

**Board Report**

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

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**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

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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), 1<sup>st</sup> 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

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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.

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## **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.	

# Office Of Inspector General Construction Change Order Spot Check Report

Presented By  
**Karen Gorman**  
Inspector General

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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 - - 1<sup>st</sup> 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 <sup>st</sup> 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