



March 30, 2015

TO: Fred Tharp  
HQ Construction, MS: 47354

THRU: Mike Morishige *MM*  
OR Construction, MS: 47440

FROM: Jon Deffenbacher, WT-12 *J*  
(253) 365-6700

SUBJECT: C-8607 – I-5, M St. to Portland Ave – HOV  
**Change Order No. 020R1 – Soil Management Resolution**

**Requested Action:**

Review     Review and Region Execution     Review and HQ Execution

**Approvals Obtained:**

**Change Approval**

**Approval to Proceed**

<b>Project Engineer:</b>	Jon Deffenbacher	12/2/2014	
<b>OR Construction:</b>	Mike Morishige	12/2/2014	
<b>HQ Construction:</b>	Fred Tharp	12/2/2014	*

\* Approval to proceed was given for specific components throughout the development of this change order. See Evolution of the Change for details.

**Description of the Change**

This change order addresses a differing site condition as specified in Section 1-04.7 of the Standard Specifications, by providing compensation for direct costs associated with discovery, testing, characterization, removal and disposal of contaminated soils, excluding the NW Pond. This change order also provides compensation for all time related impacts associated with Change Order #9, NW Pond Contaminated Materials, prior to December 1, 2014, NE Pond standby costs incurred by the Contractor between October 28, 2014 and December 1, 2014, and all future impacts related to contaminated soil encountered on the project.

**Evolution of the Change**

In August 2014 contaminated soils requiring disposal at a Subtitle D landfill were discovered during the excavation of the NW Pond. Change Order #9 was written to address the direct costs associated with the change in condition. Time related impacts associated with Change Order #9 were reserved.

Following the discovery of contaminated soil at the NW Pond, the Project Office collected samples at the NE Pond and the connecting drainage trenches. The constituents and levels of contamination were very similar to those discovered in the NW Pond. The Project Office confirmed through historical information that the likely source of contaminants within the project was fill material placed during the construction of the I-5/I-705 interchange. Both the NE and NW ponds are located within areas that were filled during that project.

Out of the 48 samples collected to characterize the soil from NE Pond, the results indicated that 15 were above MTCA cleanup levels. Given the identification of contaminated soils at two sites that were assumed to be clean, the Project Office suspected the widespread presence of contaminants at other excavation areas. The Olympic Region Environmental Office (OR Environmental) was consulted regarding disposal requirements and potential alternative disposal options. OR Environmental confirmed that contaminated soils, regardless of contaminant concentration, must be sampled and characterized prior to hauling the material to a permitted disposal facility. Soils containing contaminants above MTCA cleanup levels must be disposed at a Subtitle D landfill.

OR Environmental also advised that soil with contaminants below MTCA cleanup levels may be embanked within WSDOT right of way, but are subject to local grading permit requirements. Since the contract includes a minor amount of embankment construction, the Project Office explored disposing of the below MTCA soil on other future roadway embankment sites within existing WSDOT right of way. Due to the length of time that would be required to secure grading permits from local jurisdictions, embanking the material on another site was not feasible without causing further delay and impact to the current contract.

Recognizing the potential for contaminants in the excavation areas on the project, the Project Office determined that all excavation areas that required disposal of material off the project site would require sampling and testing prior to proceeding with excavation work. The sampling and testing effort would require significant planning and coordination in order to avoid project delays to excavation activities, and possibly the project critical path. Therefore, the Project Office pursued a change order to transfer responsibility for planning and managing the testing, permitting and disposal of all soil, regardless of contaminant level, to the Contractor.

On October 1, 2014 the Project Office requested approval for a changed condition at the NE Pond as an extension of the NW Pond. To avoid delays to the NE Pond construction activities and minimize the quantity of soil hauled to LRI Landfill facility, this request included authorization to temporarily stockpile the contaminated soil that was below MTCA cleanup levels until a disposal plan was determined. Region and HQ Construction granted approval for this change on October 2, 2014.

On October 10, 2015 HQ Construction provided approval to proceed with work to excavate, haul, and dispose of the portion of the NE Pond excavation to be hauled to LRI.

Following the excavation and disposal of the above MTCA soil from the NE Pond, the Project Office ordered the Contractor to stop NE Pond excavation until an overall disposal plan was finalized. The Project Office determined that it was appropriate to direct the Contractor to leave the equipment on standby. Keeping the equipment on site provided the ability to use the equipment to assist with soil sampling, and it ensured the equipment would be available to resume excavation work once a disposal plan was developed and approved. The Contractor was ordered off standby on December 1, 2014.

On November 13, 2014 the Project Office sent the Contractor a letter issuing the approval to proceed with the development of a sampling and characterization plan. This plan would identify areas of contamination and provide a method to characterize the soils within the project limits to determine proper disposal recommendations. On November 7, 2014, HQ Construction granted change approval and approval to proceed. Also on November 7, 2014, OR Construction provided concurrence.

The Project Office negotiated terms with the Contractor to establish unit prices to excavate and dispose of soil; above MTCA cleanup level, below MTCA but above non-detect, and clean. The new unit prices were established based on assumed quantities of work remaining, and included all impacts and inefficiencies associated with contaminated soil encountered on the project.

On December 2, 2014, Craig McDaniel was consulted and Fred Tharp of HQ Construction provided a consolidated change approval to address all costs and impacts associated with the contamination issue. Additionally, Mike Morishige of OR Construction provided concurrence, and Jon Deffenbacher, Fife Project Engineer, granted change approval for this change order. **See Attachment A.**

### **Entitlement**

Contaminated soil was discovered in multiple locations as a result of this Changed Condition. Although the contract includes provisions for excavation and disposal of contaminated soil in two known locations, the work added by this change order was not contemplated during the development of the contract document. Therefore, the Contractor is entitled to compensation for equipment standby, rehandling, sampling and testing, excavation and haul, segregating excavations, permitting, disposal fees, impacts to unchanged work, and inefficiencies resulting from this change order.

**Price**

The total estimated net change to the contract is \$4,641,285.00

An Independent Engineer's Estimate was completed by the Project Office and substantiated that Contractor's proposed unit prices were appropriate to address the added work and the associated impacts. The prices for the new items were estimated using independent quotes, past project cost data, and time analysis. **See Attachment B.**

Lump sum was used for the standby costs since that amount could be quantified. This price includes standby costs for only the equipment that was onsite for the specific purpose of excavating the NE Pond and could not be utilized for other contract work from October 28, 2014 through December 1, 2014. Force account methodology was used to determine the total amount.

The force account item for sampling and testing provides compensation for excavating test holes, collecting, and analyzing the soil throughout the project limits. The estimated amount was determined by using previous sampling rates from the NW and NE Pond and estimating the amount of sampling for the entire project excavation.

Existing bid items were adjusted to reflect the amount of material that was estimated to be paid under the new bid items and would no longer be paid under the existing Contract bid items.

**Contract Time**

This Change Order adds 15 working days to the contract to address time delays associated with the contaminated soil encountered at the NW Pond, and all future time impacts that may occur as a result of contaminated soil encountered on the project.

The Project Office recognizes up to 19 days of critical path delay due to contaminated soil at the NW Pond. The pond excavation started in late August, 2014 and became critical on September 11, 2014 following the completion of the Stage 1A traffic shift. Excavation of the NW Pond was completed on October 20, 2014. Based on the observed un-impacted production rate for excavation and the planned durations in the baseline schedule, the NW Pond excavation took an additional 19 days to complete.

In addition to the documented critical path impacts at the NW Pond, the Project Office recognizes the potential for additional critical path delays in association with future work. The following excavation related activities are on the critical path, or within 1 day of the critical path:

- Stage 1 drainage, including connecting pipes in and out of NW Pond
- Excavation and reconstruction of I-5 median vicinity of McKinley Way
- NBN Ramp roadway excavation (NBN Wall)

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- NBS Ramp roadway excavation and drainage
- SNB/NNB roadway excavation and structure excavation
- Pacific and McKinley bridge foundation excavation (drilled shafts)
- Subgrade preparation for CCP replacement (various mainline locations)

Based on the observed delay at the NW Pond and the potential to experience additional critical path delay associated with segregating and handling contaminated soils at other excavation areas, the 15 day time extension is justified.

JD:eg  
PC *PR*

**Attachments to Memorandum**

Change Order No. 020R1 – Soil Management Resolution

Attachment A: Change Approvals.

Attachment B: Independent Engineer's Estimate.

Change Order Checklist

cc: 8607, 4 – Change Orders;  
C/O; Electronic File

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DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

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CONTRACT NO: 008607  
CONTRACT TITLE: I-5, M ST TO PORTLAND AVE - HOV  
CHANGE ORDER NO: 20 RL SOIL MANAGEMENT RESOLUTION

FEDERAL AID NO:

**RECEIVED**  
**FEB 26 2015**  
**WSDOT FIFE PEO**

PRIME CONTRACTOR: [REDACTED] MAX J. KUNEY COMPANY  
120 N RALPH ST

SPOKANE WA 99202-4744

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

Change proposed by Contractor

<p>ENDORSED BY:</p>  <p>CONTRACTOR</p> <p>2-17-15</p> <p>DATE</p>	<p>SURETY CONSENT:</p> <hr/> <p>ATTORNEY IN FACT</p> <hr/> <p>DATE</p>
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ORIGINAL CONTRACT AMOUNT: 98,175,443.97  
CURRENT CONTRACT AMOUNT: 99,680,700.52  
ESTIMATED NET CHANGE THIS ORDER: 4,641,285.00  
ESTIMATED CONTRACT TOTAL AFTER CHANGE: 104,321,985.52

Approval Required:  Region  Olympia Service Center  Local Agency  PE

<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED</p>  <p>PROJECT ENGINEER</p> <p>3/27/15</p> <p>DATE</p>	<p>EXECUTED:</p>  <p>STATE CONSTRUCTION ENGINEER</p> <p>4-9-2015</p> <p>DATE</p>
<p><input checked="" type="checkbox"/> APPROVAL RECOMMENDED <input type="checkbox"/> EXECUTED</p> <p>REGIONAL ADMIN:</p> <p>Kevin J. Dayton</p> <p>BY: Michael Moiridge</p> <p>4/6/15</p> <p>DATE</p>	<p>OTHER APPROVAL WHEN REQUIRED</p> <hr/> <p>SIGNATURE</p> <hr/> <p>DATE</p> <hr/> <p>REPRESENTING</p>

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All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

**Description:**

This change order compensates the Contractor for added costs associated with the discovery, testing, characterization, removal, and disposal of contaminated soil within the roadway and structure excavation limits. This change order also compensates the Contractor for all time related costs and impacts associated with contaminated soil excavation and disposal included in Change Order #009 - NW Pond Contaminated Material, prior to December 1, 2014. This change order also compensates the Contractor for NE Pond standby costs incurred by the Contractor between October 28, 2014 and December 1, 2014.

**Construction Requirements:**

Standard Specification 1-09.2(1) General Requirements for Weighing Equipment, subsection Scale Operation is supplemented as follows:

The Scalemans Daily Report for materials weighed at LRI Landfill will not be required.

The Contractor shall prepare a Sampling and Testing Plan for all excavation Work. The Sampling and Testing Plan shall describe the process and procedures that will be used to sample and characterize soil for disposal. The Sampling and Testing Plan shall define locations for sampling and testing. The Contractor shall update the Sampling and Testing Plan as needed to reflect progress on the project. The Sampling and Testing Plan, updates, and copies of all test results shall be provided to the Contracting Agency upon request.

The Contractor shall characterize all excavation by collecting samples, testing, and analyzing constituents as necessary to dispose of the material at the contractor provided disposal site. Sampling and testing of excavation areas shall be performed prior to beginning excavation Work. The Contractor shall excavate test holes and collect samples as shown in the Sampling and Testing Plan and as designated by the Engineer.

The Contractor shall determine the testing frequency required for disposal and schedule all sampling and testing activities. Delays resulting from the sampling and testing of soil will be the responsibility of the Contractor with no additional cost to the Contracting Agency.

The Contractor shall classify and dispose of the soil as follows:

Level 1 - soils that contain contaminant levels above Model Toxicity Control Act (MCA) Method A cleanup levels and are acceptable to be disposed of at a Subtitle D landfill. Level 1 soil shall be disposed of at a Subtitle D landfill.

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Level 2 - soils that contain contaminants at levels below MTCA Method A cleanup levels. Level 2 soil shall be disposed at an approved facility that is permitted to accept the contaminated soil.

Level 3 - soils that contain no polychlorinated biphenyl (PCB), no polycyclic aromatic hydrocarbon (PAH), metals at or below the background levels of the receiving facility, gasoline range organics below 30 mg/kg, diesel and oil range organics below 200 mg/kg, and PH between 6.5 and 8.5. Level 3 soil shall be disposed of in accordance with the Standard Specifications and the Contract Special Provisions.

The Contractor shall acquire all necessary permits to dispose of Level 1 and Level 2 soils. Copies of permits and disposal authorizations shall be provided to the Contracting Agency.

The Contractor shall prepare a contaminated water management plan to address all water coming into contact with Level 1 contaminated soil. The contaminated water management plan shall include the process and procedures to collect, handle and store water that comes into contact with Level 1 contaminated soils prior to water sampling. The water shall be collected, handled, stored, and disposed of as described in the contaminated water management plan and as directed by the Engineer.

**Measurement:**

The new item "CO#020 EXC, HAUL & DISP - LEVEL 1" will be measured per ton in accordance with Section 1-09.2.

The new item "CO#020 EXC, HAUL & DISP - LEVEL 2" will be measured per ton in accordance with Section 1-09.2.

The new item "CO#020 CLEAN SOIL INEFFICIENCY/HANDLING" will be measured per cubic yard. The quantity of Clean Soil Inefficiency/Handling will be the measured quantity of excavation performed under the following unit bid items

- Item 30, Roadway Excavation Incl. Haul
- Item 33, Roadway Excavation Incl. Haul - Area Vault 1
- Item 34, Roadway Excavation Incl. Haul - Area Access Road
- Item 78, Structure Excavation Class A Incl. Haul
- Item 79, Soil Excavation for Shaft Including Haul
- Item 283, Structure Excavation Class B Incl. Haul

Clean Soil Inefficiency/Handling will not apply to the measured volume of existing cement concrete pavement and hot mix asphalt roadways that are removed under Item 30, Roadway Excavation Incl. Haul, nor will it apply to volume of Structure Excavation that is not removed from the site. Clean Soil Inefficiency/Handling will be applied only to excavation Work performed after December 1, 2014.

No specific unit of measurement will apply to the new lump sum item, "CO#020

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NE POND STANDBY".

No specific unit of measurement will apply to the new force account item, "CO#020 SAMPLING AND TESTING FA".

**Payment:**

Payment will be made in accordance with Section 1-04.1 for the following new items:

"CO#020 EXC, HAUL & DISP - LEVEL 1", per ton. This unit price shall be full pay for all costs associated with excavation, handling, hauling, and disposing of the Subtitled D contaminated soil to the Subtitle D landfill as described in this change order.

"CO#020 EXC, HAUL & DISP - LEVEL 2", per ton. This unit price shall be full pay for all costs associated with excavation, handling, hauling, and disposing of the Level 2 contaminated soil to the Contractor provided disposal site as described in this change order.

"CO#020 CLEAN SOIL INEFFICIENCY/HANDLING", per cubic yard. This unit price shall be full pay for all costs associated with segregating and handling clean soil separate from contaminated soil.

"CO#020 NE POND STANDBY", lump sum. The lump sum price shall be full payment for all costs for the equipment on standby at the NE Pond between the dates of October 28, 2014 and December 1, 2014.

"CO#020 SAMPLING AND TESTING FA", force account. Payment will be made in accordance with Section 1-09.6 of the Standard Specifications for all work required to sample and test the material including excavating test holes, collecting soil samples, and analyzing constituents.

Payment will be made for collecting, handling, storing, and disposing of contaminated water under existing Item #331 Force Account TESC Water Management. The Contractor waives its rights to equitable adjustment for Decreased Quantities for all bid items listed in this change order.

**Contract Time:**

An extension of 15 working days is granted as a result of this change order. No further time extension will be granted for Change Order #009 - NW Pond Contaminated Material.

The Contractor, by signing of this change order agrees and certifies that any and all claims or requests for compensation in any manner arising out of, or pertaining to contaminated soil have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation in any manner arising out of Contract No. 008607 prior to December 1, 2014.

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ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
0030	01	0310	ROADWAY EXCAVATION INCL. HAUL	C.Y.	16.75	-37,350.00	-625,612.50
0031	01	0330	ROADWAY EXCAVATION INCL. HAUL - AREA NE P	C.Y.	16.50	-11,955.00	-197,257.50
0078	01	4006	STRUCTURE EXCAVATION CLASS A INCL. HAUL	C.Y.	15.50	-500.00	-7,750.00
0283	01	7006	STRUCTURE EXCAVATION CLASS B INCL. HAUL	C.Y.	12.50	-7,000.00	-87,500.00
0331	01	7715	FORCE ACCOUNT TESC WATER MANAGEMENT	EST.	1,500,000.00	0.00	200,000.00
1017	01		CO#020 EXC, HAUL & DISP - LEVEL 1	TON	55.25	50,000.00	2,762,500.00
1018	01		CO#020 EXC, HAUL & DISP - LEVEL 2	TON	36.80	50,000.00	1,840,000.00
1019	01		CO#020 CLEAN SOIL INEFFICIENCY/HANDLING	C.Y.	3.50	186,750.00	653,625.00
1020	01		CO#020 NE POND STANDBY	L.S.	0.00	0.00	3,280.00
1021	01	7715	CO#020 SAMPLING AND TESTING FA	EST.	0.00	0.00	100,000.00

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