

Change Record

| Contract Number | | ct Title | Federal Aid Number |
|-----------------------------|---|--|--------------------|
| 009015 | | In Montlake to Lk Washington I/C and Bridge Replacement Projec | State Project |
| Change Order Number | _ | e Description | Date |
| 013 | | e Suppression & Ltg Mods | August 12, 2021 |
| Region | ' | Project Engineer | Phone Number |
| SR 520 Program | | Robyn Boyd | 206-770-3594 |
| Prime Contractor / Design F | | | |

Prime Contractor / Design-Builder

Graham Contracting Ltd

Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP

■ Change proposed by Contractor / Design-Builder

Evolution & Description Of Change

This is a Headquarters executed change order with execution authority delegated by the Region.

Background:

This change order is both WSDOT-initiated and Design-Builder initiated and encompasses two primary issues. The first issue, an Owner-Initiated Change (OIC), compensates the Design-Builder for design and construction of a foam-based Fixed Fire Suppression System (FFSS) under the Montlake Lid. The second issue, a Design-Builder Initiated Change (DBIC), modifies the design requirements for underlid lighting.

During the development of the Montlake Project, WSDOT Executives made the decision as the Authority Having Jurisdiction (AHJ) that the fire suppression system for the new Montlake Lid would be based on a water-only system, similar to what was constructed for the SR 99 Tunnel. As a result of this decision, the Technical Requirements only required the Design-Builder to design and construct a water-based fire suppression system. WSDOT also made the decision that there would be no restrictions on flammable cargo (fuel tanker trucks) over SR 520 and under the new Montlake Lid once it was completed. While WSDOT's decision was discussed with the Seattle Fire Department (SFD), SFD did not agree with this approach.

During Graham Contracting Ltd (GCL's) design and development of the Montlake Lid water-based fire suppression system in 2019, the SFD expressed their grave concerns and opposition to a water-only fire suppression system. SFD strongly argued that a foam-based system was necessary to handle fuel tanker truck fires and potentially other fire events resulting in fast heat growth under the Lid. SFD noted that there was little research data, engineering analysis, or current tunnels allowing operation of flammable cargo which backed WSDOT's position that a water-only system would be successful in controlling and extinguishing these types of fires. SFD's position was that the rate of heat growth from the fire could not be controlled with a water-only system. As a result, there would be a potentially greater loss of life to victims trapped inside the Montlake Lid as well as fireman trying to rescue them. SFD also noted that there would be greater damage to the Montlake Lid structure from the unchecked heat growth of the fire.

SFD also argued that the I-90 Tunnels/Lids have foam-based fire suppression systems, and these locations are a better comparison to the future SR 520 Montlake Lid instead of the SR 99 Tunnel. WSDOT and SFD officials met numerous times (at many different levels) to discuss this issue to try to find a resolution that was amenable to all parties. Several options considered were permanently banning flammable cargo, increasing water flow rates, conducting more testing, and research of new tunnels around the world. At the end of these discussions, WSDOT could not address the concerns expressed by SFD to their satisfaction with regards to a water-only fire suppression system. WSDOT decided that even though the risk of a fire incident with flammable cargo under the Lid was extremely small, WSDOT would modify the Contract to include a foam-based suppression system. WSDOT felt that it was important to address the concerns of SFD and obtain their support for the fire suppression system designed and built for the Montlake Lid.

(continuation on next page "Change Record Continuation")

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Evolution & Description of Change (continued)

The foam FFSS has been a complex, ongoing issue with many related sub-issues that are being combined into one change order. There is a total of eight Potential Change Order (PCO) numbers associated with the Underlid Foam Fire Suppression System. The Description and Evolution of each individual sub-issue is discussed below, followed by the overall Entitlement and Contract Time for the entire change order.

Changes to the Montlake Lid lighting design standards are also incorporated into this change order, as they are part of the comprehensive Montlake Underlid Systems.

<u>Underlid Foam Fire Suppression System (PCO's 49, 95, 120, 142, 143, 144, 163, 174)</u>

PCO 49 Fire Suppression System Coverage Requirements

Description of Change:

WSDOT and GCL have differing interpretations of the Contract requirements for the extent of the fire system deluge zone coverage. WSDOT's position is that the Request for Proposal (RFP) documents are clear that the system is to cover 'pier-to-pier'. GCL believes that the coverage requirement is from 'barrier-to-barrier', thereby excluding the shoulders and maintenance areas under the Montlake Lid.

Evolution of Change:

Technical Requirement (TR) Section 2.30.4.7.3 "Fire Suppression for the Montlake Lid Bridge" states: "The Design-Builder shall provide a fire suppression system that shall be an open spray nozzle in a zone configuration that shall cover the Montlake Underlid area between piers."

Appendix M1, Sheet MF22 "Fire Protection Details" is a reference document that shows a Fire Protection Zone Diagram reflecting barrier-to-barrier coverage.

On April 18, 2019, GCL submitted Request for Information (RFI) 65 to clarify the deluge zone coverage area under the lid. GCL noted the two Contract references and its interpretation that the required coverage area was between barriers. WSDOT responded that conceptual plan MF22 is only a Reference Document and not a Contract document. TR 2.30.4.7.3 requires that the fire suppression system shall cover the Montlake Underlid area between piers (wall to wall), not just between barriers.

The foam FFSS has been designed to encompass the underlid area between piers, and this change order fully resolves the coverage issue.

PCO 95 Fire Suppression System Zones

Description of Change:

This change modifies the Contract requirements in TR Section 2.30.4.7.3 "Fire Suppression for the Montlake Lid Bridge" to allow flexibility in fire zone dimensions.

Evolution of Change:

TR Section 2.30.4.7.3 "Fire Suppression for the Montlake Lid Bridge" states: "The fire suppression system shall have fire zones approximately 100-feet in length for the eastbound and westbound roadway..." and "The maximum zone area shall be limited to 6,300 square feet..."

On May 3, 2019, GCL submitted RFI 71 to clarify the design criteria for the underlid foam FFSS. Per the RFI, the FFSS design is to consider the largest anticipated operating vehicle to use the tunnel, as a worst-case scenario. National Fire Protection Association (NFPA) Standard 502, Annex E.4.2, describes that a typical zone length should be based on vehicle length as well as hydraulic analysis. The design vehicle anticipated within the tunnel is a WB-67 as classified by American Association of State Highway and Transportation Officials (AASHTO). The WB-67 classification applies to a 67-foot wheelbase long haul truck that has an overall length of approximately 74 feet. Girders are on an approximate 8-foot center-to-center spacing.

The TR states the FFSS zones below the Montlake Lid are not to exceed 6,300 square feet. Based on the geometry of the Montlake Lid and the requirement for providing sprinkler protection from pier to pier, a limit on the zone area would not allow for the FFSS zones to be approximately 100-feet in length as required in the above-referenced TR. Specifically, the east portal of the eastbound roadway is approximately 120-feet wide,

> which is a result of the maintenance area. If the FFSS zone is limited to 6,300 square feet, the resulting zone length would be approximately 50 feet. This is half the minimum zone length of "approximately 100-feet" as stated in TR 2.30.4.7.3 and less than the standard design vehicle length. Similarly, if a zone length of 80 feet is used (this would cover the largest vehicle and correspond to the girder spacing), the zone area is 9,600 square

The criteria related to zone area cannot be met if coverage across the roadway and zone length is applied as directed. Similarly, minimum zone width cannot be met if the zone area is maintained.

If the zone length is less than the vehicle length, this results in the possibility of three adjacent zones needing to be activated. This does not comply with the TR.

GCL requested the following:

- A defined acceptable minimum and maximum zone length.
- Remove the area limitation and permit the zone area to be determined based on zone length and roadway width.

On May 21, 2019, WSDOT responded to GCL that it is agreeable to the following:

- 1. Eliminating the fire zone length requirement in TR 2.30.4.7.3 that states: "The fire suppression system shall have fire zones approximately 100-feet in length for the eastbound and westbound roadway."
- 2. Eliminating the maximum fire zone area requirement in TR 2.30.4.7.3 that states: "The maximum zone area shall be limited to 6,300 square feet."

Eliminating the zone length and area constraints will allow GCL to design a fire suppression system that complies with applicable NFPA codes and standards while accommodating the planned geometry of the Montlake Lid structure. This change order incorporates the TR changes into the Contract.

PCO 120 Foam Fixed Fire Suppression System

Description of Change:

PCO 120 includes the changes and associated costs for replacing the water-based fire system required by the Contract with a foam-based FFSS. Besides the fire suppression system itself, several other systems are affected by this change and are incorporated into this issue. The following list represents the changes addressed within PCO 120:

- Fire Suppression System
 Valve Building
 Drainage

- 4. Lid Structure
- 5. Sewer System
- 6. Water Supply
- 7. ITS/Electrical System
- 1. Fire Suppression System This item includes design and construction of the foam-based FFSS and incorporates a credit for uncompleted Work associated with the water-based system (see below). The new system costs are primarily due to the increased complexity of a foam system as compared to a water-based sprinkler system. While the manufacturer was specified in the Contract, the exact products and layouts to be used presented some challenges and required significant coordination with the SFD, WSDOT, and GCL's interdisciplinary team.

The foam system added complexity in piping layouts, sizing and detailing of foam tanks, mixing valves, and other piping required solely for the foam system. The foam system also requires the addition of backflow preventers to keep the foam product from contaminating the public water system. These backflow preventers reduced overall pressures in the line which ultimately led to a second pressure-reducing valve (PRV) upstream of the fire system (see Item 6 below).

The use of foam also increased the complexity of the valve building mechanics. Space had to be created for the foam storage and proportioning valves, while ensuring these components were close enough to the water supply to achieve pressure balancing that allows proportioning to occur at the correct ratio.

- 2. <u>Valve Building</u> This item includes changes to the valve building with valve room, Uninterruptible Power Supply (UPS) room, and control room to accommodate the foam system. The valve building costs increased with this change due to the added complexity of the building. However, increases to the square footage of the building (as compared to the preliminary design) were minimized to reduce construction costs and maintain as much space as possible in the underlid median area for maintenance.
 - Various original elements of the valve building were removed, such as the overhead crane. However, structural supports for the foam valve system were added. The valves were relocated away from the pier wall system, which required the pipe system to meet a different design requirement, adding costs for additional system components.
- 3. <u>Drainage</u> The current drainage design includes a flow-splitting manhole east of the lid along SR 520 and another flow-splitting manhole at the south drainage facility. Under normal conditions, storm runoff from under the lid and along portions of SR 520 is designed to flow to the south storm drainage facility for treatment and then discharge to Lake Washington. If the fire suppression system under the lid is triggered, this is considered an emergency event [Department of Ecology (DOE) Emergency Event], which allows the increased flow to bypass the south treatment facility (through the flow control structure) and discharge directly to the lake.

With the change from a water-based to a foam-based FFSS, the permit still allows flow to discharge to the lake during the active emergency event. At the end of the emergency event ("Stage 4", as defined in the King County Industrial Waste Permit), flows to the south storm water facility must be halted and diverted to the Seattle Public Utilities (SPU) 24-inch combined sewer pipe. Stopping flow to the south storm water facility requires installation of valves in one of the downstream manhole structures.

This item includes modifying the storm drainage system to eliminate post-emergency outflow of diluted foam to the lake by adding up to two automatic gate valves within a downstream manhole. The additional Work requires modifications to the design and added construction costs.

- 4. <u>Lid Structure</u> This item includes design of the Pier 2 wall to accommodate additional, larger pipes passing from south to north for the foam-based FFSS. The water-based deluge system had singular penetrations through the Pier 2 diaphragm (between girders). The foam system has eight penetrations through the pier wall at the east end.
- 5. Sewer System This item includes adding one sewer connection (from the new WSDOT PRV to the nearby SPU sewer line) and upsizing a second sewer connection (from the valve building). The second sewer connection is due to the addition of the reduced pressure backflow preventers that were added to the valve building and required to prevent contamination of the public water system by the foam.
- 6. Water Supply This item includes adding a second PRV due to the foam FFSS. SPU has required this PRV to be isolated from SPU equipment and placed on the WSDOT section of water piping. This change affected design of the 54-inch water supply downstream from the north butterfly valve chamber to the existing pressure regulating station (PRS) and may affect the location of the PRS (and the PRS itself) depending on final design decisions.

For the 12-inch water system, a second PRV will be added, which is directly related to the addition of foam in the fire suppression system as it requires higher flows and pressure as compared to the distribution water system.

7. <u>ITS/Electrical System</u> – This item includes changes to the valve building ITS and electrical systems to incorporate the foam-based FFSS.

Evolution of Change:

Beginning in early 2019, GCL proceeded with design of the water-based FFSS in accordance with the Contract. Over the course of nine months, GCL's team reached approximately 80 percent completion on the Preliminary (PRE) Fire Suppression Design package. In the Fall of 2019, discussions began regarding the use of a foam FFSS in lieu of the water-based FFSS. WSDOT ultimately determined, in conjunction with the SFD, that a foam FFSS would be the preferred option for coverage under the Montlake Lid.

On November 15, 2019 WSDOT sent serial letter MLG0096 notifying GCL that WSDOT would be issuing an OIC to modify the TRs of the Contract to include a foam FFSS in the design of the Montlake Underlid Systems. Specific TR changes would be forthcoming. WSDOT requested GCL prepare a price proposal and schedule impacts associated with the change.

On March 4, 2020, WSDOT followed up with serial letter MLG0140. This letter provided the specific TR changes that would be required to replace the water-based system with a foam-based FFSS. WSDOT stated that the TRs may need further refinement as the change order is developed. Additional TR changes related to drainage, as well as changes to Appendix X1.B Fire Alarm Response Flowchart would be forthcoming and provided separately.

On April 15, 2020, GCL provided the first pricing proposal, which addressed the design costs associated with the foam FFSS. Since the first pricing submittal, this issue evolved as elements of Work were further refined, additional Work was identified, and TR revisions were drafted. Several iterations of the scope and associated pricing were prepared between April 2020 and December 2020.

The mutually agreed cost of this change incorporates credits for design work that was not completed for the water-based FFSS. This includes approximately 20 percent of the original design budget for the PRE-Fire Suppression Design package, all of the original design budget for the Final (FIN) and Released for Construction (RFC) Fire Suppression Design packages, and all of the original design budget for the FIN and RFC Valve Building Design packages.

On March 24, 2021, WSDOT sent letter MLC0036 to the SFD to outline and document WSDOT's proposed design approach and design parameters for the foam FFSS. The final TR edits to Sections 2.30 and 2.32 were attached to the letter, along with the updated Fire Alarm Process Flowchart (Appendix X1.B). WSDOT requested comments and concurrence with these changes by April 9, 2021.

On May 4, 2021, the SFD responded that the request for concurrence letter dated March 24, 2021 regarding the proposed design approach and design parameters for Foam Fire Suppression for Montlake Project is approved as submitted.

PCO 142 Fire Pipe Material

Description of Change:

This change modifies the Contract requirements in TR Section 2.32.5.1 "Mechanical/General Materials" to remove the requirement for GCL to provide Type 316 stainless steel pipe for the fire protection system.

Evolution of Change:

On August 9, 2019, GCL submitted RFI 112 to get clarification on design criteria for the fire suppression, standpipe, and hydrant system piping below the Montlake Lid. The following Contract references apply:

- TR 2.32.5.1 "Mechanical/General Materials": "Unless otherwise specified, the Design-Builder shall provide Type 316 stainless steel for the fire protection system."
- TR 2.32.5.1.1 "Mechanical/General Materials/Pipe": "The Design-Builder shall provide standpipe for the mechanical systems that shall be ferrous and galvanized and meet the requirements of NFPA 14 Standard for the Installation of Standpipe and Hose Systems. Pipe shall be Schedule 40 for all pipe sizes."
- TR 2.32.5.1.2 "Mechanical/General Materials/Fittings and Couplings": "The Design-Builder shall coat grooved fittings and couplings with a rust inhibiting paint," and "Grooved fittings 90's, 45's, Tees, and reducers shall be malleable iron or ductile."

GCL stated some concerns with using stainless steel for the installation, including:

- 1. Stainless steel pipe manufacturing tolerances are not as closely monitored or controlled as they are for standard ferrous piping. This often results in differing actual pipe diameters where nominal sizes are the same. This creates issues with creating solid mechanical joint connections.
- 2. Due to the finish of the piping, the surface is smoother, reducing the grip mechanical joints have on the piping which can cause issues during system pressure testing and system activation.

For the reasons above, GCL recommended not using stainless steel pipe and malleable iron fittings for the fire suppression systems. GCL referenced another WSDOT contract with deluge systems that are entirely

galvanized systems, and the West Approach Bridge North (WABN) Project which installed Class 53 cement lined ductile iron pipe, factory painted AWWA grooved couplings and fittings, galvanized screwed fittings, galvanized hanger assemblies, brass hose valves and adapter, brass drain valves, brass FDC's and factory applied painted valves. GCL requested using ferrous, galvanized, Schedule 40 piping throughout the Montlake Lid for all fire suppression piping.

On August 27, 2019, WSDOT responded to RFI 112 and agreed to eliminate the requirement for stainless steel pipe for the fire suppression system. This change order incorporates the necessary TR revisions into the Contract.

PCO 143 Underlid Drainage Requirements

Description and Evolution of Change:

The Contract requirement for the underlid storm drainage system and outflow is that the drainage network shall function as part of the water-based FFSS. On August 30, 2019, GCL submitted RFI 117 requesting a reduction in the required fire flow rate used to size the underlid storm drainage system and outfall. WSDOT reviewed and ultimately denied this request. The RFC "Mainline & Underdrain Drainage Plans" were submitted on April 1, 2020 in accordance with TR 2.14.4.3.2 "WSDOT On-Land Drainage Systems".

After issuance of the RFC package, there were discussions about how to reduce the number of structures and pipe sizes of the underlid storm system and outflow. Due to the change from a water-based system to a foam FFSS, a decision was made that the storm drainage network in this area no longer needed to function as a portion of the fire suppression system. At WSDOT's direction, GCL's team began revising the design to eliminate numerous drainage structures and downsize many of the storm drainage pipes.

As the design was being modified, WSDOT and the SFD discussed the proposed changes to the storm drainage network as they related to the foam FFSS. Based on these discussions, WSDOT elected to discontinue the design changes and proceed with the Work in accordance with the RFC design package.

This change order compensates GCL for its design efforts to modify the RFC design, before this Work was halted by WSDOT.

PCO 144 Valve Room Requirements (Refer to PCO 120, Item 2)

PCO 163 Linear Heat Detection

Description of Change:

While this issue is not directly related to the foam FFSS, it is an emergency system issue and is therefore included in the foam fire suppression change. This change includes adding the requirement for a Forward Compatible linear heat detection system under the Montlake Lid. TR Section 2.30.4.5.1.1.1 "Fire Detection for Roadway" does not require this system to be Forward Compatible.

Evolution of Change:

On March 14, 2020, GCL submitted RFI 225 "Heat Detection Requirements". GCL noted that other components of the fire detection system are required to be Forward Compatible, but the linear heat detection system does not have this requirement. GCL included a preliminary heat detection layout for WSDOT concurrence on design assumptions. WSDOT responded on April 7, 2020 directing GCL to provide linear heat detection for the future channelization associated with the Portage Bay Bridge Project (Appendix M19) for each lane of the westbound and eastbound roadways (general purpose and HOV lanes), and each lane of the Montlake eastbound on-ramp under the Montlake Lid. Linear heat detection is to be centered over each lane. This change incorporates the additional Work to provide a Forward Compatible linear heat detection system.

PCO 174 Gate Controller Changes

Description of Change:

While this issue is not directly related to the foam FFSS, it is an emergency system issue and is therefore included in the foam fire suppression change. This change includes modifications to the gate controllers.

Evolution of Change:

On December 10, 2019, GCL submitted RFI 179 "Gate Control Information", requesting information on several gate-related issues. TR Section 2.18.4.5.2.4 "Montlake Underlid Closure Gates" states: "Gates and their controllers shall be fully compatible with the existing WSDOT gate control system at the TMC [Traffic Management Center] and shall be integrated with the WSDOT gate control system at the TMC." GCL asked for a description of the typical operation, including interface with the fire panel.

WSDOT responded to the RFI on January 24, 2020 directing GCL to control the gates using the SimplexGrinnell fire control system. Eastbound and westbound gates shall be controlled separately, providing only manual control from the Fire Alarm Control Panel (FACP) and the True Site Workstations (the human machine interface to the fire control system). WSDOT stated that a gate control button on the SR 520 Simplex control screen would be acceptable.

This modified system would essentially be capable of locally overriding the remote commands by the WSDOT TMC. For the safe operation of the gates, local control from the local command post in the valve room would take precedence over the remote control by the TMC. This change order will incorporate the gate controller modifications into the Contract.

Underlid Lighting Design Standard Change (PCO 113)

Description of Change:

This change allows the most recent tunnel lighting design standard to be used in lieu of the older tunnel lighting design standard required by the Contract.

Evolution of Change:

The Contract requires the underlid lighting to be designed using the following standard:

 American National Standards Institute (ANSI)/Illuminating Engineering Society (IES) RP-22-11, American National Standard Practice for Tunnel Lighting

The ANSI/IES RP-22-11 Standard is from 2011 and was superseded by ANSI/IES RP-8-18 in 2018.

On September 11, 2019, GCL submitted RFI 122 requesting to use the most recent design standard for tunnel lighting. GCL noted the primary difference between the two standards, with respect to the tunnel lighting design criteria, is the minimum Safety Rating Number (SRN) for safe entry into the tunnel. The SRN effectively represents the ratio between the tunnel threshold luminance and the total equivalent veiling luminance (Lth/Lseq). In the latest version of the standard, the SRN has decreased from 5.0 to 4.7 resulting in lower required threshold luminance. Note that prior to 2011, previous versions of the RP-22 Tunnel Lighting design guideline allowed for up to 20% (+/-) variation in the threshold luminance value.

On October 8, 2019, WSDOT responded to the RFI, stating that WSDOT accepts the use of the RP-8-18 (2018) Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting – Chapter 14: Tunnels, as a whole, including but not limited to the use of 4.7 for the SRN. WSDOT stated that a DBIC would be required for the change.

On December 4, 2020, GCL submitted a no-cost DBIC with the proposed design standard changes. WSDOT and GCL ultimately negotiated a credit due to the reduction of Work. The lower threshold luminance in the most current design standard results in fewer lighting fixtures in the threshold zones (entry points) of the lid. It is expected that the total number of fixtures could be reduced by 10-15 percent (considering only daytime luminaires) from the 2011 design standard. Costs are further reduced as a result of fewer dimming units and appurtenances, as well as a slight reduction in design work.

The design standard modifications are incorporated into this change order and the resulting credit has been factored into the total negotiated price of the change order.

Entitlement:

In accordance with General Provisions Section 1-04.4(1), the Design–Builder is entitled to compensation for the additional cost of labor, materials and equipment to install the Underlid Foam Fire Suppression System. WSDOT is entitled to a credit for the reduction in the cost of labor, materials and equipment as result of the Underlid Lighting Design Standard Change. The cost of the complete Underlid Foam Fire Suppression System is \$3,500,000.00, and the credit for the Underlid Lighting Design Standard Change is (\$500,000.00).

The total agreed lump sum amount of this change order is \$3,000,000.00. The Engineer's Independent Estimate was based on information provided by industry sources and historical cost data.

Contract Time:

Additional Contract time associated with this change was deemed to have merit. However, no time will be provided with this change order. Additional Contract time attributed to this change has been accounted for within the Contract time extension provided in Change Order 77.

<u>Contractor Concurrence</u>: The Design-Builder has concurred with this change.

FHWA Participation: Not Applicable

Minority Small Business Veteran Woman Business Enterprises (MSVWBE) Requirements:

This Contract does not have a Condition of Award or mandatory participation goals. This Contract does have voluntary MSVWBE Participation Requirements which are based on the Design-Builder's Proposal Price. These requirements have not been modified by this change order.

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| 009015 | SR 520 Montlake to Lk Washington I/C and Bridge Replacement Project | 013 |

Basis of Cost & Justification:

In accordance with General Provision Section 1-04.4(1), the Design–Builder is entitled to compensation for the additional cost of labor, materials and equipment to install the Underlid Foam Fire Suppression System. WSDOT is entitled to a credit for the reduction in the cost of labor, materials and equipment as result of the Underlid Lighting Design Standard Change. The cost of the complete Underlid Foam Fire Suppression System is \$3,500,000.00, and the credit for the Underlid Lighting Design Standard Change is (\$500,000.00).

The total agreed lump sum amount of this change order is \$3,000,000.00. The Engineer's Independent Estimate was based on information provided by industry sources and historical cost data. See Attachment B.

Contract Time:

Additional Contract time associated with this change was deemed to have merit. However, no time will be provided with this change order. Additional Contract time attributed to this change has been accounted for within the Contract time extension provided in CO 77.

Prior Approvals:

*Project Engineer Level - Robyn Boyd, April 1, 2021

*SME Concurrence (TR Sec. 2.16 & 2.18 - Joey Yang, March 30, 2021

*Region/Program Level - Dave Becher, April 1, 2021

*SME Concurrence (TR Sec. 2.30, 2.32, 2.33) Jerry Case, April 1, 2021

*HQ Construction Level - Chris Christopher, April 29, 2021 *Program Funding Concurrence - Monica Kao, April 29,2021

*SME Concurrence (TR Sec. 2.10) - Danny Applegate, April 1, 2021

*SME Concurrence (TR Sec. 2.8 & 2.14) - Jeff Dye, March 29,2021

List Attachments:

*Change Order No. 013, Executed (124 pages)

*Change Order No. 013 CO Checklist (2 pages)

*Approval Documentation (Attachment A)

*Engineer's Independent Estimate (Attachment B)

*SFD Email (Attachment C)

*Reference ORFIs (Attachment D)

*WSDOT Letters (Attachment E)

*SFD Concurrence Letter (Attachment F)

*DBIC PCO 113 dated 12.04.2020 (Attachment G)

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