

**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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Karen Gorman
Inspector General

Spot Check #1 – Division 20 Portal Widening Turnback Project - Contract C1136**Change Order Detail**

| | |
|---|----------------|
| <u>Description of Modification or Change Order MOD-00029</u> | |
| Time Extension for MOD 20 Addl Scope and Addl Requirements for DIV 20 | |
| <u>Change Order Dates:</u> | |
| Scope of Work approved | March 25, 2022 |
| Modification Executed | June 3, 2022 |
| <u>Elapsed Time for Executing Change Order:</u> | |
| Using new delegated process | 50 workdays |
| Estimate using former Board approval process Agenda for the June Board | 63 workdays |
| <u>Cost of Change Order:</u> | |
| Metro independent cost estimate (ICE) | none |
| Contractor's proposed cost | \$8,825,585 |
| Negotiated amount | \$6,000,000 |
| Percentage of negotiated amount over ICE | undetermined |
| Amount negotiated less than the Contractor's proposal | 2,825,585 |

Spot Check #2 - Division 20 Portal Widening Turnback Project - Contract C1136**Change Order Detail**

| | |
|--|-----------------|
| <u>Description of Modification or Change Order – CO-0011.3</u> | |
| 1st Street Viaduct – Crack and Spall Repair | |
| <u>Change Order Dates:</u> | |
| Scope of Work approved | No agreed scope |
| Not To Exceed amount issued March 15, 2022 No Modification Executed | NTE only |
| <u>Elapsed Time for Executing Change Order:</u> | |
| Using new delegated process, | undetermined |
| Estimate using former Board approval process | undetermined |
| <u>Cost of Change Order:</u> | |
| Metro Record of Magnitude (ROM) | \$4,044,990 |
| Contractor's proposed cost | none |
| Not Negotiated – NTE ONLY for \$634,157 increase to | \$3,235,000 |
| Percentage under the ROM | 5.5% |
| Amount negotiated less than the Contractor's proposal | undetermined |

Spot Check #3 - Purple Line Extension Section 2 Transit Project - Contract C1120**Change Order Detail**

| | |
|---|----------------|
| <u>Description of Modification or Change Order – CO-0041</u> Tunneling Suspension Associated with Abandonment of Oil Wells | |
| <u>Change Order Dates:</u> | |
| Scope of Work approved | March 22, 2022 |
| Unilateral Executed | April 12, 2022 |
| <u>Elapsed Time for Executing Change Order:</u> | |
| Using new delegated process | 16 workdays |
| Estimate using former Board approval process Agenda for the May Board | 48 workdays |
| <u>Cost of Change Order:</u> | |
| Metro independent cost estimate (ICE) | \$2,075,000 |
| Contractor's proposed cost | none |
| Not Negotiated - Unilateral | \$2,075,000 |
| Percentage amount over/under ICE | 0% |
| Amount negotiated less than the Contractor's proposal | undetermined |

Spot Check# 4- Purple Line Section 3 Transit Project – Stations Contract C1152**Change Order Detail**

| | |
|---|----------------|
| <u>Description of Modification or Change Order – CO-0035.1</u> VA Steam Tunnel Size Increase and Redundancy (Construction) | |
| <u>Change Order Dates:</u> | |
| Scope of Work approved | April.22.2022 |
| Not To Exceed amount issued No Modification Executed | April 29, 2022 |
| <u>Elapsed Time for Executing Change Order:</u> | |
| Using new delegated process, prepared 04.22.2022 | 6 workdays |
| Estimate using former Board approval process Agenda for the June Board | 44 workdays |
| <u>Cost of Modification:</u> | |
| Metro independent cost estimate (ICE) | \$5,358,735 |
| Contractor's proposed cost | \$6,717,671 |
| Not Negotiated – NTE ONLY | \$4,286,998 |
| 80% Percentage of ICE allowed for NTE | 0% |
| CO Not negotiated – difference btwn CSP and NTE | \$2,430,673 |

ATTACHMENT B (August 2022)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|---|---|------------------------|-----------------|
| August 2022 #1 Contract C1136 MOD-0029 Division 20 Portal Widening and Turnback Project - Time Extension for MOD-20 Addl Scope and Addl Requirements for DIV 20 | The OIG recommends, that all future construction contracts include a capped amount per day to pay the contractor when Metro stops critical path construction work or contractor incurs significant delays due to unforeseen causes. | | |
| August 2022 #2 Contract C1136 CO-0011.3 Division 20 Portal Widening and Turnback Project - 1st Street Viaduct - Crack and Spall Repair | 1) The OIG recommends that the scope of work should be agreed upon as soon as possible. 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. | | |
| August 2022 #3 Contract C1120 CO-0041 Purple Line Ext. Sect. 2 Tunneling Suspension Associated with Abandonment of Oil Wells | The OIG recommends Metro consider implementing Unilateral change orders when the contractor is claiming compensation for delays greater than the contract cap permits. | | |
| August 2022 #4 Stations Contract C1152 CO-0035.1 Purple Line Ext. Sect. 3 VA Steam Tunnel Size Increase and Redundancy | 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 a NTE basis as soon as possible. | | |

ATTACHMENT B (April 2022)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|---|--|-----------------|
| April 2022 #1 Contract C0988 MOD-0551 Crenshaw/LAX Transit Corridor Project Landscape Changes – Park Mesa | none | | |
| April 2022 #2 Contract C0980 MOD-00230 Regional Connector - Transit Corridor Project Alameda Emergency Stair Exit (ES2) | The OIG recommends in-house plan review be as fully completed as possible before Metro groups sign off on the design plans. | The project team agrees with OIG and does have both project staff and Metro staff provide reviews for all plans. This change originated with the change in FLS requirements within the Wye which was identified after award of contract. | |
| April 2022 #3 Contract C1045 MOD-0144 Purple Line Extension Sect. 1 Construction LaCienega Station During Mining | none | | |
| April 2022 #4 Contract C1045 MOD-0147 Purple Line Extension Sect. 1 Vapor Extraction Street Restoration | none | | |

ATTACHMENT B (January 2022)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|---|--|--|---|
| January 2022 #1 Contract C0980 MOD-00218 Regional Connector - Transit Corridor Project Metro Eastside Access Improvement Project "Segment 2" Esplanade and other improvements along Alameda Street – Construction Only | none | | |
| January 2022 #2 Contract C1136 CO-00020.2 Division 20 Portal Widening and Turnback Project Differing Site Conditions - Connections to Existing Ductbanks and Unknown Utilities Impacts | The OIG recommends that Metro continue to track the time and materials used by the contractor while negotiating the Contractor's cost and schedule proposal and to bring this change order to a final award amount. | Final award amount for CO-00020.2 has been reached. Negotiations with the Contractor (TPC) consisted of multiple workshops to reach agreement on rates of production, activity duration, labor, materials and equipment required, complexity of the work. Since agreement on these items was challenging, Metro made a business decision to start with the contractor's estimate and deduct items that were not allowed in the contract. A final settlement for CO 20 was reached at \$43.3M, approximately \$10M under the contractor's original estimate. A time delay for changes related to CO 20 in the amount of \$6M, or 6 months at \$1M per month, has also been agreed upon for these changes. | Substantial Completion and commissioning of the turnback track is scheduled for late Fall of 2024 to coincide with Revenue Operations of PLE1. Final project completion could be as much as a year later. |
| January 2022 #3 Contract C1120 CO-00034 Purple Line Extension Sect. 2 Century City Constellation Station Storm Drain and Sanitary Sewer Relocation Construction of MOD 70 Design | none | | |
| January 2022 #4 Contract C1152 MOD-0007 Purple Line Extension Sect. 3 Replacement Parking at VA Hospital Lot 42 During Station Construction | The OIG recommends that the Contractor be instructed to timely submit cost proposals, enter negotiations, and sign agreements before work is performed so Metro can process the work order close in time to work being performed, not only to pay the contractor but to help ensure the sub-contractors are paid timely. | No Comments | |

ATTACHMENT B (October 2021)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|---|---|-----------------|
| <p>October 2021 #1 Contract C0980 MOD-00206 Regional Connector - Transit Corridor Project Add Wye Junction Fan Plant - Construction</p> | <p>Since the Board approved of a budget for this item in 2015 at \$12 mil., the cost has increased to a total of \$21,186,000 (a 77% increase). This Fan System cost has been reported in pieces, as parts were completed, but not as a whole to indicate the cost creep overall over time. We recommend that when LOP information is being periodically provided to the Board that it includes a summary, per project, to show historical cost information over the life of each project. That summary should indicate if they anticipate completing the project within the current LOP and how many LOP increases have occurred so far.</p> | <p>The initial board item in 2015 for the fan plant was an ROM at the time and had yet to be fully designed and estimated for a complete change. As the project progressed the design and went into construction, the team worked through the negotiations for the full scope of the fan plant. As of now, there has only been one LOP increase and the project has anticipated that the project would fall within the LOP to date. Project team will work with Program Management leadership on how information is reported and follow Program Management's direction for any changes on how LOP is reported.</p> | |
| <p>October 2021 #2 Contract C1136 MOD-00020 Division 20 Portal Widening and Turnback Project Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project</p> | <p>The OIG recommends: 1. When Metro needs to expedite a project, include Operations in the initial planning phase early, prior to and during design so they can provide constant input during the design. 2. Explore with Operations if they need additional resources to dedicate full time to assist in the intense design, planning, and implementation pre-opening phases of Metro's rail infrastructure/capital projects, or other ways in which Program Management and Operations can work together to approach these projects to maximize cooperation, communication, and assistance. 3. Have the Legal Department review our designer contracts to determine if they are adequate to hold contractors accountable, enforceable, and require use of bonds and proof of adequate insurance to cover errors of this type and resulting in cost of this magnitude.</p> | <p>1. Project alignments were revised during planning phase to accommodate additional storage capacity and technical requirements required for turnback headways. As design progressed, Operations participated in frequent design review meetings. 2. Additional Operations resources during design phases would be beneficial and help produce more comprehensive reviews. 3. Project team is coordinating with County Counsel on review of designer contracts.</p> | |
| <p>October 2021 #3 Contract C1045 MOD-0 137 Purple Line Extension Sect. 1 Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts</p> | <p>see #4 for recommendation</p> | | |
| <p>October 2021 #4 Contract C1045 MOD-00138 Purple Line Extension Sect. 1 Additional Dewatering Treatment and Discharge Impacts at Western</p> | <p>The OIG recommends that all dewatering change orders for this project should be evaluated or audited. The Geotechnical Baseline Report issued by the consultant to Metro was not accurate for the soil type, ground water, and hydrogen sulfide levels for each segment of Purple Line Section 1 and the consultant might be held liable for some of the costs of differing site conditions not correctly determined by the consultant. Unplanned dewatering site conditions also cost Metro \$15.8 mil. at the La Brea Station and \$16.8 mil. at the La Cienega Station in 2020 and 2019 respectively.</p> | <p>The dewatering MODs for WPLE-1 have been already been evaluated as part of the CN process. In order to minimize the potential for future DSCs on other Projects, consideration should be undertaken to expend more resources during Preliminary Engineering (PE) to more accurately project the actual conditions encountered. The costs of additional PE should be weighed against the increased base bid prices, or future Change Order costs if no additional PE efforts are undertaken. Valid additional costs to Metro, via the base bid or Change Order, will be incurred either way. It is premature at this time to hold the PE Consultant liable for all or a portion of the costs of this MOD.</p> | |

ATTACHMENT B (July 2021)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|---|--|--|-----------------|
| July 2021 #1 Contract C0980 MOD-00196 Regional Connector - Transit Corridor Project Construct the 2nd & Broadway Station Overbuild Load Transfer System | none | | |
| July 2021 #2 Contract C0980 MOD-00202 Regional Connector - Transit Corridor Project Revise Communications Radio System Scope of Work- Construction | The OIG recommends that after installation of the new radio system that interface with Los Angeles fire, police and sheriff departments be tested and verified for their signal strength and connectivity. | Agreed, all radio systems will be fully tested and verified for signal strength and connectivity | |
| July 2021 #3 Contract C1045 MOD-0131 Purple Line Extension Sect. 1 Wilshire/Fairfax Station Subgrade Differing Site Conditions | The OIG recommends that after a DRB issues its recommendations that favor the contractor, Metro act swiftly to move forward with a change notice to the contractor and not delay payment to the contractor, less any credits owed to Metro. We understand in this particular case the contractor assigned a lower priority for processing this change notice over many others. | In this case there was no requirement for Metro to issue a Change Notice due to the DRB ruling. The Contractor (STS) chose to delay providing Metro with a cost proposal associated with the DRB ruling due to other higher Contractor priorities. After the eventual receipt of the DRB ruling proposal from the Contractor, the costs were negotiated, and a MOD issued (w/o any Change Notice being created). It should be noted that whether a Change Notice is issued or not, the Contractor has the right to submit a proposal whenever and for whatever they perceive as changed work (via a Request for Change). Section 1 has and continues to issue Change Notices in a timely manner when Metro recognizes merited changed scope of work. | |
| July 2021 #4 Contract C1152 MOD-0014 Purple Line Extension Sect. 3 Revisions to Westwood/UCLA Station Entrances – Design Only | none | | |

ATTACHMENT B (April 2021)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|---|---|--|-----------------|
| April 2021 #1 Contract C0988 MOD-00253.3 Crenshaw/LAX Transit Corridor Project Landscape Changes – Park Mesa | The OIG recommends that we identify quickly the differences in cost between the new scope of work from the contract and finalize plans and the cost with the prime Contractor. | -Agree and recommendation will be incorporated into C/LAX Project Lessons Learned. -C0988 Contract Team has started to identify the differences in cost between the new scope of work from the contract. Additionally, new scope of work will only be processed if it is a safety related change. | |
| April 2021 #2 Contract C0980 MOD-00188 Regional Connector - Transit Corridor Project 2nd/Hope Pedestrian Bridge - Construction | no recommendation concerning this change order | | |
| April 2021 #3 Contract C1120 MOD-0095 Purple Line Extension Sect. 2 Station and Bicycle Parking, Architectural Features Design and Construction Changes at Wilshire/Rodeo & Century City Constellation Stations | The OIG recommends that Purple Line, Section 3, be immediately evaluated to determine if the MRDC architectural updates and the Metro bike hub system changes have been incorporated into the Purple Line Extension Section 3 Transit project. This will ensure consistency, compliance with the MRDC, and cost assessments to be determined and negotiated at the earliest possible time. | Purple Line Sect #2 response: Noted. Purple Line Sect #3 response: The WPLE3 contract included the latest MRDC requirements for bike hubs at both stations at time of bid, which minimized changes to the WPLE3 contract. | |
| April 2021 #4 Contract C1120 MOD-0095 0100 Purple Line Extension Sect. 2 Century City Constellation Main Entrance - Construction | The large cost disparities between the ICE and a Contactor's proposal on high dollar transactions should continue to prompt further technical and commercial evaluation in order to arrive at a fair and reasonable price. The OIG recommends that the ICE be evaluated by the Estimating department to further evaluate the significant differences between the Contractor's proposal and their independent estimate utilizing both technical and commercial evaluation. | ESTIMATING response: Metro Estimating will review the ICE and CSP and work with V/CM and Project Management staff to evaluate the differences. Purple Line Sect #2 response: Project staff will continue to involve Estimating staff in scoping discussions to ensure that they have a full understanding of the scope of work for all Change Work. | |

ATTACHMENT B (January 2021)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|---|---|---|
| <p>January 2021 #1 Contract C0980 MOD-00184 Regional Connector - Transit Corridor Project Expanded Duco Yard and Temple Street Sanitary Sewer Work</p> | <p>The OIG recommends that future contracts with the designer should include verification of sewers identified as abandoned, and to document the verification on the construction drawings if the cost of such verification is minor and the consequences of reliance on erroneous information is significant. Additionally, the OIG recommends that the as-built record drawings at the City be updated.</p> | <p>Planning and engineering need to rely on as-built records for much of their work. However, where key utilities are involved, it is best that their condition and status be validated during the preliminary design phase. This investigation is often expensive and not easily performed without site investigation. The engineer must use his/her judgement to determine which utilities require physical investigation and inspection. Project budget contingency should be set aside for utility discrepancies that may be discovered during construction. Agree that even minor utilities, improperly documented, can have a significant cost and/or schedule impact to a project and should be investigated early, to the extent possible. The City is the best entity to ensure that underground maps are complete.</p> | <p>No further action from Regional Connector as project design has already been completed. However, efforts are continually made to perform potholing investigations for verification prior to construction so as to avoid impacts to schedule should discrepancies be found.</p> |
| <p>January 2021 #2 Contract C1045 MOD-00121 Purple Line Extension Sect. 1 Alternate Soil Disposal</p> | <p>California laws, including Senate Bill 1383 of 2016 set mandatory targets to reduce waste going to landfills. Metro developed a recycling policy (GEN 51) in response to State recycling goals and to support Metro's sustainability goals. The Conditional Use Permit for the Chiquita Canyon Landfill was set to expire and the Landfill operator sought a new permit, which was granted in July, 2017. The new permit requirements limits the rate of tonnage of dumping allowed, hours of operation, and the county set other multiple requirements that Chiquita Canyon must adhere. The OIG recommends:</p> <ol style="list-style-type: none"> 1. Construction waste disposal options are utilized to minimize project costs and to help achieve the reduction goal of a 75% reduction in waste by 2025; 2. Project teams work very closely with the Metro Sustainability Department, State, Los Angeles County, other regulators, landfill owners, and contractor's personnel, to determine options consistent with GEN 51 for the reuse of soils and construction debris in the current or other construction sites; 3. When a Board member has a matter come before them at their respective municipalities that can potentially effect Metro projects, if they would give notice to Metro of the matter, Metro can determine how its projects will be impacted and possibly address the matter with the municipality or 3rd party prior to the matter being approved including possibly negotiate that the terms of a permit not allow price increases or other impacts on Metro projects where contractual commitments have previously been negotiated in reliance on previous conditions; 4. LA Metro evaluate how other LA Metro projects for which a contract was entered may be impacted by the newly imposed landfill mitigations and higher fees. | <p>Metro acknowledges the recommendations listed and provides the following responses below:</p> <ol style="list-style-type: none"> 1. Per contract, the project must divert/recycle 75% of waste. Purple Line Section 1 has diverted 100% of excavated clean material on the project to be reused as beneficial cover or fill at offsite projects. 2. The Purple Line Section 1 project has a member of the Metro Environmental Compliance and Sustainability Department (ECSD) on staff. This team member updates project management and contractors on opportunities to reduce waste impacts as they become available across the county. 3. Acknowledged 4. ECSD management will review awarded projects and available facilities and make recommendations on where to make changes to disposal practices as needed. | |
| <p>January 2021 #3 Contract C1120 MOD-0091 Purple Line Extension Sect. 2 Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations</p> | <p>The OIG recommends that immediately prior to sending out an RFP, Metro should insure that the most current MRDC is used.</p> | <p>In this case, the updated MRDC Section 8 was added to the RFP near the end of the solicitation period, but conflicts with other contract documents were not identified because of the late issuance of the update. Staff agree that all future changes to the MRDC should be coordinated by Metro Engineering and issued before future RFPs are released.</p> | |

ATTACHMENT B (January 2021)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|--|------------------------|-----------------|
| January 2021 #4 Contract C1152 CO-0005.1 Purple Line Extension Sect. 3 VA Hospital Replacement Parking for Lot 42 During Station Construction Phase | The OIG recommends that the Project office and Real Estate continue to work closely and aggressively to come to a full resolution with the VA hospital and the contractor on the modified costs. | Agree | |

ATTACHMENT B (October 2020)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|---|---|-----------------|
| <p>October 2020 #1 Contract C0988 MOD-00485 Crenshaw/LAX Transit Corridor Project Case 5 Bedding Required by LABOE</p> | <p>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.</p> <p>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.</p> | <p>Recommendation will be incorporated into C/LAX project Lessons Learned.</p> | |
| <p>October 2020 #2 Contract C1045 MOD-00111 Purple Line Extension Sect. 1 Fairfax Paleo Zone Modified Limits</p> | <p>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.</p> | <p>Recommendation will be incorporated into PLE1 project Lessons Learned.</p> | |
| <p>October 2020 #3 Contract C1120 MOD-00080 Purple Line Extension Sect. 2 Demobilization and Remobilization due to COBH Moratorium</p> | <p>The MOA between Metro and COBH imposes additional restrictions on Metro and adds costly change orders to the original contract.</p> <p>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.</p> | <p>Agreed.</p> | |
| <p>October 2020 #4 Contract C1151 MOD-0004.1 Purple Line Extension Sect. 3 Increase Ground Water Treatment Plant Capacity at Tail Track Exit Shaft</p> | <p>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.</p> <p>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.</p> | <p>The location of the Tail Track Exit Shaft had to move from an environmentally cleared site occupied by the Army reserve site to the US Department of Veterans Affairs West Los Angeles campus when it became evident that the US Army Reserve was unwilling to allow the use of this location for either construction laydown or a permanent Metro Facility. Metro Real Estate and Project staff successfully negotiated with the Department of Veterans Affairs to enable relocation of this construction laydown area and permanent facility to their West Los Angeles Campus.</p> | |

ATTACHMENT B (October 2020)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|---|--|---|-----------------|
| <p>October 2020 #5 Contract C1151 MOD-0005 Purple Line Extension Sect. 3 Addition of Sepulveda Staging Area to Compensate VA Site Reduction</p> | <p>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.</p> <p>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.</p> | <p>The space available for staging at the Tail Track Exit Shaft on the Department of Veterans Affairs Campus is limited; being located in a nationally designated historic district. Metro Real Estate and Project Staff have and are working closely together, in a timely manner to ensure real estate acquisitions are coordinated with project need dates to minimize overall risk and cost to Metro in delivering the project.</p> | |

ATTACHMENT B (August 2020)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|---|---|---|-----------------|
| <p>August 2020 #1 Contract C1045 MOD-00095 Purple Line Extension Sect. 1 Transit Project: Phase 5 Golder EOR Mitigation Plan Implementation</p> | <p>The OIG is in agreement with applying extra safety precautions that the Metro project office has put forward. Where conditions are relatively unique to the tunneling industry, more prescriptive specifications for means and methods in these zones is warranted.</p> <p>Since the Contractor, Golder Gas, performed the entire mitigation plan including removal and mitigation, the OIG recommends that LA Metro ensure that Golder Gas is held contractually, jointly, and severally liability for any future incident involving gas in the area where the soil vapor extraction wells and the monitoring wells are installed and abandoned. This is the common practice in environmental cases where a "consulting expert" is hired to monitor and mitigate a hazardous substance issue.</p> | <p>The Section 1 Project will review the indemnification text issued to Golder that was required by STS in order for Golder to proceed with the work. This indemnification will determine what Golder's future obligations are.</p> | |
| <p>August 2020 #2 Contract C1045 MOD-00106 Purple Line Extension Sect. 1 Center Muck Shaft at La Brea (ECI-03)</p> | <p>The OIG recognizes that this type of shaft at the La Brea station can serve a legitimate purpose and that the OIG recommends that use of such methods should be considered and contemplated in future project specifications and a reserve for same should be made when the savings in time, expense, and safety outweigh the cost of such a shaft.</p> | <p>OIG comment received will be included in the lessons learned.</p> | |
| <p>August 2020 #3 Contract C1045 MOD-00107 Purple Line Extension Sect. 1 Center Muck Shaft at La Brea (ECI-03)</p> | <p>The OIG is concerned that a bid of 40% over an ICE, when you are in a noncompetitive circumstance, may not be a good faith offer or bad communication on specifications. Such behaviors can have the effect of damaging a relationship during an early phase of construction and create distrust that can harm project collaboration in the future. We appreciate a contractor's willingness to proceed on work even without a commitment from Metro in some cases for the payment for that work, but recommend the contractor exercise greater care in formulating its proposals and that Metro be clear and fair but diligent and firm in its ICE calculations and negotiations stance.</p> | <p>OIG comment received. Contractor will be reminded to have appropriate personell attend the fact finding and provide timely complete CSP in order to resolve issues in a collaborative manner.</p> | |

ATTACHMENT B (August 2020)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|---|--|-----------------|
| <p>August 2020 #4 Contract C1120 MOD-00073 Purple Line Extension Sect. 2 Century City Constellation Station Track work Extension</p> | <p>1. The OIG is concerned that a bid is almost 3 times over the ICE, when you are in a noncompetitive circumstance, may not be a good faith offer or bad communication on specifications. Such behaviors can have the effect of damaging a relationship during an early phase of construction and create distrust that can harm project collaboration in the future. We appreciate a contractor's willingness to proceed on work even without a commitment from Metro in some cases for the payment for that work, but recommend the contractor exercise greater care in formulating its proposals and that Metro be clear and fair but diligent and firm in its ICE calculations and negotiations stance.</p> <p>LA Metro is having to absorb the cost of track extension change orders that arose due to errors and omissions on the part of the engineering consultant WSP. The OIG was informed that WSP miscalculated the braking distance in the initial project definition drawings that were supplied to the construction contractor. Metro will have to cover this expense with the contractor, but should look to the design engineering firm for reimbursement to Metro of the costs it would not have had to otherwise incur less amounts saved or mitigations.</p> <p>2. The OIG additionally recommends that Metro review the current Metro Rail Design Criteria (MRDC) compared to the newly released FRA track design standards for accommodating a train entering a stub-end to determine if any modification or update to our MRDC is warranted.</p> | <p>1. If a Cost and Schedule Proposal (CSP) is significantly higher than the Independent Cost Estimate (ICE), Metro's Contract Administrator and the Project Team engages in further meetings with the Contractor to clarify scope in order to determine the source of the discrepancies between the two estimates. These meetings are professional in nature, and often result in favorable resolution on a price that is somewhere between the ICE and the revised CSP. This process ultimately leads to the execution of mutually agreed upon Contract Modifications, and avoids costly disputes related to Changed Work.</p> <p>Related to the cost of the change, if WSP had calculated the braking distance correctly, the Contractor's proposal price would have included the cost for the trackwork that was recently added by Contract Modification. As a result, the awarded contract value would have been slightly higher, and the project contingency slightly lower at Notice to Proceed. The only additional cost that this error by WSP may have created is a theoretical premium for paying for added trackwork in a non-competitive environment, which would be difficult to prove. It should be noted that the difference between the executed Contract Modification price and the ICE was about 17%, or \$171,000. As a result, it is likely that it would be difficult for Metro to determine if it paid a non-competitive premium. That said, the recommendation will be discussed with senior executive management in VCM and Program Management to determine if any action against WSP will take place.</p> <p>2. This recommendation will be referred to Metro Engineering for consideration.</p> | |

ATTACHMENT B (April 2020)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|---|--|---|
| <p>April 2020 #1 C0980 MOD-00161 Regional Connector - Procure Medium Attenuation Fasteners in Lieu of Standard Direct Fixation Rail Fasteners for the 2nd & Broadway Crossover</p> | <p>Regional Connector project is very unique because of all the existing historical buildings above the construction. Noise pollution has become a major concern for urban transit dwellers and authorities. The rule of thumb is a 10decibel technical increase in noise is heard by the human ear as "doubled" in loudness. When constructing underground for tunnels and stations the Environmental Impact Report must remember to always mitigate sound and vibration to protect the potentially impacted fragile surface buildings.</p> <p>The OIG recommends this scenario be written into the Lessons Learned file for future similar situations when constructing under historic or special case existing buildings.</p> | <p>The Regional Connector Project has extensive vibration mitigation elements included in the design where the operating guidway passes nearby sensitive receptors including recording studios, music venues and hotels. The project also requires that noise and vibration monitoring be performed during construction near sensitive facilities.</p> <p>The lesson learned and responded to in the referenced Contract Modification, is that information gathered during construction monitoring should be used to adjust the designed mitigations where field conditions indicate they are necessary.</p> | <p>Completed with issuance of subject contract modification. Equipment to be installed 3rd quarter 2020</p> |
| <p>April 2020 #2 C1045 MOD-00098 Purple Line Sect. 1 Additional Air Scrubbers at Fairfax Station</p> | <p>The OIG recommends further questioning to Southern California AQMD to determine why on a previous Metro construction contract (at the same location) they set the emission limit at 50 parts per billion, and the published standards are set at an emission limit of 30 parts per billion. On this contract the limits are set at 15 parts per billion. The inconsistency of the emissions limit should be taken under consideration and request in writing from AQMD why the standard emission limit could not be applied to this permit.</p> <p>The OIG further recommends in future construction pre-bid meetings, disclose to all potential contractors that the AQMD permit values necessary for the technical specification, "Temporary Construction Ventilation for Scrubber Units" has varied in the recent past and to verify the amount with an AQMD representative. If possible a commitment needs to be obtained from AQMD by the contractor at the time of submission of a bid amount, that the standard is firm for a defined period.</p> | <p>The emissions limit for equipment was set at the time the Contractor submitted the specific ventilation plan to SCAQMD for permit.</p> <p>The SCAQMD does not have a set standard for hydrogen sulfide, but the states standard is 30 parts per billion. SCAQMD develops their requirements based on specific site conditions. Our EIR states Metro and its contractors will set and maintain work equipment and standards to meet SCAQMD standards.</p> <p>A letter will be sent to SCAQMD for clarification on how SCAQMD can consistently apply emissions regulations for hydrogen sulfide for Metro's future projects.</p> | |
| <p>April 2020 #3 C1120 MOD-00064 Purple Line Sect. 2 Geotechnical Instrumentation Installation and Monitoring AT&T and Beverly Hills High School</p> | <p>The OIG recommends that the independent estimator visit the field location concerning where the work for this change order will occur. The construction manager should walk the estimator through the scope of the changes for which they are developing a cost estimate. The independent estimate was a 126.7% lower than the negotiated price. Where such significant discrepancies in price estimates exist, either the estimator for Metro, or the estimator for the contractor needs to re-evaluate the scope of the change order.</p> | <p>Agreed. Moving forward the estimating group will endeavor to work even more closely with available subject matter experts to assure a thorough understanding of scope and of the engineering and construction processes involved.</p> | |
| <p>April 2020 #4 C1151 MOD-00001 Purple Line Sect. 3 Revise the Tail Track Exit Shaft Location from US Army Reserv to Veterans Affairs Property</p> | <p>If the Army Reserve location had been negotiated prior to the contract award, these amounts might have been included in the original bid, although the price then and now might have been the same for this different location.</p> <p>The OIG recommends Real estate arrangements should be negotiated as early as possible.</p> | <p>Metro agrees with the OIG's comment regarding the price of the change. The cost would roughly be the same whether it was negotiated prior to contract award or after award. We agree that real estate arrangements (agreements) should be negotiated as early as possible. The project initiated contact with the property owner for the Exit Shaft property acquisition after the project was identified to be accelerated from the original 2035 Revenue Service Date. Metro did engage in talks with the VA early in the Project but obtaining VA approval to access their property has not been without a few challenges that Metro was able to overcome.</p> | |

ATTACHMENT B (January 2020)

| OIG REPORT/ SPOT CHECK # MOD # | RECOMMENDATIONS | MANAGEMENT'S RESPONSES | COMPLETION DATE |
|--|--|---|-----------------|
| Jan 2020 / #1 C0988-MOD-00437 Crenshaw/LAX UG1 (H2S) Ventilation Fans - Construction | none | | |
| January 2020 #2 C0980 MOD-00154 Regional Connector - Acoustical Treatments for Areas Not on Finish Schedule | none | | |
| January 2020 #3 C1045 MOD-00089 Purple Line Sect. 1 Development and On Site Validation of the Selected Gas Mitigation Option for M13 | <p>While the soil at every site is unique, it is possible to create a standard for testing soils for gasses. There is no current rule or technical specification within Metro criteria for extraction of CH₄ or H₂S from the soil.</p> <p>The OIG recommends after the final report is submitted by the contractor, that a technical specification for testing be developed and written into the MDRC to use in the future.</p> | <p>PLE1 Final M13 Mitigation Report will be forwarded to Metro Geotechnical Department for their review and further processing.</p> | |
| January 2020 #4 C1045 MOD-00090 Purple Line Sect. 1 Oil Well Investigation In Lieu of TBM Probe Ahead | <p>The implementation of the drilling and magnetometer survey from Section 1 has been incorporated into Purple Line Extension Section 2 and 3 contracts.</p> <p>The OIG recommends that the procedures implemented for locating tanks, pipes and other abandoned waste be added to the Lessons Learned database.</p> <p>The OIG further recommends that Metro evaluates whether to pursue recovery for waste removal costs under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund. Passed in 1980). The OIG recommends that Metro's Engineering Program Management provide information on this matter to Metro's Legal department to assist in making this determination and potentially pursuing this recovery.</p> | <p>PLE1 implemented methodologies for locating known tanks, pipes and other abandoned waste will be added to the Lessons Learned database. PLE1 notes that the hazardous waste removal is relatively small/negligible compared with the overall volume of soil removed. After reviewing the potential ROI on pursuing legal actions against any potential responsible parties for cost recovery the current determination based on the available data is that it is not worth the effort and cost at this time. However, it was decided that Metro County Counsel would provide a preliminary review on the issue and it would be revisited in the future.</p> | |

Office Of Inspector General Construction Change Order Spot Check Report

Presented By
Karen Gorman
Inspector General

August 2022

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Spot Checks 1 & 2

- 1 - Division 20 - - Time Extension for MOD-20 Addl Scope and Addl Requirements for DIV 20**
\$6,000,000

Recommendation:

Future construction contracts include a capped amount per day to pay the contractor when Metro stops critical path construction work or contractor incurs significant delays due to unforeseen causes.

- 2 - Division 20 - - 1st Street Viaduct – Crack and Spall Repair**
NTE: \$634,157 increase for total of \$3,235,000

Recommendation:

- (1) The scope of work should be agreed upon as soon as possible,
- (2) Resolve the dispute concerning the language in the modification form.

Spot Check 3 & 4

3 - Purple Line Sect. 2 - - Tunneling Suspension Associated with Abandonment of Oil Wells
Unilateral: **\$2,075,000**

Recommendation:

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

4 - Purple Line Sect. 3 - - VA Steam Tunnel Size Increase and Redundancy (Construction)
NTE: **\$4,286,998**

Recommendation:

The Contractor's CSP be thoroughly evaluated to finalize the change order.

Spot Check Schedule Comparison

File #
2022-0450

Schedule Comparison: new delegated process vs. former Board approval process

| PROJECT | Title of Change Order | Time Saved Executed date to Board Mtg. | NEW Delegated Process final SOW to Executed date | Former Board Approval Process |
|--|---|--|--|-------------------------------|
| DIVISION 20 PORTAL WIDENING & TURNBACK PROJECT | Time Extension for MOD 20 Addl Scope | 13 | 50 | 63 |
| DIVISION 20 PORTAL WIDENING & TURNBACK PROJECT | 1 st Street Viaduct Crack and Spall Repair | UNDETERMINED | | |
| WESTSIDE PURPLE LINE EXT. SECT 2 | Tunneling Suspension Associated w/Abandonment of Oil Wells | 32 | 16 | 48 |
| WESTSIDE PURPLE LINE EXT. SECT 3 | VA Steam Tunnel Size Increase and Redundancy (Construction) | 38 | 6 | 44 |