forward support Metro's Strategic Plan Goal #5: Provide responsive, accountable, and trustworthy governance within the Metro organization and CEO goals to exercise fiscal discipline to ensure financial stability. The OIG mission includes reviewing expenditures for fraud, waste, and abuse in Metro program, operations and resources. For each selected change order reviewed, the OIG evaluates whether there are red flags of fraud, waste, or abuse taking place. We report the details of the significant change orders, and make recommendations consistent with the OIG's Construction Best Practices report dated February 29, 2016, more particularly focusing on lessons learned, improving efficiencies, and prudent spending.

Our goal is to provide rational, trustworthy information to the Board and support the efforts of Metro

management to constantly improve and refine its efforts for the benefit of the public. The Office of the Inspector General will continue reporting to the Board the results of Construction Change Order Spot Checks selected from the Program Management Major Project Status Quarterly Report.


NEXT STEPS

The OIG shall provide every quarter, an on-going spread sheet of recommendations to Program Control. Program Control and Program Management agrees to respond to the recommendations of the OIG within 30 days. The OIG continues to meet periodically to discuss reports, recommendations, and the status of implementation of recommendations, with Project Management and receive updates. The list of OIG recommendations and Metro management responses, is an attachment to this OIG report.

ATTACHMENTS

- Attachment A - Charts for Spot Checks
- Attachment B - Tracking Sheet of OIG Recommendations and Responses
- Attachment C - Power Point for October 2020 Construction Spot Checks

Prepared by: Prepared by: Suzanna Sterling, Construction Specialist Investigator, (213) 244-7368
Reviewed by: Karen Gorman, Inspector General, (213) 244-7337



Karen Gorman
Inspector General