

**Board Report**

File #: 2022-0450, **File Type:** Informational Report**Agenda Number:** 31.

**CONSTRUCTION COMMITTEE
August 18, 2022****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 March 1 to May 31, 2022.

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 four change orders in this report were selected from the Program Management Major Project Status. The OIG gathers the data, reviews all the change orders over \$500,000 and selects one change order from each of the major projects. Where a major project does not have a change order over \$500,000, another project might have two change orders to report on. 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 involved project office.

Change orders in this report originate from three different projects (Purple Line Extension Sections 2 and 3, and Division 20) but all concern the same contractor.

- Two change orders were issued as Not To Exceed (NTE) amounts because no Scope of Work agreement and Cost Schedule Proposal (CSP) were received, consequently no final modifications were entered into.
- One change order Scope of Work was agreed upon, but Metro could not reach an agreement with the contractor concerning the schedule. Therefore, Metro issued a Unilateral (directed) change order to the contractor.
- There was only one change order that progressed to a signed modification that had both an

- agreed upon Scope of Work and a CSP submitted.
- The Contractor objects to language in Metro’s standard forms.

For each Spot Check we summarize:

- Description of the change order
- Change order detail
- Scope of Work
- Budget
- Schedule: (Time to execute the change order)
- Safety and
- Recommendations

Metro’s Program Control department has provided informal responses to this report before its issuance and will provide written responses to the recommendations in this OIG Spot Checks Report within 30 days after this Report is issued. Included with this Report is a spreadsheet on the status of responses concerning former OIG Spot Check Report recommendations.

DISCUSSION

Spot Checks Performed in this Quarter

Spot Check #1 - Division 20 Portal Widening and Turnback Project

This OIG Spot Check report concerns the DIV 20 Portal Widening and Turnback Project. (Contract C1136 MOD-0029), Time Extension for MOD 20 Addl Scope & Requirements for DIV 20

Change Order Detail

See Attachment A Spot Check #1 chart.

Summary #1

Scope of Work - This change order (MOD 29) covers “delay” costs claimed by the contractor. A prior change order, MOD 20, was executed in August 2021 for \$43.3m which incorporated numerous design changes, drawing updates, and extra Metro directed work under the Division 20 contract; but not the delay costs. The contract does not state the cost per day for delays.

The Contractor’s claim is for 7 months (calculated at 213 days) lost time, in the amount of \$8,825,585.79. Metro negotiated with the contractor to allow 6 months (183 days) at \$32,787/day for a total of \$6m. This change order did not have an independent cost estimate (ICE) therefore the amount was checked against a similar concurrent change order’s ICE and found to be consistent. Metro developed a time impact analysis to determine that 6 months and not the Contractor’s 7 months, was an appropriate amount of time. This modification resolves all time related impacts for the 6-month extension including milestones 2 through 8 of the project schedules.

Budget - These modifications were negotiated, and the award amount is \$6,000,000. The Contractor’s proposal was \$8,825,585. The difference in price is \$2,825,585 (32%) under the contractor’s proposal. The negotiated amount was compared concurrent change order’s ICE. Staff stated that funds for this change are within the recently amended Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The Contractor and Metro

agreed on the Scope of Work on March 25, 2022. The modification including the price, was awarded on June 3, 2022, and was completed in 50 workdays. Under the prior Board approval method for change orders, assuming a June Board meeting date, it would have taken a total of 63 workdays to complete the transaction.

Safety - DIV 20 Project has 493,789 project hours through June 2022 with a Recordable Injury Rate of 2.84 (Bureau of Labor Statistics the National Average is 2.4) and a Days Away, Restricted or Transferred (DART) of 1.22 (Bureau of Labor Statistics National Average is 1.5).

Recommendation - The OIG recommends that future construction contracts include a capped amount per day to pay the contractor when Metro stops critical path construction work or the contractor incurs significant delays due to unforeseen causes.

Spot Check #2 - Division 20 Portal Widening and Turnback Project

This OIG Spot Check report concerns the DIV 20 Portal Widening and Turnback Project. (Contract C1136 CO-0011.3), 1st Street Viaduct - Crack and Spall Repair.

Change Order Detail

See Attachment A Spot Check #2 chart.

Summary #2

Scope of Work - This change order is to repair the concrete cracks and broken pieces on the 1st Street Viaduct. The 1st Street Viaduct, originally completed in 1929, is a bridge that consists of a series of arches, and columns supporting the long-elevated roadway of 1st Street and the South East portion of the Metro Gold line. Modifications are necessary to the supporting structures of the bridge to provide for the track turnback to accommodate the new Purple line heavy rail trains to be located at the Metro Division 20 yard.

The remediation process to the 1st Street Viaduct required a full structural concrete inspection of the bridge. The full inspection was not possible because of limited access to the live train yard. Three processes needed to take place to determine the status of the bridge: 1) the removal of the asphalt roadway above and 2) the smoke protection "slabs" attached to the underside of the bridge structure (covered under MOD 20) needed to be removed as well, 3) exposing the bridge foundations. When the Contractor removed the slabs, the original concrete revealed extensive cracking and breakage. Remedial repairs were necessary. The parties have not agreed upon a scope of work because the full extent of the repairs have not been determined. Additionally, the Contractor has not completed a final cost and schedule proposal (CSP), but they are continuing to perform work. We were advised, "The Scope of Work with associated costs will be determined when all repair work is complete." The contractor does not have a fixed schedule, scope, or cost for performance of the work. The project team provided four NTE change orders (CO-11) to the contractor to complete the work. The project team states the full amount may cost as much as \$4m.

Because of limited access to the live train yard, this change order work was budgeted at \$100,000 in the contract as a place holder until the full scope could be determined.

The cumulative change orders are:

- a. Base was \$706,673, CO 11.0
- b. Increase of \$1,394,170, to \$2,100,843, CO 11.1
- c. Increase of \$500,000, to \$2,600,843, CO 11.2
- d. Increase of \$634,157, to \$3,235,000, CO 11.3

Independent of this change order, the OIG was informed the contractor refuses to sign modifications because the Metro standard modification form says Metro will not pay the sub-contractor's bond cost. This issue is not limited to this project.

Budget - Four NTE change orders have occurred totaling \$3,235,000. An estimate of \$4,044,990 was established by Metro. The total awards (of all four NTE's) are 21% under this amount. Staff stated that funds for this change are within the recently amended Life-of-Project budget.

Schedule - An NTE was issued on March 15, 2022, to continue the work. The amount of time to complete the change order verses taking it to the Board is undetermined since the NTE was issued without CSP or an agreed upon scope.

Safety - DIV 20 Project has 493,789 project hours through June 2022 with a Recordable Injury Rate of 2.84 (Bureau of Labor Statistics the National Average is 2.4) and a Days Away, Restricted or Transferred (DART) of 1.22 (Bureau of Labor Statistics National Average is 1.5).

Recommendation - (1) The OIG recommends that the scope of work should be agreed upon as soon as possible, and (2) the OIG recommends the issue of liability for sub-contractors claims and bonds be resolved, and further change orders follow the standard Metro construction practices and procedures. We further recommend that the language concerning bonds and sub-contractors in the Metro standard forms for modification/change orders be moved to the Metro standard contract terms and conditions.

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 CO-0041), Tunneling Suspension Associated with Abandonment of Oil Wells.

Change Order Detail

See Attachment A Spot Check #3 chart.

Summary #3

Scope of Work - This change order covers compensation for the period when Metro ordered suspension of work below the Beverly Hills High School for a total of 83 days because of the oil wells in the path of the tunnel boring machines. The oil wells required plugging in accordance with California Department of Conservation Geologic Energy Management Division (CalGEM).

Budget - This Unilateral change order is for \$2,075,000. The contract rate under the schedule of quantities and prices for 'daily standby for tunnel heading' is \$25,000 per day. The Contractor submitted a request for delay charges for 144 days. The ICE was calculated at \$25,000 per day multiplied by 83 days. Staff stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The Scope of Work was signed on March 22, 2022; the change order was signed April

12, 2022. This change order was accomplished in 16 work days. If the delegation of authority was not in place, this Unilateral request would have gone to the May Board, 48 work days later.

Safety - Purple Line Extension 2 Project has 2,759,051 project hours through June 2022 with a Recordable Injury Rate of 2.97 (Bureau of Labor Statistics reports the National Average is 2.4) and Days Away, Restricted or Transferred (DART) of 0.67 (Bureau of Labor Statistics reports the National Average is 1.5).

Recommendation - The OIG recommends Metro consider implementing Unilateral change orders when the contractor is claiming compensation for delays greater than the contract cap permits.

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

This OIG Spot Check report concerns the Purple Line Extension Section 3 Transit Project (Stations Contract C1152 CO-0035.1), VA Steam Tunnel Size Increase and Redundancy (Construction)

Change Order Detail

See Attachment A Spot Check #4 chart.

Summary #4

Scope of Work - This change order provides funds to the contractor for enlarging the existing steam tunnel and building a redundant steam line to provide hot water for sterilization at the VA hospital pursuant to memorandum of understanding (MOU) between the VA and Metro. The contract states that the existing utility steam line tunnel is to be relocated because it is in the way of the future Metro station.

Budget -. CO-35.0 was issued in February 2021 as a Not to Exceed (NTE) type change order for \$850,000 for the steam tunnel materials. This (NTE) type change order, CO-35.1, for an additional \$4,286,998, is for the construction of the steam lines to continue to perform work while staff continues their review of the Contractor's proposal for this large and complex change order. Metro's staff stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The delegation process was utilized for this change order. The staff determined the NTE amount and issued the change order in 6 days. If the change order had gone to the Board, it would have been for the June Board, which occur 44 days later. However, since the change order is not settled in terms of cost, and schedule it might not be considered Board ready.

Safety - Purple Line Ext. 3 Project has 1,988,977 project hours through May 2022 with a Recordable Injury Rate of 1.51 (Bureau of Labor Statistics reports the National Average is 2.4) and Days Away, Restricted or Transferred (DART) of 0.50 (Bureau of Labor Statistics reports the National Average is 1.5).

Recommendation - Now that the cost schedule proposal (CSP) has been received, the OIG recommends that the contractor's CSP be thoroughly evaluated to finalize the change order to enter into an agreed upon modification to replace working on an NTE basis as soon as possible.

FINANCIAL IMPACT

This report will have no financial impact on the agency.

Impact to Budget

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

- Spot Check #1) \$6,000,000 DIV 20 Portal Widening & Turnback Project
- Spot Check #2) \$634,157 DIV 20 Portal Widening & Turnback Project
- Spot Check #3) \$2,075,000 Purple Line Extension Section 2 Project
- Spot Check #4) \$4,286,998 Purple Line Extension Section 3 Project

In the opinion of the OIG, the use of NTE awards for tens of millions of dollars in construction services is a practice Metro has historically avoided as high risk. It does not commit a contractor to completion of a specific amount of work for a fixed price within a certain schedule. It does have the potential to save money, but should not be over used. NTE authorizations do not incentivize efficiency.

The OIG was informed the contractor refuses to sign modifications because the Metro standard modification form says Metro will not pay the sub-contractor's bond cost. Therefore, to avoid over use of NTE's the disagreement concerning the modification form language should be resolved.

EQUITY PLATFORM

In the opinion of the OIG, we considered whether these change orders presented any equity related issues on their face. The two locations inside of Division 20, are within or adjacent to Equity Focus Communities (EFC's). There are 20-ft high sound walls around the construction worksites to protect residential communities and office suites from the nuisance of construction noise. The OIG did not receive any data concerning other community impacts. Each of the contractors are striving to have work performed by Disadvantage Business Enterprises (DBE) typically at 12-15% implementation, for these change orders at these EFC sites. The OIG observed no obvious disparate impacts created by these change orders on small businesses, low-income persons, or by the performance of the work in a manner that impacted a disadvantaged community beyond what is typical and usual when conducting any construction.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Office of Inspector General reviews large change orders over a calendar quarter and makes recommendations as appropriate to 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 programs, 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.

NEXT STEPS

The OIG shall provide every quarter, an ongoing spreadsheet of recommendations to Program Control and Program Management. Program Control and Program Management both 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 the recommendations with Project Management, and receive updates. The list of OIG recommendations and Metro management responses is an attachment to this OIG report (Attachment B).

ATTACHMENTS

Attachment A - Change Order Details for Spot Checks

Attachment B - Tracking Sheet of OIG Recommendations and Responses to last quarter

Attachment C - Power Point for Aug 2022 Construction Spot Checks

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