File #: 2020-0825, **File Type:** Informational Report **Agenda Number:** 40.

CONSTRUCTION COMMITTEE
JANUARY 21, 2021

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 September 1 to November 30, 2020.

ISSUE

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

BACKGROUND

The OIG's Construction Change Order Spot Check Program ("Spot Checks") focuses on approved change orders and modifications that exceed $500,000. The four change orders in this report were selected from the January 2021 Program Management Major Project Status Report (Legistar file # 2020-0836) covering September 1 to November 30, 2020. The information for the Spot Checks was collected from the Program Management Information System (PMIS) which is the department's database system. Also, TEAM meetings and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff from each project office.

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

- A negotiated amount that was less than the contractors' proposed price for the work to be done,
- Enabled the contractor to immediately order parts and materials, reducing delay,

- Contractor and was able to continue working without stoppages related to these change orders, and
- Zero construction delay costs were incurred for these changes.

Each Spot Check summarizes the following areas:

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

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

DISCUSSION

Spot Checks Performed in this Quarter

A. Spot Check #1 - Regional Connector - Transit Corridor Project

This OIG Spot Check report concerns the Regional Connector - Transit Corridor Project (Contract C0980 MOD-00184) Expanded Duco Yard and Temple Street Sanitary Sewer Work

Change Order Detail
See Attachment A Spot Check #1 chart.

Summary #1
Scope of Work -
This change order is to realign a sewer line inside of Los Angeles Department of Water and Power (LADWP) Facility at Duco Yard, located on the corner of East Temple Street and Alameda Street.

During field investigation it was discovered that an active sewer line into LADWP's Duco Yard was in direct conflict with the proposed underground track and guideway structure construction plans. This active sewer line was incorrectly shown on recorded as-built drawings as being abandoned.

The project team performed analysis of multiple alternatives and determined the only workable solution for the sewer conflict was to realign the sewer inside Duco Yard to drain into the publicly owned sanitary sewer line on Temple Street. Temple Street sewer would need to be expanded from 8-inch pipe to a 10-inch to accommodate the additional sewage flow. The work will be done within the LADWP Duco Yard and a property right-of-entry agreement has been secured from LADWP.

Budget -This modification was negotiated, and the award amount is $3,060,510. The contractor's proposal was $3,724,682 and the ICE was $2,924,507. The award amount was $664,172 (17.8%) under the contractor's proposal. The negotiated amount was $136,003 (4.65%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on November 5, 2020. The modification was awarded on November 20, 2020 and was completed in 12 workdays. Under the prior Board approval method for change orders, assuming a January Board meeting date, it would have taken an additional 54 workdays to complete the work.

Recommendation - 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.

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

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1045 MOD-00121), Alternate Soil Disposal

Change Order Detail

See Attachment A Spot Check #2 chart.

Summary #2

Scope of Work - This change order is due to an increase in fees, capacity limits, and modified hours of operation at the Chiquita Canyon landfill where dumping of materials is done for this project. Metro has an agreement with this landfill location, but the landfill changed its pricing in 2017 which affected the Purple Line Section 1 ongoing costs. The Chiquita Canyon landfill dump fees for clean dirt increased from $5 per ton to $10 per ton and for contaminated non-hazardous soil from $17.25/ton to $23.25/ton. Additionally, the landfill's daily maximum capacity was lowered to not exceed 12,000 tons on any given day. Furthermore, the landfills open hours were reduced.

Invoices and weight tickets have accumulated over the years and have now been provided for October 1, 2017 through December 31, 2020. During this period a total of 1,112,965 tons of clean soil and 539,291 tons of contaminated soil were identified as 'Alternate Soil Disposal Quantities' that were hauled away from the project and disposed of at other landfill sites and at higher rates than applied before the rate increase.

By both raising the rates, limiting hours of operation and lowering the daily capacity the contractor not only had to pay more than what was originally negotiated in the construction contract but was forced to haul both the clean and contaminated dirt to other landfills that may be a farther distance.

Budget -This modification was negotiated, and the award amount is $16,469,000. The contractor's proposal was $21,525,548 and the ICE was $15,680,422. The award amount was $5,056,548 (23.5%) under the contractor's proposal. The negotiated amount was $788,558 (5.0%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on September 10, 2020. The modification was awarded on October 21, 2020 and was completed in 30 workdays. Under the prior Board approval method for change orders, assuming a November Board meeting date, it would have taken an additional 52 workdays to complete the work.

Recommendation - 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:

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; and
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.

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

This OIG Spot Check report concerns the Purple Line Extension Section 2 Transit Project (Contract C1120 MOD-0091), Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations

Change Order Detail

See Attachment A Spot Check #3 chart.

Summary #3

Scope of Work -

This change order concerns uninterruptible power supplies (UPS). UPS are primarily used to provide a backup power source. This change order will increase the capacity of the UPS batteries from 50% to 100% at the Wilshire Rodeo and Century City Constellation Stations along the Purple Line.

When the RFP for this project was prepared the Metro Rail Design Criteria (MRDC) technical requirements were amended, however Contract General and Technical Requirements for the UPS capacity were not accordingly updated to match the updates in the MRDC. This Change Order accomplishes compliance with the MRDC that determined a higher level of backup power capacity

was more prudent.

Budget -This modification was negotiated, and the award amount is $800,381. The contractor's proposal was $1,115,685 and the ICE was $697,053. The award amount was $315,304 (28.3%) under the contractor's proposal. The negotiated amount was $103,328 (14.8%) over the ICE. Staff has stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on July 30, 2020. The modification was awarded on September 16, 2020 and was completed in 33 workdays. Under the prior Board approval method for change orders, assuming a September Board meeting date, it would have taken an additional 39 workdays to complete the work.

Recommendation - The OIG recommends that immediately prior to sending out an RFP, Metro should insure that the most current MRDC is used.

D. 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-0005.1), VA Hospital Replacement Parking for Lot 42 During Station Construction Phase.

Change Order Detail

See Attachment A Spot Check #4 chart.

Summary #4

Scope of Work - In order to build the Metro station at the Veterans Administration (VA) hospital campus to serve the patrons and the users of the VA hospital, the station location was decided to be placed at the primary parking lot #42. Currently, lot #42 has accessible parking for ADA and is close to the main entrance.

The station area will eliminate approximately two thirds of the parking spaces in lot #42 and temporary parking must be provided over the next several years during construction. The VA has requested Metro to provide temporary parking at other parking lots on the VA campus to accommodate the loss of spaces from parking lot #42 while a permanent replacement parking structure is being constructed. This change order is to upgrade the other parking lots which are in disrepair and not designed to accommodate ADA parking. The upgrade will refurbish the lots and bring them up to ADA code to meet the capacity needs of the hospital.

This change order is out of scope from the original contract because when the RFP was prepared in 2017, there was insufficient information available from the VA to define temporary replacement parking and the location of the new VA parking structure was not yet determined.

In February 2020, Metro issued a change order to initiate the design effort. September of 2020, Metro and the contractor agreed to set an incremental increase with a Not-to-Exceed value in order to provide finances to the contractor to move forward with the construction project. Completion of negotiations is pending receipt of the contractor's future cost schedule proposal (CSP).

Budget -This modification was negotiated as a Not-to-Exceed amount of $1,727,505. The contractor's proposal was $2,716,681 and the ICE was $2,159,382. The award amount was granted as a partial award and the contractor is to notify Metro when costs reach $1.382,004 which is 80% of the Not-to-Exceed value. The final negotiated amount is to be determined when the contractor submits an updated CSP because of the parking lot changes from the original contract scope.

Schedule - The new delegation process was utilized for this modification. The project office and contractor have only reached a partial agreement on August 28, 2020. The authorization to proceed was reached on September 4, 2020, and work was completed in 5 workdays. Under the prior Board approval method for change orders, assuming an October Board meeting date, it would have taken an additional 39 workdays to complete the transaction.

Recommendation - 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.

FINANCIAL IMPACT

This report will have no Financial Impact to the agency.
Impact to Budget

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

- Spot Check #1) $3,060,510 Regional Connector Transit Corridor Project
- Spot Check #2) $16,469,000 Purple Line Extension Section 1
- Spot Check #3) $800,381 Purple Line Extension Section 2
- Spot Check #4) $1,727,505 Purple Line Extension Section 3

IMPLEMENTATION OF STRATEGIC PLAN GOALS

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

Our goal is to provide rational, trustworthy information to the Board and support the efforts of Metro management to constantly improve and refine its efforts for the benefit of the public. The Office of the Inspector General will continue reporting to the Board the results of Construction Change Order Spot Checks selected from the Program Management Major Project Status Quarterly Report.

NEXT STEPS

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

ATTACHMENTS

Attachment A - Charts for Spot Checks
Attachment B - Tracking Sheet of OIG Recommendations and Responses
Attachment C - Power Point for January 2021 Construction Spot Checks

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Spot Check #1 – Regional Connector Transit Corridor Project - Contract C0980

Change Order Detail

Description of Modification MOD-00184 Expanded Duco Yard and Temple Street Sanitary Sewer Work	
Change Order Dates:	
Scope of Work approved	November 5, 2020
Modification Executed	November 20, 2020
Elapsed Time for Executing Change Order:	
Using new delegated process	12 work days
Estimate using former Board approval process Agenda for the January Board (December dark)	54 work days
Cost of Change Order:	
Metro independent cost estimate (ICE)	$2,924,507
Contractor's proposed cost	$3,724,682
Negotiated amount	$3,060,510
Percentage of negotiated amount over ICE	4.65%
Amount negotiated less than the Contractor's proposal	$664,172

Spot Check #2 - Purple Line Extension Section 1 Transit Project - Contract C1045

Change Order Detail

Description of Modification MOD-00121 Alternate Soil Disposal	
Change Order Dates:	
Scope of Work approved	September 10, 2020
Modification Executed	October 21, 2020
Elapsed Time for Executing Change Order:	
Using new delegated process	30 work days
Estimate using former Board approval process Agenda for the November Board	52 work days
Cost of Change Order:	
Metro independent cost estimate (ICE)	$15,680,422
Contractor's proposed cost	$21,525,548
Negotiated amount	$16,469,000
Percentage of negotiated amount over ICE	5.0%
Amount negotiated under Contractor's proposal	$5,056,548

Spot Check #3 - Purple Line Extension Section 2 Transit Project - Contract C1120

Change Order Detail

Description of Modification MOD-0091 Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations	
Change Order Dates:	
Scope of Work approved	July 30, 2020
Modification Executed	September 16, 2020
Elapsed Time for Executing Change Order:	
Using new delegated process	33 work days
Estimate using former Board approval process Agenda for the September Board	39 work days
Cost of Change Order:	
Metro independent cost estimate (ICE)	$697,053
Contractor's proposed cost	$1,115,685
Negotiated amount	$800,381
Percentage of negotiated amount over ICE	14.8%
Amount negotiated under Contractor's proposal	$315,304

Spot Check# 4 - Purple Line Section 3 Transit Project – Stations Contract C1152

Change Order Detail

Description of Modification - CO-0005.1 VA Hospital Replacement Parking for Lot 42 During Station Construction Phase	
Change Order Dates:	
Scope of Work partial agreement	August 28, 2020
Modification Executed as Not-to-Exceed	September 04, 2020
Elapsed Time for Executing Change Order:	
Using new delegated process	5 work days
Estimate using former Board approval process Agenda for the October	39 work days
Cost of Modification:	
Metro independent cost estimate (ICE)	$2,159,382
Contractor's proposed cost	$2,716,681
Negotiated as PARTIAL AWARD: Not-to-Exceed	$1,727,505
Percentage of negotiated amount over ICE	TBD
Amount negotiated under the Contractor's proposal	TBD

ATTACHMENT B (January 2021)			
OIG REPORT/ SPOT CHECK # MOD #	**RECOMMENDATIONS**	**MANAGEMENT'S RESPONSES**	**COMPLETION DATE**
January 2021 #1 Contract C0980 MOD-00184 Regional Connector - Transit Corridor Project Expanded Duco Yard and Temple Street Sanitary Sewer Work	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.		
January 2021 #2 Contract C1045 MOD-00121 Purple Line Extension Sect. 1 Alternate Soil Disposal	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: 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.		
January 2021 #3 Contract C1120 MOD-0091 Purple Line Extension Sect. 2 Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations	The OIG recommends that immediately prior to sending out an RFP, Metro should insure that the most current MRDC is used.		

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.		

ATTACHMENT B (October 2020)			
OIG REPORT/ SPOT CHECK # MOD #	**RECOMMENDATIONS**	**MANAGEMENT'S RESPONSES**	**COMPLETION DATE**
October 2020 #1 Contract C0988 MOD-00485 Crenshaw/LAX Transit Corridor Project Case 5 Bedding Required by LABOE	Since the 'Green book' states the support and materials for sewer and storm drain pipe are to be encased in concrete, the OIG recommends that the LA Metro rail standard drawing US-014, be updated to reflect the required City standard and Metro may negotiate with the LABOE to adopt a different standard for specific projects as warranted. We further recommend, as discussed in previous reports, that Metro study the large discrepancies between the Metro ICE and the award amounts to determine if there is a method by which those discrepancies can be narrowed. This recommendation applies to many of the Spot Checks reviewed in this Report, and is based also on a Metro audit completed by the Management Audit Services Department that noted significant discrepancies in these amounts to be a frequent occurrence.	Recommendation will be incorporated into C/LAX project Lessons Learned.	
October 2020 #2 Contract C1045 MOD-00111 Purple Line Extension Sect. 1 Fairfax Paleo Zone Modified Limits	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.	Recommendation will be incorporated into PLE1 project Lessons Learned.	
October 2020 #3 Contract C1120 MOD-00080 Purple Line Extension Sect. 2 Demobilization and Remobilization due to COBH Moratorium	The MOA between Metro and COBH imposes additional restrictions on Metro and adds costly change orders to the original contract. The OIG recommends Metro adopts a standardized MOA for use in negotiations with all jurisdictions within Los Angeles County and utilizes this agreement for every construction project going forward in each respective jurisdiction and that budget estimates for projects should be revised as necessary to take into consideration MOAs entered into.	Agreed.	
October 2020 #4 Contract C1151 MOD-0004.1 Purple Line Extension Sect. 3 Increase Ground Water Treatment Plant Capacity at Tail Track Exit Shaft	It is the OIG's understanding that water pump tests and water quality tests were performed, but they were performed at the original location, the Army Reserve site, which is no longer the correct shaft location. Now the site is at the Veterans Administration property. A change in location can greatly affect both the levels and quality of the groundwater, thus increasing the revised dewatering process. It is critical that the Real Estate Department be included at the earliest possible time in negotiating the property requirements for a project. Having to change location plans after a contract award can have significant scheduling and expense consequences.	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 Vetereans 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 succesfully negotiated with the Department of Veterans Affairs to enable relocation of this construction laydown area and permanent facility to their West Los Angeles Campus.	

ATTACHMENT B (October 2020)			
OIG REPORT/ SPOT CHECK # MOD #	**RECOMMENDATIONS**	**MANAGEMENT'S RESPONSES**	**COMPLETION DATE**
October 2020 #5 Contract C1151 MOD-0005 Purple Line Extension Sect. 3 Addition of Sepulveda Staging Area to Compensate VA Site Reduction	The Purple Line Extension 3 was a 'next decade project' and was accelerated to be completed in the next 5 years with many project processes that had to be compressed to meet the schedule. We also understand that the real estate acquisition process is contingent on the funding being in place. The real estate acquisition process and all other real estate arrangements must be negotiated as early as possible and negotiate those property rights strategically to ensure we have our real estate needs met at the earliest and least expensive manner possible.	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 aquisuisitons are coordinated with project need dates to minimize overall risk and cost to Metro in delivering the project.	

ATTACHMENT B (August 2020)			
OIG REPORT/ SPOT CHECK # MOD #	**RECOMMENDATIONS**	**MANAGEMENT'S RESPONSES**	**COMPLETION DATE**
August 2020 #1 Contract C1045 MOD-00095 Purple Line Extension Sect. 1 Transit Project: Phase 5 Golder EOR Mitigation Plan Implementation	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. 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.	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.	
August 2020 #2 Contract C1045 MOD-00106 Purple Line Extension Sect. 1 Center Muck Shaft at La Brea (ECI-03)	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.	OIG comment received will be included in the lessons learned.	
August 2020 #3 Contract C1045 MOD-00107 Purple Line Extension Sect. 1 Center Muck Shaft at La Brea (ECI-03)	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.	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.	

ATTACHMENT B (August 2020)			
OIG REPORT/ SPOT CHECK # MOD #	**RECOMMENDATIONS**	**MANAGEMENT'S RESPONSES**	**COMPLETION DATE**
August 2020 #4 Contract C1120 MOD-00073 Purple Line Extension Sect. 2 Century City Constellation Station Track work Extension	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. 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. 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.	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. 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. 2. This recommendation will be referred to Metro Engineering for consideration.	

ATTACHMENT B (April 2020)			
OIG REPORT/ SPOT CHECK # MOD #	**RECOMMENDATIONS**	**MANAGEMENT'S RESPONSES**	**COMPLETION DATE**
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	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. 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.	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. 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 indicicate they are necessary.	Completed with issuance of subject contract modification. Equipment to be installed 3rd quarter 2020
April 2020 #2 C1045 MOD-00098 Purple Line Sect. 1 Additional Air Scrubbers at Fairfax Station	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. 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.	The emissions limit for equipment was set at the time the Contractor submitted the specific ventilation plan to SCAQMD for permit. 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. 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.	
April 2020 #3 C1120 MOD-00064 Purple Line Sect. 2 Geotechnical Instrumentation Installation and Monitoring AT&T and Beverly Hills High School	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 though 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.	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.	
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	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. The OIG recommends Real estate arrangements should be negotiated as early as possible.	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.	

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 - Acousticall 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	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 CH_4 or H_2S from the soil. 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.	PLE1 Final M13 Mitigation Report will be forwaded to Metro Geotechnical Department for their review and further processing.	
January 2020 #4 C1045 MOD-00090 Purple Line Sect. 1 Oil Well Investigation In Lieu of TBM Probe Ahead	The implementation of the drilling and magnetometer survey from Section 1 has been incorporated into Purple Line Extension Section 2 and 3 contracts. The OIG recommends that the procedures implemented for locating tanks, pipes and other abandoned waste be added to the Lessons Learned database. 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.	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.	

File #
2020-0825

Office Of Inspector General Construction Change Order Spot Check Report

Presented By

Karen Gorman

Inspector General

January 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority

Metro

Spot Check Costs

File # 2020-0825

Summary of Selected Change Order Costs

Four OIG spot checks of Change Orders / Modifications reported

1 Change Order for Regional Connector Transit Corridor

- Expanded Duco Yard and Temple Street Sanitary Sewer Work = $3,060,510

2 Change Order Purple Line Section 1

- Alternate Soil Disposal = $16,469,000

3 Change Order for Purple Line Section 2

- Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations = $800,381

4 Change Order for Purple Line Section 3

- VA Hospital Replacement Parking for Lot 42 During Station Construction Phase = $1,727,505

Spot Check Schedule Comparison

File # 2020-0825

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

PROECT	Title of Change Order	Time Saved Executed date to Board Mtg.	NEW Delegated Process final SOW to Executed date	Former Board Approval Process
REGIONAL CONNECTOR	Expanded Duco Yard and Temple Street Sanitary Sewer Work	42	12	54
WESTISIDE PURPLE LINE SECT 1	Alternate Soil Disposal	22	30	52
WESTISIDE PURPLE LINE SECT 2	Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations	6	33	39
WESTISIDE PURPLE LINE SECT 3	VA Hospital Replacement Parking for Lot 42 During Station Construction Phase	34	5	39

Spot Check Recommendations

File # 2020-0825

#1 Contract C0980 MOD-00184 Regional Connector - Transit Corridor Project Expanded Duco Yard and Temple Street Sanitary Sewer Work	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.

Spot Check Recommendations

File # 2020-0825

#2
Contract C1045
MOD-00121
Purple Line
Extension Sect. 1
Alternate Soil
Disposal

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:

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.

Spot Check Recommendations

#3 Contract C1120 MOD-0091 Purple Line Extension Sect. 2 Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations	The OIG recommends that immediately prior to sending out an RFP, Metro should insure that the most current MRDC is used.
#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.