CONFORMED TO ADDENDUM 1

CITY OF KENT
KING COUNTY, WASHINGTON

KENT SPECIAL PROVISIONS FOR

Mill Creek Side Channel / Leber Homestead Property

Project Number: 08-3018

BIDS ACCEPTED UNTIL
April ~~5~~ 7, 2016
10 A.M.

BID OPENING IMMEDIATELY FOLLOWING

DELIVER TO
CITY OF KENT, CITY HALL
220 4th Avenue S., Kent, WA 98032-5895

TIMOTHY J. LAPORTE, P.E.
PUBLIC WORKS DIRECTOR

KENT
WASHINGTON

CITY OF KENT
KING COUNTY, WASHINGTON

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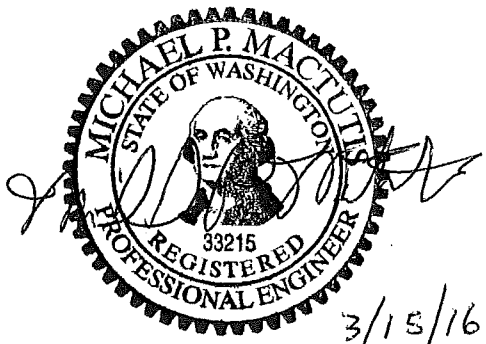

3/15/16

KENT
WASHINGTON

INVITATION TO BID

Notice is hereby given that the City of Kent, Washington, will receive sealed bids at the City Clerk's office through, **April 5, 2016** up to **10 a.m.** as shown on the clock on the east wall of the City Clerk's Office on the first floor of City Hall, 220 4th Avenue South, Kent, Washington. All bids must be properly marked and sealed in accordance with this "Invitation to Bid." Bids must be delivered and received at the City Clerk's office by the above-stated time, regardless of delivery method, including U.S. Mail. All bids will be opened and read publicly aloud immediately following **10 a.m.** for the City of Kent project named as follows:

Mill Creek Side Channel / Leber Homestead Property
Project Number: 08-3018

This phased project will create 64,000 SF of floodplain wetland tributary to Mill Creek and the Green River to increase rearing and flood refuge habitat for juvenile salmonids. The project will excavate 88,000 cubic yards (CY) of earthen material, stockpiling 8,300 CY of soil on-site while exporting and disposing of 79,700 CY. The project will also include: 1) Importing and incorporation of two inches of compost into the top 10 inches of finished soils in preparation for planting (by others); 2) Importing and constructing 43 large wood structures; 3) Construction of a 700 foot long by 15' wide quarry-spall maintenance road to access the channel bottom; 4) Construction of 300 linear feet of 2-rail wooden split-rail fencing along S. 262nd Ave.; and 5) Maintenance and repair of S. 262nd Ave.

The top 12 inches of soil on the southern parcel on the project site contains arsenic levels in excess of the Washington State Department of Ecology (Ecology) action level (20 mg/kg). The project includes mixing the top 12 inches of soil on this southern parcel with approximately 36 inches of clean soil from lower depths (or the northern parcel topsoil) to reduce arsenic levels down below the Ecology action level. A total of 8,000 CY of contaminated soil is present on-site. The contractor will utilize the mixed material on-site or dispose of it off-site. Verification testing by the City is required prior to disposal or on-site use to confirm that soil arsenic levels are below 20 mg/kg.

The Engineer's estimate for this project is approximately $2.0 - $2.25 million Bid documents may be obtained by contacting City of Kent Engineering Department, Nancy Yoshitake at 253-856-5508. For technical questions, please call Matt Knox at 253-856-5551.

The City hereby invites all Contractors to a non-mandatory, pre-bid meeting that will be conducted at the City of Kent Centennial Center located at 400 W. Gowe, Kent, WA on March 31, 2016; the meeting will be held in Centennial North and South which is located on the first floor across from the elevators and will begin at 9:00 am. Meeting notes and any addendum resulting from the meeting will be distributed to Contractors on the City's plan holders list for this project.

Bids must be clearly marked "Bid" with the name of the project on the outside of the envelope, addressed to the City Clerk, 220 4th Avenue South, Kent, WA 98032-5895. Only sealed bids will be accepted. No facsimiles or electronic submittals will be considered.

Each bid shall be in accordance with the plans and specifications and other contract documents now on file in the office of the City Engineer, City of Kent, Washington. Paper copies of the plans and Kent Special Provisions may be purchased at a **non-refundable cost of $50.00** for each set. **Plans and specifications can also be downloaded at no charge at www.kentwa.gov/procurement.** Copies of the WSDOT Standard Specifications are available for perusal only.

SCHEDULE I A: CONTAMINATED SOIL REMEDIATION

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
1000A	1-09.7(2) KSP	1 LUMP SUM	Mobilization	$ Per LS	$
1010A	2-14.5 KSP	33,000 B CU YDS	Excavation, Mix and Stockpile Contaminated Soil	$ Per BCY	$
1015A	2-14.5 KSP	24,700 ~~CU YDS~~ ***B CU YDS***	Haul Offsite and Dispose of Mixed Soil	$ Per ~~CY~~ ***BCY***	$
1017A	2-13.5 KSP	8,300 CU YDS	Fill Construction of Berms A & B	$ Per CY	$

Sub Total ***$***_____

9.5% WA State Sales Tax ***$***_____

Schedule I A Total $_____

SCHEDULE I B – EARTHWORK AND STREETS

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
1040B	2-10.5 KSP	55,000 B CU YDS	Excavation and Haul of Habitat Area	$ Per BCY	$
1045B	2-10.5 KSP	1 FORCE ACCOUNT	Habitat Grading *Common price to all bidders	$5,000.00* Per FA	$5,000.00
1050B	8-02.5 KSP	2,000 CU YDS	Compost, Including Site Preparation	$ Per ~~SY~~ ***CY***	$
~~7040~~ ***1055B***	2-07.5 ~~WSDOT~~ ***KSP***	~~100~~ ***200*** M gal	***Water*** ~~Watering – Dust Control~~	$ Per M gal	$
1080B	8-15.5 KSP	1 LUMP SUM	Maintenance Access Road	$ Per LS	$
1090B	8-01.5 WSDOT	350 SQ YDS	Stabilized Construction Entrance	$ Per SY	$
1097B	5-04.5 KSP	~~420~~ ***500*** TONS	HMA for Full Width Overlay Class ½", PG 64-22	$ Per TON	$
1098B	5-04.5 KSP	1 FORCE ACCOUNT	Road Maintenance *Common price to all bidders	$15,000.00* Per FA	$15,000.00
1100B	8-12.5 KSP	300 LN FT	Install New Wooden Split-Rail Fencing	$ Per LF	$
~~1320B~~	~~8-30.5 KSP~~	~~1 EACH~~	~~Project Sign~~	~~$ Per EA~~	~~$~~

wrench if applicable) to the City Maintenance Shops for reading. If the Contractor requires another hydrant meter and permit at the time a meter is returned to the City Maintenance Shops, he shall request a meter and one shall be provided. An additional meter deposit will not be required. The Contractors initial hydrant meter deposit shall be transferred to the new meter issued.

DIVISION 2 IS SUPPLEMENTED BY ADDING THE FOLLOWING NEW SECTION:

2-10 EXCAVATION

2-10.1 Description

"Excavation and Haul of Habitat Area" shall include full compensation for all excavation and rough grading shown on the plans and haul and disposal of material to an approved off-site location (see KSP 1-04.9). This pay item shall include over excavation of approximately 2" to allow for placement of compost amended topsoil across all newly exposed slopes and channel bottom.

Note to Bidders: The quantity set forth in the bid schedule for this item represents material that does not require mixing in order to be removed from the site or placed and compacted on site.

"Habitat Grading" shall include smoothing and final ground shaping as directed by the Engineer. Finished grade will have minor slope deviations to increase habitat variability especially near the toe of slopes. The Contractor shall notify the Engineer electronically or in writing 1 week before Habitat Grading is to occur, and again the day before Habitat Grading is to occur. No Habitat Grading shall occur without the Engineer or their representative on site.

2-10.4 Measurement

All quantities in this section, with the exception of Habitat Grading, shall be measured by either bank cubic yard or cubic yard. Habitat Grading shall be paid by Force Account and measured on a time and equipment basis. Should the contractor dispute the quantity of any category of earthwork for this project, the contractor shall notify the Engineer in writing, submitting evidence in the form of a construction survey or photogrammetric survey with measurement for the proposed adjustment. The Engineer will determine the amount of the adjustment, if any. Only deviations in quantity in excess of 5% will be paid.

Note to Bidders: City survey staff has performed a full topographic survey prior to construction and will perform another at the end of construction. Pre-construction and final surface/CADD files shall be made available to the Contractor at the Contractor's request. The quantity difference between the pre-construction and post-construction survey, minus the quantity measured for "Haul Offsite and Dispose of Mixed Soil" (as will be determined by mid-construction survey), will determine the pay quantity for the pay item "Excavation and Haul of

Habitat Area". Fill construction quantity shall be removed from final topographic measurement solely for the purposes of quantifying "Excavation and Haul of Habitat Area".

2-10.5 Payment

"Excavation and Haul of Habitat Area"
"Habitat Grading"
Each of the above items shall include all costs to accomplish the work. Items as described in Section 2-10. Payment for "Excavation and Haul of Habitat Area" shall be the unit contract price per bank cubic yard of material. Payment for "Habitat Grading" shall be by Force Account.

2-12 CONSTRUCTION GEOSYNTHETIC

SECTION 2-12.2 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

2-12.2 Materials

Non-woven geotextile fabric shall meet the material requirements of Table 3 in Section 9-33 of the WSDOT Standard Specifications for high survivability, separation and soil stabilization, and underground drainage for each geotextile use as specified on the plans or in the Kent Special Provisions.

SECTION 2-12.3 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

2-12.3 Construction Requirements

The Contractor shall take all necessary precautions to not tear or damage the fabric during installation. The fabric shall be laid down by hand. Folds or creases in the fabric shall be pulled flat. The fabric sides and ends shall be anchored or weighted sufficiently to prevent slouching. Joints or seams shall be overlapped a minimum of two (2) feet.

DIVISION 2 IS SUPPLEMENTED BY ADDING THE FOLLOWING NEW SECTION:

2-13 FILL CONSTRUCTION OF BERMS A & B:

2-13.1 Description

This work shall consist of constructing one or more layers of fill using on-site borrow at the locations shown on the plans and in conformity with the lines, grades, depths, and typical cross sections shown on the plans.

At the time of the pre-construction conference, the Contractor shall submit a staging and sequencing plan for construction of this project.

2-13.2 Materials

Materials will consist of suitable on-site borrow sourced from channel excavation.

Note to Bidders: Suitable on-site borrow for this project is defined as "Excavation, Mix, & Stockpile Contaminated Soil". Arsenic contaminated soils underneath the berm fill on the contaminated parcel must be mixed to below Ecology action levels.

2-13.3 Construction Requirements

On-site borrow for fill construction shall be uniformly spread to the depth, width, and cross-sections shown on the plans. A maximum lift thickness of 12" is allowed. Fill shall be constructed to a dry density of 85% - 90% as established by ASTM D-1557. Prior to placing the first lift of fill, the area below the proposed fill shall be scarified to a depth of 12". The first lift shall be mixed into the scarified ruts to provide for a stable base to place fill on.

2-13.4 Measurement

On site borrow for fill construction shall be measured by the cubic yard of compacted material. Variations from quantities due to shrink/swell or differences in compaction densities shall not constitute additional measurement or payment; this quantity variation, if any, shall be removed from the site and disposed of properly at no cost to the Contracting Agency.

2-13.5 Payment

The unit contract price per cubic yard for "Fill Construction of Berms A & B" constitutes complete compensation for furnishing all labor, materials, tools, supplies, and equipment necessary to haul, place and compact, the on-site borrow as shown on the plans and described in these specifications.

DIVISION 2-14 IS SUPPLEMENTED BY ADDING THE FOLLOWING NEW SECTION:

2-14 CONTAMINATED SOIL MIXING AND DISPOSITION

2-14.1 (A) Description

The surface soil on the southern parcel (parcel #0200000127) is contaminated with arsenic above State cleanup levels to a depth of at least 1 foot below grade. The known concentrations and depths of the arsenic are shown on Figure 1 and in Table 1. The sample locations are shown on Figure 1. It is the intent of the project to lower the arsenic concentration to less than 20 milligrams of arsenic (As) per kilogram of soil (mg/kg) by mixing the soil from the lower depths and/or from the northern parcel. This section includes specifications for mixing of contaminated soil that is present within the work area.

The Contractor shall perform the Work in this Section at the general direction of the Engineer, in accordance with the applicable local, state, and federal statutes, regulations, standards, and Chapter 70.105D Revised Code of Washington (RCW) and Washington Administrative Code (WAC) Chapter 173-340, Washington Dangerous Waste rules in WAC 173-303, Washington Department of Labor and Industries (L&I) rules in WAC Chapter 296, including WAC 296-843, and 296-155, and the accepted Work Plan and Site-Specific Health and Safety Plan (HASP).

Workers that may come into contact with the contaminated soil shall have initial 40-hour training and associated annual 8-hour refreshers on Hazardous Waste Operations and Emergency Response (HAZWOPER) and be under medical surveillance per WAC 296-843-210. At least one worker must also have a HAZWOPER Supervisor training certificate. The Supervisor must be on site during all activities associated with contaminated soil, until the confirmation test results indicate the arsenic concentrations are acceptable. The Contractor must assign a qualified person to be the site safety and health officer. The HAZWOPER Supervisor may fulfill this role. The Supervisor shall have the authority and responsibility to: 1) establish means and methods and evaluate associated hazards of their contracted work, and 2) ensure that they and their subcontractors establish, implement and enforce engineering and administrative controls and personal protective equipment and safe procedures sufficient to control the hazards of their work; See Appendix A for guidance on preparation of a site-specific HASP.

The contractor shall provide all necessary labor, equipment, material to complete the scope of work under this section prior to any other earthwork. Work shall be performed in a safe manner consistent with applicable L&I rules and with environmental rules from the Washington State Department of Ecology, and as applicable rules enforced by the U.S. Army Corps of Engineers, the Washington Department of Fish and Wildlife, and the U.S. Department of Transportation (U.S. DOT). The Contractor shall provide for the safety of site personnel, City personnel, personnel representing third party stakeholders, and the public for the duration of the Contract.

2-14.1 (B) Scope of Work

Work includes excavation and mixing of the upper 1-foot of the site soil over the southern parcel with three (3) feet of site soil from lower levels or from the north parcel to achieve a 1:3 mix ratio. The estimated in-place volume of the contaminated soil is 8,000 bank cubic yards (BCY). Up to 8,300 BCY of the mixed soil (at less than 20 mg/kg soil) will be used to construct the onsite berms, as shown on the drawings, and additional over-excavation quantified as "Excavation and haul of habitat area" (as defined in KSP 2-10) may be proposed to dispose of the remaining mixed soil on the construction site. Any material disposed of in over-excavated locations shall be placed and compacted in accordance with KSP section 2-13 and only with the approval of the Engineer. Alternatively, some or all of the mixed soil

can be transported offsite in accordance with U.S. DOT rules for an approved end use consistent with Washington Department of Ecology rules. The approved end uses may be disposal in a demolition debris landfill or for site development for commercial and/or industrial properties. The mixed soil may not be used for residential development or for agricultural uses. It is up to the Contractor to verify the acceptance of this material by the end user, and to perform any additional soil testing and verification necessary by the end user beyond the confirmation sampling mentioned below.

The City will collect and analyze confirmation samples after mixing, to verify that arsenic concentrations are acceptable. The analytical test results will be provided to the contractor. Allow up to 5 business days to receive the test results. Additional soil mixing will be required if the first test result indicates that arsenic concentrations exceed 20 mg/kg.

2-14.2 Submittals

Describe in your proposal, the proposed source of the soil to be used for mixing (from below the contaminated soil horizon and/or from the north parcel), method of mixing, schedule, and the proposed end use for the portion shipped offsite. If offsite disposal is proposed, written verification of acceptance of this material by the end user will be provided to the City for approval.

Prepare and submit a work plan for Engineer's review at least 2 weeks prior to mobilization. The Work Plan shall describe in detail, the sequence of work, method of soil mixing and procedures, schedule of activities, the final approved disposition of the offsite soil at approved facility(ies) for Engineer's review and acceptance prior to mobilization. No adjustments for time or cost/compensation will be made for any re-submittals. The Work Plan shall include, at a minimum:

1. Schedule of activities.
2. Methods and procedures of excavation, mixing, and stockpiling.
3. Equipment to be used.
4. Contaminated and or mixed soil staging and storing procedures, and proposed locations.

Prepare and submit a Site-Specific Health and Safety Plan (HASP), which includes the hazard analysis of the proposed work procedures and associated controls and safe work practices, dust control measures, decontamination methods and remedial action waste management procedure, route to a nearby hospital or medical facility, required worker training and certifications, safety data sheets for materials brought on site by the contractor, heavy equipment inspection and underground utility preservation procedures, and other elements required for a HASP to comply with WAC 296-843. Elements and procedures may be in the HASP, or to eliminate duplication may reference other existing documents which shall be available on site during the project. Provide an inspection copy of all referenced documents and certifications of personnel that will work on the site that are not included in the HASP when submitting the HASP for review by

the Engineer. Dust control measures required to meet nuisance dust criteria will be sufficient to control worker exposure to arsenic from the site soil. Conservatively, the standard shall be no visible dust sustained for more than 2 minutes. Equipment decontamination may be conducted by dry means; the standard shall be no visible soil on the equipment.

Submit closeout documentation to the Engineer as it becomes available including, but not limited to, surveys, logs, weight tickets, and waste profiles.

2-14.3 Construction Requirements

2-14.3 (A) Soil Mixing

The surface soil on the southern parcel to the depth of 12 inches shall be mixed with soil from the deeper zone or soil from the north parcel at a ratio of 1 part contaminated soil to 3 parts uncontaminated soil (1:3). The soil shall be thoroughly mixed mechanically either by multiple passes of a bulldozer, disc, ripper, or similar equipment or by mechanical mixers. Conduct mixing test sections at three locations on site prior to initiating site-side mixing operation. Each section shall be at least 500 square feet area. The Engineer will evaluate the mixing procedure and work with the contractor to alter the mixing procedure if needed. Engineer will collect confirmation samples for testing. Allow 5 business days to receive the analytical results for the test sections.

After approval of the test sections, the Contractor shall proceed with site-wide mixing operation, following the same approved mixing methodology. Homogenize the soil mixture to the extent practical. The mixing ratio may be altered, based on the analytical test results. Mixing of additional soil (higher ratio) will be required, if the concentrations are found to be higher than 20 mg/kg. Mix additional soil, if required, following the same established mixing procedure.

2-14.3 (B) Soil Stockpiling

Stockpile the mixed soil in windrows for sampling and future shipment. Engineer will collect confirmation samples from the stockpiles. Allow up to 5 business days for the determination of the analytical test results. Do not add more soil to a stockpile that was sampled. If a sample fails, mix additional soil from depth or from the north parcel to that segment represented by the sample.

2-14.3 (C) Transportation and Disposal

Dispose of the mixed soil that passes analytical testing, as determined by the Engineer. Offsite disposal shall be at a demolition debris landfill or at commercial and/or industrial developments, as approved by the Engineer. Provide a copy of the landfill waste profile or acceptance letter from the receiving facility to the Engineer.

2-14.4 Measurement

Measurement for "Excavation, Mix and Stockpile Contaminated Soil" shall be per bank cubic yard (BCY) of soil excavated, mixed, and shipped offsite or used for onsite berm construction. "Haul Offsite and Dispose of Mixed Soil" shall be measured by cubic yards (CY). The quantities shall be determined by land surveying before and after the work is completed – see section 2-10.2 for more detail.

2-14.5 Payment

Payment for "Excavation, Mix and Stockpile Contaminated Soil" shall be per bank cubic yard (BCY) and "Haul Offsite and Dispose of Mixed Soil" shall be per ***bank*** cubic yards (~~CY~~ ***BCY***) and constitute all costs necessary to accomplish the work detailed in 2-14 above and Appendix A below. Note that verification testing of soils to determine whether soils are below the Ecology action level (and suitable for off-site disposal or on-site fill) will be accomplished by others, and will require 5 days turnaround time.

GRAVEL PATH

RR TRACKS

RR ROW

ASPHALT ROAD

DO NOT DISTURB OVERHEAD ELECTRIC POLE OR GUY ANCHORS.

APN: 0220041019
OWNER: METRO PARKS

MEAN HIGHER HIGH WATER (±EL. 6.52')

MHHW

WILTON WATERWAY

PUGET SOUND

BLOCK 131 TACOMA TIDELANDS

EXCAVATE & DISPOSE UPPER 1.0' OF SOIL AND THEN MIX TO 3' BELOW EG WITHIN GRID CELL 1.

LEAD CONTAMINATION IN EXCEEDANCE OF DANGEROUS WASTE CRITERIA. EXCAVATE CELL 6A TO A DEPTH OF 1.0' BELOW EG PRIOR TO BEGINNING ANY OTHER EARTHWORK (±10 TONS). SEE NOTE 4.

PROPERTY BOUNDARY (TYP.)

Soil Confirmation Sampling Plan Legend:

- Dangerous Waste Sample (5)
- Contaminated Soil Removal Sample (3)
- Contaminated Soil Mixing Sample (27)
- UST Sample (1)

NOTES:

1. ALL DEBRIS AND WASTE SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL LOCATION.
2. SITE SOILS CONTAIN ARSENIC, CADMIUM, AND LEAD IN EXCEEDENCE OF WDOE MODEL TOXICS CONTROL ACT METHOD A CRITERIA . SEE SPECIAL TECHNICAL SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR HEALTH AND SAFETY OF ALL PERSONNEL AND VISITORS TO THE PROJECT SITE.
3. SEE SECTION 2-05 OF THE SPECIAL TECHNICAL SPECIFICATIONS.
4. REMOVAL OF LEAD CONTAMINATION IN EXCEEDENCE OF DANGEROUS WASTE CRITERIA SHALL NOT BE COMPLETED WITHIN 24 HOURS OF PRECIPITATION OR CHANCE OF PRECIPITATION AS INDICATED BY A LOCAL WEATHER FORECAST. THIS REQUIREMENT SHALL NOT APPLY IF STORMWATER RUNOFF FROM THE EXCAVATION AREA IS COLLECTED FOR TREATMENT OR OFFSITE DISPOSAL.

0 10 20
SCALE IN FEET

LEGEND

- EXCAVATE AND DISPOSE UPPER 1.0' OF SOIL (±190 CY/360 TONS)
- MIX UPPER 3.0' OF SOIL (±1,172 CY)
- MIX UPPER 1.5' OF SOIL (±420 CY)
- LEACHABLE LEAD DETECTED (DANGEROUS WASTE D008) (±5 CY/10 TONS)
- DEMOLISHED STRUCTURE FOOTPRINT
- (1) COMPLIANCE SAMPLING GRID CELL (±50'X50')

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants
400 North 34th Street, Suite 100
P.O. Box 300303
Seattle, Washington 98103
(206) 632-8020 FAX: (206) 695-6777

NO.	REVISIONS	DATE

PROJNO 21-1-12526-200
DATE NOVEMBER 2016
DESIGNEDBY CJK | DRAWNBY CJK
CHECKEDBYDRC | APPROVEDBY

KAY'S HOUSE RESTORATION PROJECT

CONTAMINATED SOILS SAMPLING PLAN

TITLOW PARK, TACOMA, WA

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

Filename: I:\WP\21-11\2526 Kays House Restoration\CAD\04 Sheets\8_CONTAMINATED SOILS REMOVAL PLAN.dwg Date: 09-27-2016 Login: CJK

EXHIBIT 1

NW 1/4 SEC. 25, T 22 N, R 4 E

20 0 20 40
SCALE: 1" = 40'

BERM A
BERM B
BERM C
MILL CREEK
GREEN RIVER
S 262nd ST
SR 167
1
A
9+00
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
20+00
21+00
22+00
23+00
24+00
25+00
30+00
31+00
32+00
33+00
34+00
35+00
36+00
37+00
38+00

MICHAEL PAUL MACTUTIS
STATE OF WASHINGTON
13215
REGISTERED
PROFESSIONAL ENGINEER

G:\environmental\08-3018 leber property\dwg\08-3018 10 GRADING PLAN.dwg 12/23/2015 8:23 AM

NO.	REVISION	BY	DATE

DESIGNED: ____ CHECKED: ____ KENT PROJECT NO. 08-3018
DRAWN: ____ PROJECT ENGR: ____ CONST. MGMT. REVIEW
APPROVED: ____ CITY ENGINEER DATE
SCALE: HORIZ: ____ VERT: ____
BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

City of Kent
Public Works Department
Engineering Division

GRADING PLAN

MILL CREEK SIDE CHANNEL (LEBER)

SHEET 10 OF 17
FILE NO. 08-3018 10 GRADING PLAN.dwg

NW 1/4 SEC. 25, T 22 N, R 4 E

20 0 20 40
SCALE: 1" = 40'

PLANTING LEGEND

- LIVE STAKE AREA
- LIVE STAKE + COTTONWOOD/ALDER/ASH
- LIVE STAKE + SHRUB AREA
- LIVE STAKE + COTTONWOOD/ALDER/ASH + SHRUB
- SLOPE TREE/SHRUB

GENERAL NOTES

1. SEE SHEET 16 FOR PLANTING SCHEDULE, AND SHEET 17 FOR PLANTING DETAILS

MILL CREEK

S 262nd ST

GREEN RIVER

SR 167

EP

MICHAEL PAUL MACTUTIS
STATE OF WASHINGTON
13215
REGISTERED
PROFESSIONAL ENGINEER

G:\environmental\08-3018 leber property\dwg\08-3018 15 PLANTING PLAN.dwg 12/23/2015 8:23 AM

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SCALE: HORIZ: 1"=40' VERT: ____
BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

KENT WASHINGTON
City of Kent
Public Works Department
Engineering Division

PLANTING PLAN

MILL CREEK SIDE CHANNEL (LEBER)

SHEET 15 OF 17
FILE NO. 08-3018 15 PLANTING PLAN.dwg

CONFORMED TO ADDENDUM 1

CITY OF KENT
KING COUNTY, WASHINGTON

KENT SPECIAL PROVISIONS FOR

Mill Creek Side Channel / Leber Homestead Property

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KENT
WASHINGTON

TAB INDEX

CITY OF KENT
KING COUNTY, WASHINGTON

KENT SPECIAL PROVISIONS FOR

Mill Creek Side Channel / Leber Homestead Property

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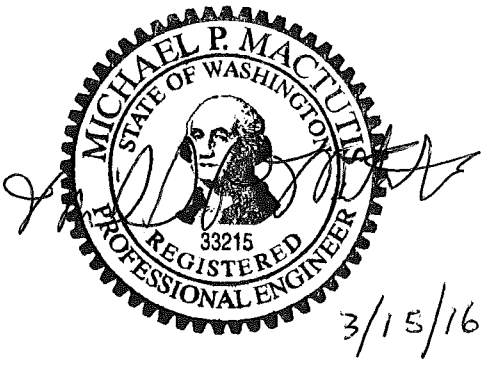

KENT
WASHINGTON

ORDER OF CONTENTS

Environmental Permits

Soils Information

Meeting Notes and Attendance List

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Mill Creek Side Channel / Leber Homestead Property
Project Number: 08-3018

This phased project will create 64,000 SF of floodplain wetland tributary to Mill Creek and the Green River to increase rearing and flood refuge habitat for juvenile salmonids. The project will excavate 88,000 cubic yards (CY) of earthen material, stockpiling 8,300 CY of soil on-site while exporting and disposing of 79,700 CY. The project will also include: 1) Importing and incorporation of two inches of compost into the top 10 inches of finished soils in preparation for planting (by others); 2) Importing and constructing 43 large wood structures; 3) Construction of a 700 foot long by 15' wide quarry-spall maintenance road to access the channel bottom; 4) Construction of 300 linear feet of 2-rail wooden split-rail fencing along S. 262nd Ave.; and 5) Maintenance and repair of S. 262nd Ave.

The top 12 inches of soil on the southern parcel on the project site contains arsenic levels in excess of the Washington State Department of Ecology (Ecology) action level (20 mg/kg). The project includes mixing the top 12 inches of soil on this southern parcel with approximately 36 inches of clean soil from lower depths (or the northern parcel topsoil) to reduce arsenic levels down below the Ecology action level. A total of 8,000 CY of contaminated soil is present on-site. The contractor will utilize the mixed material on-site or dispose of it off-site. Verification testing by the City is required prior to disposal or on-site use to confirm that soil arsenic levels are below 20 mg/kg.

The Engineer's estimate for this project is approximately $2.0 - $2.25 million Bid documents may be obtained by contacting City of Kent Engineering Department, Nancy Yoshitake at 253-856-5508. For technical questions, please call Matt Knox at 253-856-5551.

The City hereby invites all Contractors to a non-mandatory, pre-bid meeting that will be conducted at the City of Kent Centennial Center located at 400 W. Gowe, Kent, WA on March 31, 2016; the meeting will be held in Centennial North and South which is located on the first floor across from the elevators and will begin at 9:00 am. Meeting notes and any addendum resulting from the meeting will be distributed to Contractors on the City's plan holders list for this project.

Bids must be clearly marked "Bid" with the name of the project on the outside of the envelope, addressed to the City Clerk, 220 4th Avenue South, Kent, WA 98032-5895. Only sealed bids will be accepted. No facsimiles or electronic submittals will be considered.

Each bid shall be in accordance with the plans and specifications and other contract documents now on file in the office of the City Engineer, City of Kent, Washington. Paper copies of the plans and Kent Special Provisions may be purchased at a **non-refundable cost of $50.00** for each set. **Plans and specifications can also be downloaded at no charge at www.kentwa.gov/procurement.** Copies of the WSDOT Standard Specifications are available for perusal only.

A cashier's check, cash, or surety bond in the amount of 5% of the bid must be included with the bid.

The City of Kent reserves the right to reject any and all bids on any or all schedules or alternates or to waive any informalities in the bidding and shall determine which bid or bidders is the most responsive, satisfactory and responsible bidder and shall be the sole judge thereof.

No plea of mistake in the bid shall be available to the bidder for the recovery of his/her deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

Bidders must submit with their initial bid a signed statement as to whether they have previously performed work subject to the President's Executive Order No. 11246.

No bidder may withdraw his/her bid for a period of sixty (60) days after the day of bid opening.

Dated this 16th day of March, 2016.

BY: Sue Hanson
for Ronald F. Moore, City Clerk

Published in Daily Journal of Commerce on March 22 and 29, 2016

PROPOSAL

To the City Clerk
City Hall
Kent, Washington 98032

The undersigned hereby certifies that _____ has examined the job site and construction details of the work as outlined on the plans and described in the specifications for the project named **Mill Creek Side Channel / Leber Homestead Property/Project Number: 08-3018** for the City of Kent, Washington, and has read and thoroughly understands the plans and specifications and contract governing the work embraced in this improvement and the method by which payment will be made for that work and hereby proposes to undertake and complete the work embraced in this improvement in accordance with the bid and contract, and at the following schedule of rates and prices:

NOTE TO BIDDERS:

1) All bid items are described in the Kent Special Provisions (KSP) or the Standard Specifications (WSDOT). Reference the Section No. listed in this proposal, where the bid item is described.

2) Proposal items are numbered in sequence but are non-continuous.

3) Unit prices for all items, all extensions, and total amount of bid must be shown.

4) Should bid items with identically worded bid item descriptions, marked with asterisk (*), appear in more than one schedule of the proposal, the bidder must bid the same unit price on corresponding items for each schedule. If the Contractor enters different unit prices on these items, the City will unilaterally revise the bid amounts to the lowest unit price on each corresponding item and recalculate the Contractor's total bid amount. The corrected total bid amount will be used by the City for award purposes and fix the amount of the contract bond.

EXAMPLE

SCHEDULE I - STREET

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
1006	2-03.5 WSDOT	100 CU YDS	Roadway Excavation, Including Haul	$14.00 Per CY	$1,400.00

Any bids not filled out properly may be considered non-responsive.

SCHEDULE I A: CONTAMINATED SOIL REMEDIATION

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
1000A	1-09.7(2) KSP	1 LUMP SUM	Mobilization	$ Per LS	$
1010A	2-14.5 KSP	33,000 B CU YDS	Excavation, Mix and Stockpile Contaminated Soil	$ Per BCY	$
1015A	2-14.5 KSP	24,700 ~~CU YDS~~ ***B CU YDS***	Haul Offsite and Dispose of Mixed Soil	$ Per ~~CY~~ ***BCY***	$
1017A	2-13.5 KSP	8,300 CU YDS	Fill Construction of Berms A & B	$ Per CY	$

Sub Total ***$*** _____

9.5% WA State Sales Tax ***$*** _____

Schedule I A Total $_____

SCHEDULE I B – EARTHWORK AND STREETS

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
1040B	2-10.5 KSP	55,000 B CU YDS	Excavation and Haul of Habitat Area	$ Per BCY	$
1045B	2-10.5 KSP	1 FORCE ACCOUNT	Habitat Grading *Common price to all bidders	$5,000.00* Per FA	$5,000.00
1050B	8-02.5 KSP	2,000 CU YDS	Compost, Including Site Preparation	$ Per ~~SY~~ ***CY***	$
~~7040~~ ***1055B***	2-07.5 ~~WSDOT~~ ***KSP***	~~100~~ ***200*** M gal	***Water*** ~~Watering – Dust Control~~	$ Per M gal	$
1080B	8-15.5 KSP	1 LUMP SUM	Maintenance Access Road	$ Per LS	$
1090B	8-01.5 WSDOT	350 SQ YDS	Stabilized Construction Entrance	$ Per SY	$
1097B	5-04.5 KSP	~~420~~ ***500*** TONS	HMA for Full Width Overlay Class ½", PG 64-22	$ Per TON	$
1098B	5-04.5 KSP	1 FORCE ACCOUNT	Road Maintenance *Common price to all bidders	$15,000.00* Per FA	$15,000.00
1100B	8-12.5 KSP	300 LN FT	Install New Wooden Split-Rail Fencing	$ Per LF	$
~~1320B~~	~~8-30.5 KSP~~	~~1 EACH~~	~~Project Sign~~	~~$ Per EA~~	~~$~~

SCHEDULE I B – EARTHWORK AND STREETS

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT

Sub Total ***$_____***

9.5% WA State Sales Tax ***$_____***

Schedule I B Total $_____

SCHEDULE IV: WATER MANAGEMENT

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
4000	7-00.5 KSP	1 LUMP SUM	Temporary Creek Exclusion	$ Per LS	$
4010	7-00.5 KSP	1 FORCE ACCOUNT	Dewatering *Common price to all bidders	$10,000.00* Per FA	$10,000.00

Sub Total ***$*** _____

9.5% WA State Sales Tax ***$*** _____

Schedule IV Total $_____

SCHEDULE V: TRAFFIC CONTROL

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
5005	1-10.5 KSP	1,000 HOURS	Traffic Control Labor *Common price to all bidders	$39.84* Per HR	$39,840.00
5010	1-10.5 WSDOT	96 SQ FT	Construction Signs Class A	$ Per SF	$
5015	1-10.5 KSP	20 HOURS	Traffic Control Supervisor	$ Per HR	$
5020	1-10.5 KSP	1 LUMP SUM	Temporary Traffic Control Devices	$ Per LS	$

Sub Total ***$*** _____

9.5% WA State Sales Tax ***$*** _____

Schedule V Total $_____

SCHEDULE VII: TEMPORARY EROSION AND SEDIMENTATION CONTROL

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
7000	8-01.5 KSP	9 ACRES	Seeding, Fertilizing, and Mulching	$ Per AC	$
7005	8-01.5 KSP	2,300 LN FT	Filter Fabric Fence	$ Per LF	$
7008	8-12.5 KSP	800 LN FT	High Visibility Construction Fence	$ Per LF	$
7010	8-01.5 KSP	2,000 LN FT	Straw Wattles	$ Per LF	$
7020	8-01.5 KSP	1,500 SQ YDS	Straw Mulch	$ Per SY	$
7025	8-01.5 KSP	1000 SQ YDS	Clear Plastic Covering	$ Per SY	$
7030	8-01.5 KSP	5 DAYS	ESC Lead	$ Per DAY	$
7035	8-01.5 WSDOT	~~100~~ ***600*** HOURS	Street Cleaning	$ Per HR	$
~~7040~~	~~2-07.5 WSDOT~~	~~100 M gal~~	~~Watering – Dust Control~~	~~$ Per M gal~~	~~$~~
7050	8-01.5 KSP	14,500 SQ YDS	Erosion Control Blanket	$ Per SY	$

SCHEDULE VII: TEMPORARY EROSION AND SEDIMENTATION CONTROL

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
7055	8-01.5 WSDOT	1 FORCE ACCOUNT	Temporary Erosion/Water Pollution Control *Common price to all bidders	$15,000.00* Per FA	$15,000.00

All bid items in schedule VII, shall be implemented ONLY per direction given by the City's representatives.

Sub Total ***$_____***

9.5% WA State Sales Tax ***$_____***

Schedule VII Total $_____

SCHEDULE VIII: RESTORATION

ITEM NO.	SECTION NO.	APPROX. QUANTITY	ITEM	UNIT PRICE	TOTAL AMOUNT
8140	8-26.5 KSP	27 EACH	Wall Engineered Log Jam	$ Per EA	$
8145	8-26.5 KSP	10 EACH	Habitat Engineered Log Jam	$ Per EA	$
8150	8-26.5 KSP	4 EACH	Single Log with Rootwad Along Bank	$ Per EA	$
8155	8-26.5 KSP	2 EACH	Streambed Grade Control Log Cluster	$ Per EA	$

Sub Total ***$*** _____

9.5% WA State Sales Tax ***$*** _____

Schedule VIII Total $_____

BID SUMMARY

Schedule I A	_____
Schedule I B	_____
Schedule IV	_____
Schedule V	_____
Schedule VII	_____
Schedule VIII	_____
TOTAL BID AMOUNT	_____

CONTRACT

THIS AGREEMENT, is entered into between the CITY OF KENT, a Washington municipal corporation ("City"), and _____, organized under the laws of the State of _____, located and doing business at _____ ("Contractor").

WITNESS:

In consideration of the terms and conditions contained in this Agreement and in the project documents, plans, and specifications all of which are a part of this Agreement, the parties agree as follows:

1. The Contractor shall do all work and furnish all tools, materials, and equipment for: **Mill Creek Side Channel / Leber Homestead Property/Project Number: 08-3018** in accordance with and as described in the Contract and shall perform any alterations in or additions to the work provided under the Contract and every part thereof. The Contract shall include all project specifications, provisions, and plans; the City's general and special conditions; the 2016 Standard Specifications for Road, Bridge, and Municipal Construction, as prepared by the Washington State Department of Transportation and the Washington State Chapter of the American Public Works Association, including all published amendments issued by those organizations, if applicable ("Standard Specifications"); the City's bid documents; and the Contractor's response to the City's bid. The Contractor is responsible to obtain copies of the 2014 WSDOT Standard Specifications including the latest amendments issued by WSDOT as of the date of bid opening. Unless otherwise directed by the City, work shall start within ten (10) days after the City issues its Notice to Proceed and be completed within **one hundred eighty (180) working days**.

   The Contractor shall provide and bear all expense of all equipment, work, and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing all the work provided for in the Contract, except where the specifications allocate that responsibility to the City.

2. The City hereby promises and agrees with the Contractor to employ, and does employ, the Contractor to provide the materials and to do and cause to be done the above described work and to complete and finish the same according to the Contract and the terms and conditions herein contained and hereby contracts to pay for the same according to the Contract and the schedule of unit or itemized prices provided by Contractor in its response to the City's bid, at the time and in the manner and upon the conditions provided for in the Contract.

3. The Contractor for itself, and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all covenants herein contained upon the part of the Contractor.

4. It is further provided that no liability shall attach to the City by reason of entering into this contract, except as expressly provided herein.

5. Contractor shall defend, indemnify, and hold the City, its officers, officials, employees, agents, volunteers and assigns harmless from any and all claims, injuries, damages, losses or suits, including all legal costs and attorney fees, arising out of or in connection with the performance of this contract, except for injuries and damages caused by the sole negligence of the City.

The City's inspection or acceptance of any of Contractor's work when completed shall not be grounds to avoid any of these covenants of indemnification.

Should a court of competent jurisdiction determine that this contract is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the City, its officers, officials, employees, agents and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence.

IT IS FURTHER SPECIFICALLY AND EXPRESSLY UNDERSTOOD THAT THE INDEMNIFICATION PROVIDED HEREIN CONSTITUTES THE CONTRACTOR'S WAIVER OF IMMUNITY UNDER INDUSTRIAL INSURANCE, TITLE 51 RCW, SOLELY FOR THE PURPOSES OF THIS INDEMNIFICATION. THE PARTIES FURTHER ACKNOWLEDGE THAT THEY HAVE MUTUALLY NEGOTIATED THIS WAIVER.

The following indemnification language is required by Washington State Recreation and Conservation Office, one of the primary funders of this project.

The ~~sponsor~~ contractor shall defend, indemnify, and hold the State and its officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the actual or alleged acts, errors, omissions or negligence of, or the breach of any obligation under this Agreement by, the ~~sponsor~~ contractor or the ~~sponsor's~~ contractor's agents, employees, ~~contractors,~~ subcontractors, or vendors, of any tier, or any other persons for whom the ~~sponsor~~ contractor may be legally liable.

Provided that nothing herein shall require a ~~sponsor~~ contractor to defend or indemnify the State against and hold harmless the State from claims, demands or suits based solely upon the negligence of the State, its employees and agents for whom the State is vicariously liable.

Provided further that if the claims or suits are caused by or result from the concurrent negligence of (a) the ~~sponsor~~ contractor or the ~~sponsor's~~ contractor's agents, employees, ~~contractors,~~ subcontractors or vendors, of any tier, or any other persons for whom the ~~Sponsor~~ Contractor is legally liable, and (b) the State its employees and agents for whom it is vicariously liable, the indemnity obligation shall be valid and enforceable only to the extent of the ~~sponsor's~~ contractor's negligence or the negligence of the ~~sponsor's~~ contractor's agents, employees, ~~contractors,~~ subcontractors or vendors, of any tier, or any other persons for whom the ~~sponsor~~ contractor may be legally liable.

This provision shall be included in any Agreement between ~~sponsor~~ contractor and any ~~contactors,~~ subcontractors and vendors of any tier.

The ~~sponsor~~ contractor shall also defend, indemnify, and hold the State and its officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions by the ~~sponsor~~ contractor or the ~~sponsor's~~ contractor's agents, employees, ~~contractors,~~ subcontractors or vendors, of any tier, or any other persons for whom the ~~sponsor~~ contractor may be legally liable, in performance of the Work under this Agreement or arising out of any use in connection with the Agreement of methods, processes, designs, information or other items furnished or communicated to State, its agents, officers and employees pursuant to the Agreement; provided that this indemnity shall not apply to any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions resulting from State's, its agents', officers' and employees' failure to comply with specific written instructions regarding use provided to State, it agents, officers and employees by the ~~sponsor~~ contractor, its agents, employees, ~~contractors,~~ subcontractors or vendors, of any tier, or any other persons for whom the ~~sponsor~~ contractor may be legally liable.

The ~~sponsor~~ contractor specifically assumes potential liability for actions brought by the ~~sponsor's~~ contractor's own employees or its agents against the State and, solely for the purpose of the indemnification and defense, the ~~sponsor~~ contractor specifically waives any immunity under the state industrial insurance law, RWC Title 51.

The Washington State Recreation and Conservation Office (RCO) is included within the term State, as are all other agencies, departments, boards, or other entities of state government.

The provisions of this section shall survive the expiration or termination of this contract.

6. Contractor agrees, upon the City's written demand, to make all books and records available to the City for inspection, review, photocopying, and audit in the event of a contract related dispute, claim, modification, or other contract related action at reasonable times (not to exceed three (3) business days) and at places designated by the City.

7. The Contractor shall procure and maintain, during the term of construction and throughout the specified term of maintenance, insurance of the types and in the amounts described in Exhibit A attached and incorporated by this reference.

8. Contractor is responsible for locating any underground utilities affected by the work and is deemed to be an excavator for purposes of RCW Ch. 19.122, as amended. Contractor shall be responsible for compliance with RCW Ch. 19.122,

including utilization of the “one call” locator service before commencing any excavation activities.

9. Contractor shall fully cover any and all loads of loose construction materials, including but not limited to sand, dirt, gravel, asphalt, excavated materials, construction debris, etc, to protect said materials from air exposure and to minimize emission of airborne particles to the ambient air environment within the City.

CITY OF KENT

BY:_____
SUZETTE COOKE, MAYOR

DATE:_____

ATTEST:

_____
BRENDA JACOBER, CITY CLERK

APPROVED AS TO FORM:

_____
KENT LAW DEPARTMENT

CONTRACTOR

BY:_____

PRINT NAME:_____

TITLE:_____

DATE:_____

KENT SPECIAL PROVISIONS
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KENT SPECIAL PROVISIONS
TABLE OF CONTENTS

KENT SPECIAL PROVISIONS

The Kent Special Provisions ("Kent Special Provisions" or "KSP") modify and supersede any conflicting provisions of the 2016 Standard Specifications for Road, Bridge, and Municipal Construction, as prepared by the Washington State Department of Transportation and the Washington State Chapter of the American Public Works Association, including all published amendments issued by those organizations ("WSDOT Standard Specifications"). Otherwise all provisions of the WSDOT Standard Specifications shall apply. All references in the WSDOT Standard Specifications to the State of Washington, its various departments or directors, or to the contracting agency, shall be revised appropriately to include the City and/or City Engineer, except for references to State statutes or regulations. Finally, all of these documents are a part of this contract.

DIVISION 1 – GENERAL REQUIREMENTS

1-01 DEFINITIONS AND TERMS

SECTION 1-01.1 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

1-01.1 General

When these Kent Special Provisions make reference to a "Section," for example, "in accordance with Section 1-01", the reference is to the WSDOT Standard Specifications as modified by these Kent Special Provisions.

SECTION 1-01.2(2) IS SUPPLEMENTED BY ADDING THE FOLLOWING:

1-01.2(2) Items of Work and Units of Measurement

EA	Each
Eq. Adj.	Equitable Adjustment
FA	Force Account
HR	Hour
M GAL	Thousand gallons
NIC	Not In Contract
SF	Square Feet

SECTION 1-01.3, "CONTRACT" DEFINTION, IS DELETED AND REPLACED WITH THE FOLLOWING:

1-01.3 Definitions

The written agreement between the Contracting Agency and the Contractor. It describes, among other things:

1. What work will be done, and by when;
2. Who provides labor and materials; and
3. How Contractors will be paid.

DIVISION 2 – EARTHWORK

2-07 WATERING

SECTION 2-07.1 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

2-07.1 Description

The City's Environmental Engineering Department will pay the City's Water Department for the water used. The pay item for "Water" shall be considered full compensation for all tools, materials, and efforts necessary to load, haul, and distribute the water for purposes of Dust Control.

All water shall be drawn from a City of Kent owned hydrant. The exact hydrant to be used will be determined by the City at the pre-construction meeting, however it will likely be the hydrant located on S. 262nd Street.

SECTION 2-07.3 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

2-07.3 Construction Requirements

The Contractor shall use the minimum amount of water required to control dust per the Puget Sound Air Pollution Control Authority's requirements or at the direction of the Engineer.

SECTION 2-07.4 IS DELETED AND REPLACED WITH THE FOLLOWING:

2-07.4 Measurement

The Contractor shall obtain a hydrant meter and permit from the City Maintenance Shop located at 5821 South 240th Street (253) 856-5600 to measure the quantities of water used. Hydrant wrenches are also available at the City Maintenance Shops at the Contractors option. No additional deposit is required for the hydrant wrench. The City shall provide all water that comes from the City water system.

Note to Bidders: Please see definition of "M gal" in KSP Section 1-01.2(2).

Prior to issuance of the hydrant meter (and wrench if applicable) and permit, the Contractor shall make a hydrant meter deposit to the City Customer Service Division located on the first floor of the Centennial Center at 400 West Gowe Street (253) 856-5200. The said deposit is refundable provided the Contractor returns the hydrant meter (and wrench if applicable) to the City Maintenance Shops undamaged.

The Contractor shall provide his own gate valve on the hose side of the hydrant meter with which to control water flow.

The hydrant meter permit duration is two (2) months. At the end of the permit duration, the Contractor shall deliver the hydrant meter (and

wrench if applicable) to the City Maintenance Shops for reading. If the Contractor requires another hydrant meter and permit at the time a meter is returned to the City Maintenance Shops, he shall request a meter and one shall be provided. An additional meter deposit will not be required. The Contractors initial hydrant meter deposit shall be transferred to the new meter issued.

DIVISION 2 IS SUPPLEMENTED BY ADDING THE FOLLOWING NEW SECTION:

2-10 EXCAVATION

2-10.1 Description

"Excavation and Haul of Habitat Area" shall include full compensation for all excavation and rough grading shown on the plans and haul and disposal of material to an approved off-site location (see KSP 1-04.9). This pay item shall include over excavation of approximately 2" to allow for placement of compost amended topsoil across all newly exposed slopes and channel bottom.

Note to Bidders: The quantity set forth in the bid schedule for this item represents material that does not require mixing in order to be removed from the site or placed and compacted on site.

"Habitat Grading" shall include smoothing and final ground shaping as directed by the Engineer. Finished grade will have minor slope deviations to increase habitat variability especially near the toe of slopes. The Contractor shall notify the Engineer electronically or in writing 1 week before Habitat Grading is to occur, and again the day before Habitat Grading is to occur. No Habitat Grading shall occur without the Engineer or their representative on site.

2-10.4 Measurement

All quantities in this section, with the exception of Habitat Grading, shall be measured by either bank cubic yard or cubic yard. Habitat Grading shall be paid by Force Account and measured on a time and equipment basis. Should the contractor dispute the quantity of any category of earthwork for this project, the contractor shall notify the Engineer in writing, submitting evidence in the form of a construction survey or photogrammetric survey with measurement for the proposed adjustment. The Engineer will determine the amount of the adjustment, if any. Only deviations in quantity in excess of 5% will be paid.

Note to Bidders: City survey staff has performed a full topographic survey prior to construction and will perform another at the end of construction. Pre-construction and final surface/CADD files shall be made available to the Contractor at the Contractor's request. The quantity difference between the pre-construction and post-construction survey, minus the quantity measured for "Haul Offsite and Dispose of Mixed Soil" (as will be determined by mid-construction survey), will determine the pay quantity for the pay item "Excavation and Haul of

Habitat Area". Fill construction quantity shall be removed from final topographic measurement solely for the purposes of quantifying "Excavation and Haul of Habitat Area".

2-10.5 Payment

"Excavation and Haul of Habitat Area"
"Habitat Grading"
Each of the above items shall include all costs to accomplish the work. Items as described in Section 2-10. Payment for "Excavation and Haul of Habitat Area" shall be the unit contract price per bank cubic yard of material. Payment for "Habitat Grading" shall be by Force Account.

2-12 CONSTRUCTION GEOSYNTHETIC

SECTION 2-12.2 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

2-12.2 Materials

Non-woven geotextile fabric shall meet the material requirements of Table 3 in Section 9-33 of the WSDOT Standard Specifications for high survivability, separation and soil stabilization, and underground drainage for each geotextile use as specified on the plans or in the Kent Special Provisions.

SECTION 2-12.3 IS SUPPLEMENTED BY ADDING THE FOLLOWING:

2-12.3 Construction Requirements

The Contractor shall take all necessary precautions to not tear or damage the fabric during installation. The fabric shall be laid down by hand. Folds or creases in the fabric shall be pulled flat. The fabric sides and ends shall be anchored or weighted sufficiently to prevent slouching. Joints or seams shall be overlapped a minimum of two (2) feet.

DIVISION 2 IS SUPPLEMENTED BY ADDING THE FOLLOWING NEW SECTION:

2-13 FILL CONSTRUCTION OF BERMS A & B:

2-13.1 Description

This work shall consist of constructing one or more layers of fill using on-site borrow at the locations shown on the plans and in conformity with the lines, grades, depths, and typical cross sections shown on the plans.

At the time of the pre-construction conference, the Contractor shall submit a staging and sequencing plan for construction of this project.

2-13.2 Materials

Materials will consist of suitable on-site borrow sourced from channel excavation.

Note to Bidders: Suitable on-site borrow for this project is defined as "Excavation, Mix, & Stockpile Contaminated Soil". Arsenic contaminated soils underneath the berm fill on the contaminated parcel must be mixed to below Ecology action levels.

2-13.3 Construction Requirements

On-site borrow for fill construction shall be uniformly spread to the depth, width, and cross-sections shown on the plans. A maximum lift thickness of 12" is allowed. Fill shall be constructed to a dry density of 85% - 90% as established by ASTM D-1557. Prior to placing the first lift of fill, the area below the proposed fill shall be scarified to a depth of 12". The first lift shall be mixed into the scarified ruts to provide for a stable base to place fill on.

2-13.4 Measurement

On site borrow for fill construction shall be measured by the cubic yard of compacted material. Variations from quantities due to shrink/swell or differences in compaction densities shall not constitute additional measurement or payment; this quantity variation, if any, shall be removed from the site and disposed of properly at no cost to the Contracting Agency.

2-13.5 Payment

The unit contract price per cubic yard for "Fill Construction of Berms A & B" constitutes complete compensation for furnishing all labor, materials, tools, supplies, and equipment necessary to haul, place and compact, the on-site borrow as shown on the plans and described in these specifications.

DIVISION 2-14 IS SUPPLEMENTED BY ADDING THE FOLLOWING NEW SECTION:

2-14 CONTAMINATED SOIL MIXING AND DISPOSITION

2-14.1 (A) Description

The surface soil on the southern parcel (parcel #0200000127) is contaminated with arsenic above State cleanup levels to a depth of at least 1 foot below grade. The known concentrations and depths of the arsenic are shown on Figure 1 and in Table 1. The sample locations are shown on Figure 1. It is the intent of the project to lower the arsenic concentration to less than 20 milligrams of arsenic (As) per kilogram of soil (mg/kg) by mixing the soil from the lower depths and/or from the northern parcel. This section includes specifications for mixing of contaminated soil that is present within the work area.

The Contractor shall perform the Work in this Section at the general direction of the Engineer, in accordance with the applicable local, state, and federal statutes, regulations, standards, and Chapter 70.105D Revised Code of Washington (RCW) and Washington Administrative Code (WAC) Chapter 173-340, Washington Dangerous Waste rules in WAC 173-303, Washington Department of Labor and Industries (L&I) rules in WAC Chapter 296, including WAC 296-843, and 296-155, and the accepted Work Plan and Site-Specific Health and Safety Plan (HASP).

Workers that may come into contact with the contaminated soil shall have initial 40-hour training and associated annual 8-hour refreshers on Hazardous Waste Operations and Emergency Response (HAZWOPER) and be under medical surveillance per WAC 296-843-210. At least one worker must also have a HAZWOPER Supervisor training certificate. The Supervisor must be on site during all activities associated with contaminated soil, until the confirmation test results indicate the arsenic concentrations are acceptable. The Contractor must assign a qualified person to be the site safety and health officer. The HAZWOPER Supervisor may fulfill this role. The Supervisor shall have the authority and responsibility to: 1) establish means and methods and evaluate associated hazards of their contracted work, and 2) ensure that they and their subcontractors establish, implement and enforce engineering and administrative controls and personal protective equipment and safe procedures sufficient to control the hazards of their work; See Appendix A for guidance on preparation of a site-specific HASP.

The contractor shall provide all necessary labor, equipment, material to complete the scope of work under this section prior to any other earthwork. Work shall be performed in a safe manner consistent with applicable L&I rules and with environmental rules from the Washington State Department of Ecology, and as applicable rules enforced by the U.S. Army Corps of Engineers, the Washington Department of Fish and Wildlife, and the U.S. Department of Transportation (U.S. DOT). The Contractor shall provide for the safety of site personnel, City personnel, personnel representing third party stakeholders, and the public for the duration of the Contract.

2-14.1 (B) Scope of Work

Work includes excavation and mixing of the upper 1-foot of the site soil over the southern parcel with three (3) feet of site soil from lower levels or from the north parcel to achieve a 1:3 mix ratio. The estimated in-place volume of the contaminated soil is 8,000 bank cubic yards (BCY). Up to 8,300 BCY of the mixed soil (at less than 20 mg/kg soil) will be used to construct the onsite berms, as shown on the drawings, and additional over-excavation quantified as "Excavation and haul of habitat area" (as defined in KSP 2-10) may be proposed to dispose of the remaining mixed soil on the construction site. Any material disposed of in over-excavated locations shall be placed and compacted in accordance with KSP section 2-13 and only with the approval of the Engineer. Alternatively, some or all of the mixed soil

can be transported offsite in accordance with U.S. DOT rules for an approved end use consistent with Washington Department of Ecology rules. The approved end uses may be disposal in a demolition debris landfill or for site development for commercial and/or industrial properties. The mixed soil may not be used for residential development or for agricultural uses. It is up to the Contractor to verify the acceptance of this material by the end user, and to perform any additional soil testing and verification necessary by the end user beyond the confirmation sampling mentioned below.

The City will collect and analyze confirmation samples after mixing, to verify that arsenic concentrations are acceptable. The analytical test results will be provided to the contractor. Allow up to 5 business days to receive the test results. Additional soil mixing will be required if the first test result indicates that arsenic concentrations exceed 20 mg/kg.

2-14.2 Submittals

Describe in your proposal, the proposed source of the soil to be used for mixing (from below the contaminated soil horizon and/or from the north parcel), method of mixing, schedule, and the proposed end use for the portion shipped offsite. If offsite disposal is proposed, written verification of acceptance of this material by the end user will be provided to the City for approval.

Prepare and submit a work plan for Engineer's review at least 2 weeks prior to mobilization. The Work Plan shall describe in detail, the sequence of work, method of soil mixing and procedures, schedule of activities, the final approved disposition of the offsite soil at approved facility(ies) for Engineer's review and acceptance prior to mobilization. No adjustments for time or cost/compensation will be made for any re-submittals. The Work Plan shall include, at a minimum:

1. Schedule of activities.
2. Methods and procedures of excavation, mixing, and stockpiling.
3. Equipment to be used.
4. Contaminated and or mixed soil staging and storing procedures, and proposed locations.

Prepare and submit a Site-Specific Health and Safety Plan (HASP), which includes the hazard analysis of the proposed work procedures and associated controls and safe work practices, dust control measures, decontamination methods and remedial action waste management procedure, route to a nearby hospital or medical facility, required worker training and certifications, safety data sheets for materials brought on site by the contractor, heavy equipment inspection and underground utility preservation procedures, and other elements required for a HASP to comply with WAC 296-843. Elements and procedures may be in the HASP, or to eliminate duplication may reference other existing documents which shall be available on site during the project. Provide an inspection copy of all referenced documents and certifications of personnel that will work on the site that are not included in the HASP when submitting the HASP for review by

the Engineer. Dust control measures required to meet nuisance dust criteria will be sufficient to control worker exposure to arsenic from the site soil. Conservatively, the standard shall be no visible dust sustained for more than 2 minutes. Equipment decontamination may be conducted by dry means; the standard shall be no visible soil on the equipment.

Submit closeout documentation to the Engineer as it becomes available including, but not limited to, surveys, logs, weight tickets, and waste profiles.

2-14.3 Construction Requirements

2-14.3 (A) Soil Mixing

The surface soil on the southern parcel to the depth of 12 inches shall be mixed with soil from the deeper zone or soil from the north parcel at a ratio of 1 part contaminated soil to 3 parts uncontaminated soil (1:3). The soil shall be thoroughly mixed mechanically either by multiple passes of a bulldozer, disc, ripper, or similar equipment or by mechanical mixers. Conduct mixing test sections at three locations on site prior to initiating site-side mixing operation. Each section shall be at least 500 square feet area. The Engineer will evaluate the mixing procedure and work with the contractor to alter the mixing procedure if needed. Engineer will collect confirmation samples for testing. Allow 5 business days to receive the analytical results for the test sections.

After approval of the test sections, the Contractor shall proceed with site-wide mixing operation, following the same approved mixing methodology. Homogenize the soil mixture to the extent practical. The mixing ratio may be altered, based on the analytical test results. Mixing of additional soil (higher ratio) will be required, if the concentrations are found to be higher than 20 mg/kg. Mix additional soil, if required, following the same established mixing procedure.

2-14.3 (B) Soil Stockpiling

Stockpile the mixed soil in windrows for sampling and future shipment. Engineer will collect confirmation samples from the stockpiles. Allow up to 5 business days for the determination of the analytical test results. Do not add more soil to a stockpile that was sampled. If a sample fails, mix additional soil from depth or from the north parcel to that segment represented by the sample.

2-14.3 (C) Transportation and Disposal

Dispose of the mixed soil that passes analytical testing, as determined by the Engineer. Offsite disposal shall be at a demolition debris landfill or at commercial and/or industrial developments, as approved by the Engineer. Provide a copy of the landfill waste profile or acceptance letter from the receiving facility to the Engineer.

2-14.4 Measurement

Measurement for "Excavation, Mix and Stockpile Contaminated Soil" shall be per bank cubic yard (BCY) of soil excavated, mixed, and shipped offsite or used for onsite berm construction. "Haul Offsite and Dispose of Mixed Soil" shall be measured by cubic yards (CY). The quantities shall be determined by land surveying before and after the work is completed – see section 2-10.2 for more detail.

2-14.5 Payment

Payment for "Excavation, Mix and Stockpile Contaminated Soil" shall be per bank cubic yard (BCY) and "Haul Offsite and Dispose of Mixed Soil" shall be per ***bank*** cubic yards (~~CY~~ ***BCY***) and constitute all costs necessary to accomplish the work detailed in 2-14 above and Appendix A below. Note that verification testing of soils to determine whether soils are below the Ecology action level (and suitable for off-site disposal or on-site fill) will be accomplished by others, and will require 5 days turnaround time.

amec foster wheeler

Memo

Sent via e-mail: mknox@kentwa.gov

To:	Mr. Matt Knox City of Kent Engineering Department	Project:	SE14161150
From:	Crystal Thimsen	cc:	Kathleen Goodman, Amec Foster Wheeler Koorus Tahghighi, Amec Foster Wheeler Project File
Tel:	(206) 342-1760		
Fax:	(206) 342-1761		
Date:	April 11, 2015		

Subject: **Leber Property Soil Mixing Oversight Proposal**
Mill Creek Confluence Restoration Project
Kent, Washington

INTRODUCTION

This proposal memorandum has been prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), for the City of Kent Engineering Department (City) to provide a brief description and cost estimate associated with inspection and sampling of the proposed soil mixing on the Leber Property to obtain arsenic concentrations below the screening level of 20 milligrams per kilogram (mg/kg).

PROJECT BACKGROUND

The Mill Creek Confluence Restoration Project comprises 8.6 acres and two parcels (2522049023 and 0200000127) (Figure 1 attached). The property is located adjacent to 7040 South 262nd Street (Figure 1). This restoration project will create over 87,000 square feet (2 acres) of intermittently-inundated aquatic habitat (below the ordinary high water mark) adjacent to the Green River near the confluence of Mill Creek, in order to increase floodplain refuge habitat for Chinook and other salmonids, enhance riparian habitat, and increase floodplain storage and other floodplain functions.

Amec Foster Wheeler conducted soil testing on both parcels in July 2014 to determine if the soil had been contaminated by the historical operation of the ASARCO smelter plume. The investigation revealed arsenic at elevated concentrations above the cleanup level established by the Washington State Department of Ecology (Ecology) of 20 mg/kg on the south parcel (Ecology, 2012). An additional investigation and soil sampling was conducted in February 2016 to determine the arsenic concentrations with depth. Based on the results of the recent investigation, it was decided to mix the upper 1 foot of the site soil on the southern parcel with either deeper soil or soil from the north parcel at a ratio of 1 to 3, to lower the arsenic concentration to below 20 mg/kg (Amec Foster Wheeler, 2016). Amec Foster Wheeler prepared soil mixing specifications, which were included in the City's bid package. The selected contractor is scheduled to begin the soil mixing operation this summer.

SCOPE OF WORK

We have divided the work into five tasks to complete the scope of work. These tasks are:

- Project Plans Preparation;

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- Field Inspection and Sampling;
- Confirmation Sampling;
- Final Report Preparation; and
- Project Management.

The specific work performed under each task and associated assumptions are described below.

Task 1 – Project Plans Preparation

This task includes review of the selected contractor's work plan and site-specific health and safety plan (HASP) to determine their content and proposed methodology. We will then prepare a work plan and project-specific HASP for Amec Foster Wheeler's involvement with the soil mixing phase of the project. The work plan will consist mainly of a sampling and analysis plan, detailing sampling strategy and procedures. The work plan will be prepared based on the selected contractor's soil mixing procedure and methodology.

We will submit our review comments on the contractor submittals and our draft project plans electronically to the City of Kent for review and comment. We have assumed that reviewing contractor submittals as well as developing Amec Foster Wheeler plans will require two rounds of review and revisions.

Task 2 – Field Inspection and Sampling

This task includes the field activities associated with inspection of the soil mixing operation and collection of soil samples for verification. A senior engineer and the field inspector from Amec Foster Wheeler will be present on the first day to establish the mixing protocols during mixing test sections and to collect verification samples. Subsequently, the inspector will be on site full time while the soil mixing operation is ongoing. The contractor's proposed mixing operation and duration is currently unknown. Therefore, we have assumed that operation will be completed within eight weeks, and that the contractor will work a standard 40-hour work week. Depending on the level of resources allocated to the soil mixing operation by the contractor, it is possible that an additional field inspector may be needed, but the project duration will be accordingly shortened, such that there would be minimal to no cost impact to our assumed eight-week duration.

The field inspector will attend the morning tailgate safety meeting and visually observe and verify the correct soil mixing procedure is followed. He/she will collect verification samples while on site. The field inspector will document the activities in a field book describing the accomplishments for the day and the samples collected. The project progress will also be documented with photographs. A summary weekly report along with select photographs will be submitted to the City once a week. We have budgeted a total of nine hours per day for the field inspector to allow inspection, sampling, and project documentation, daily. We have assumed that contractor management, soil shipment, and new berm construction oversight will be conducted by the City.

We have assumed there will be a weekly project progress meeting of one hour duration, which will be attended by our senior engineer and, if the timing allows, by our field inspector. In the meeting the

project progress will be summarized and any issues that may come up will be discussed and resolved.

The soil mixing phase of the project is expected to generate approximately 38,000 bank cubic yards (BCY) of mixed soil. We have assumed that one sample per 250 BCY will be collected for verification. This ratio will require collection of at least 152 samples. Each sample will be composited from five discrete samples. Due to the possibility of some samples exceeding the cleanup level, we propose an allowance of an additional 48 samples for re-testing. Given the volume of soil represented by each sample, we propose to subdivide a section that may fail testing into four subsections, or approximately 52 BCY, and resampling. This approach may result in certain subsections to pass the testing, thus minimizing the amount of soil re-mixing by the contractor. Any re-mixed soil will be re-sampled every 250 BCY.

All samples will be picked up by Friedman & Bruya, Inc., an analytical laboratory located in Seattle, Washington. We propose to conduct the analysis on a 24-hour turnaround basis, so that the contractor will know the results within 48 hours of sample collection. We believe the added cost of $20 per sample for fast turnaround will result in cost savings for the City. If the project status indicates that contractor operations will not be delayed by slower turnaround time, then the samples will not be rushed. The data received will be reviewed by our chemist for accuracy and validity, and tabulated.

Task 3 – Confirmation Sampling

This task may be considered an optional item, if Ecology requires sampling of the final subgrade to confirm the arsenic concentrations that remain will be below the screening level of 20 mg/kg. We have assumed that the City will discuss this topic with Ecology within the next two weeks and will arrive at a decision as to whether confirmation sampling of the subgrade will be required. If this task is required, then the proposed sampling locations and procedures will be discussed in the work plan. We have assumed that confirmation sampling will be conducted as the mixed soil is shipped off site, during the same eight weeks of soil mixing operation. Therefore, only an average of one additional hour per day has been included for the field inspector.

We have assumed that confirmation samples will be collected on a grid of approximately 100 feet square, resulting in a total of 21 samples. We have assumed that the project surveyor will establish the sample locations and mark them with a flag.

Task 4 – Final Report Preparation

After completion of the project, a draft summary report will be prepared, presenting the project activities and laboratory results. The draft report will be submitted to the City electronically for review and comment. A final report will be prepared which will incorporate any comments we receive. The final report will contain all the activity logs, photographs, and laboratory reports. Three hard copies of the final report, along with an electronic version, will be submitted to the City.

Task 5 – Project Management

This task includes the activities associated with administrative management of the project such as invoice preparation and budgetary reporting. Also included in this task are three meetings of about one hour duration each with our senior staff to discuss the overall progress and resolve any issues.

We have assumed that a meeting may be needed before, at mid-point, and at completion of the project.

COST OVERVIEW

We propose to complete the project on time and material basis. The estimated budget to complete the project is presented below per task:

Task 1 – Project Plans Preparation

Task 2 – Field Inspection and Sampling

Task 3 – Confirmation Sampling

Task 4 – Final Report Preparation

Task 5 – Project Management

Project Total

All work will be conducted on a time and materials basis in accordance with the detailed cost breakdown in the attached Table 1 and our standard agreement with the City of Kent. Work will be billed on actual costs based on the i own on Table 1. The estimated total cost to perform the soil mixing oversight for the site i lo work will be performed outside this scope of work without your verbal or written authorization.

We will minimize our effort to the extent possible to keep the cost down; furthermore, if the contractor completes the project in less than eight weeks, the cost will be reduced.

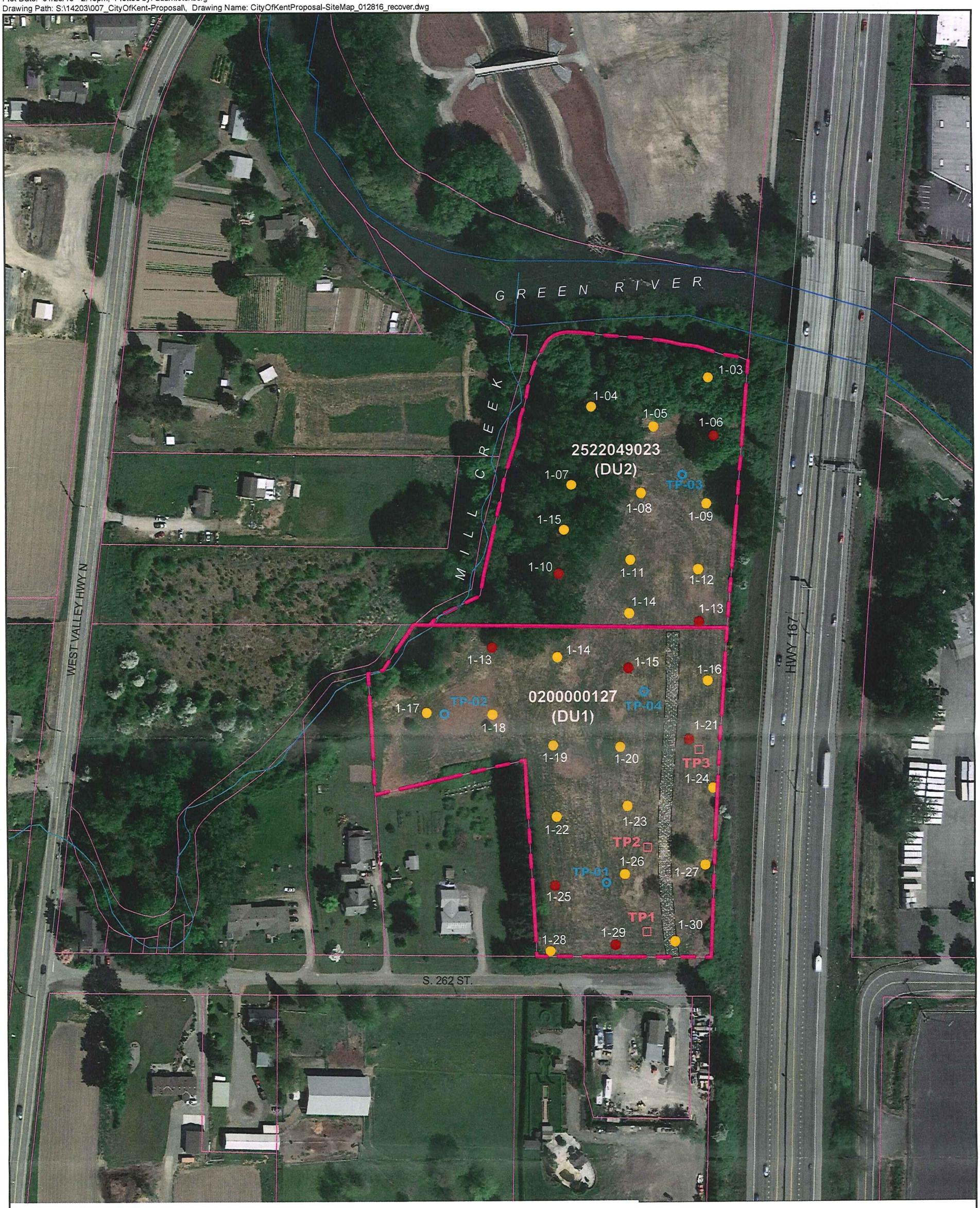
Attachments: Figure 1
Table 1

REFERENCES

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Leber Property Remedial Approach Results, Mill Creek Confluence Restoration Project, Kent, Washington, February.

Washington State Department of Ecology (Ecology), 2012, Tacoma Smelter Plume Model Remedies Guidance: Sampling and Cleanup of Arsenic and Lead Contaminated Soils, Publication Number 12-09-086-A, June.

Plot Date: 01/28/16 - 2:45pm, Plotted by: adam.stenberg
Drawing Path: S:\14203\007_CityOfKent-Proposal\, Drawing Name: CityOfKentProposal-SiteMap_012816_recover.dwg



EXPLANATION

- JANUARY 2016 TEST PIT LOCATION
- NEW ROAD (GRAVEL)
- PARCEL BOUNDARY

HISTORICAL SAMPLING LOCATIONS

- SAMPLE (0-6" DEPTH)
- SAMPLE (0-6" AND 6"-12" DEPTH)
- TP-01 2008 SOIL TEST PIT

N

0 75 150
APPROXIMATE SCALE IN FEET

amec foster wheeler

SITE MAP AND TEST PIT LOCATIONS
Leber Property
Mill Creek Confluence Restoration Project
Kent, Washington

By: APS	Date: 01/28/16	Project No. 14161150
Amec Foster Wheeler Environment & Infrastructure, Inc.		Figure 1

GRAVEL PATH

RR TRACKS

RR ROW

ASPHALT ROAD

DO NOT DISTURB OVERHEAD ELECTRIC POLE OR GUY ANCHORS.

APN: 0220041019
OWNER: METRO PARKS

MEAN HIGHER HIGH WATER (±EL. 6.52')

MHHW

WILTON WATERWAY

PUGET SOUND

BLOCK 131 TACOMA TIDELANDS

EXCAVATE & DISPOSE UPPER 1.0' OF SOIL AND THEN MIX TO 3' BELOW EG WITHIN GRID CELL 1.

LEAD CONTAMINATION IN EXCEEDANCE OF DANGEROUS WASTE CRITERIA. EXCAVATE CELL 6A TO A DEPTH OF 1.0' BELOW EG PRIOR TO BEGINNING ANY OTHER EARTHWORK (±10 TONS). SEE NOTE 4.

PROPERTY BOUNDARY (TYP.)

Soil Confirmation Sampling Plan Legend:

- Dangerous Waste Sample (5)
- Contaminated Soil Removal Sample (3)
- Contaminated Soil Mixing Sample (27)
- UST Sample (1)

NOTES:

1. ALL DEBRIS AND WASTE SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL LOCATION.
2. SITE SOILS CONTAIN ARSENIC, CADMIUM, AND LEAD IN EXCEEDENCE OF WDOE MODEL TOXICS CONTROL ACT METHOD A CRITERIA . SEE SPECIAL TECHNICAL SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR HEALTH AND SAFETY OF ALL PERSONNEL AND VISITORS TO THE PROJECT SITE.
3. SEE SECTION 2-05 OF THE SPECIAL TECHNICAL SPECIFICATIONS.
4. REMOVAL OF LEAD CONTAMINATION IN EXCEEDENCE OF DANGEROUS WASTE CRITERIA SHALL NOT BE COMPLETED WITHIN 24 HOURS OF PRECIPITATION OR CHANCE OF PRECIPITATION AS INDICATED BY A LOCAL WEATHER FORECAST. THIS REQUIREMENT SHALL NOT APPLY IF STORMWATER RUNOFF FROM THE EXCAVATION AREA IS COLLECTED FOR TREATMENT OR OFFSITE DISPOSAL.

0 10 20
SCALE IN FEET

LEGEND

- EXCAVATE AND DISPOSE UPPER 1.0' OF SOIL (±190 CY/360 TONS)
- MIX UPPER 3.0' OF SOIL (±1,172 CY)
- MIX UPPER 1.5' OF SOIL (±420 CY)
- LEACHABLE LEAD DETECTED (DANGEROUS WASTE D008) (±5 CY/10 TONS)
- DEMOLISHED STRUCTURE FOOTPRINT
- (1) COMPLIANCE SAMPLING GRID CELL (±50'X50')

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants
400 North 34th Street, Suite 100
P.O. Box 300303
Seattle, Washington 98103
(206) 632-8020 FAX: (206) 695-6777

NO.	REVISIONS	DATE

PROJNO 21-1-12526-200
DATE NOVEMBER 2016
DESIGNEDBY CJK | DRAWNBY CJK
CHECKEDBYDRC | APPROVEDBY

KAY'S HOUSE RESTORATION PROJECT

CONTAMINATED SOILS SAMPLING PLAN

TITLOW PARK, TACOMA, WA

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

Filename: I:\WP\21-11\2526 Kays House Restoration\CAD\04 Sheets\8_CONTAMINATED SOILS REMOVAL PLAN.dwg Date: 09-27-2016 Login: CJK

EXHIBIT 1

NW 1/4 SEC. 25, T 22 N, R 4 E

20 0 20 40
SCALE: 1" = 40'

BERM A
BERM B
BERM C
MILL CREEK
GREEN RIVER
S 262nd ST
SR 167
1
A
9+00
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
20+00
21+00
22+00
23+00
24+00
25+00
30+00
31+00
32+00
33+00
34+00
35+00
36+00
37+00
38+00

MICHAEL PAUL MACTUTIS
STATE OF WASHINGTON
13215
REGISTERED
PROFESSIONAL ENGINEER

G:\environmental\08-3018 leber property\dwg\08-3018 10 GRADING PLAN.dwg 12/23/2015 8:23 AM

NO.	REVISION	BY	DATE

DESIGNED: ____ CHECKED: ____ KENT PROJECT NO. 08-3018
DRAWN: ____ PROJECT ENGR: ____ CONST. MGMT. REVIEW
APPROVED: ____ CITY ENGINEER DATE
SCALE: HORIZ: ____ VERT: ____
BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

City of Kent
Public Works Department
Engineering Division

GRADING PLAN

MILL CREEK SIDE CHANNEL (LEBER)

SHEET 10 OF 17
FILE NO. 08-3018 10 GRADING PLAN.dwg

NW 1/4 SEC. 25, T 22 N, R 4 E

20 0 20 40
SCALE: 1" = 40'

PLANTING LEGEND

- LIVE STAKE AREA
- LIVE STAKE + COTTONWOOD/ALDER/ASH
- LIVE STAKE + SHRUB AREA
- LIVE STAKE + COTTONWOOD/ALDER/ASH + SHRUB
- SLOPE TREE/SHRUB

GENERAL NOTES

1. SEE SHEET 16 FOR PLANTING SCHEDULE, AND SHEET 17 FOR PLANTING DETAILS

MILL CREEK

S 262nd ST

GREEN RIVER

SR 167

EP

MICHAEL PAUL MACTUTIS
STATE OF WASHINGTON
13215
REGISTERED
PROFESSIONAL ENGINEER

G:\environmental\08-3018 leber property\dwg\08-3018 15 PLANTING PLAN.dwg 12/23/2015 8:23 AM

NO.	REVISION	BY	DATE

DESIGNED: ____ CHECKED: ____ KENT PROJECT NO. ____
DRAWN: ____ PROJECT ENGR: ____ CONST. MGMT. REVIEW ____
APPROVED: ____ CITY ENGINEER DATE ____
SCALE: HORIZ: 1"=40' VERT: ____
BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

KENT WASHINGTON
City of Kent
Public Works Department
Engineering Division

PLANTING PLAN

MILL CREEK SIDE CHANNEL (LEBER)

SHEET 15 OF 17
FILE NO. 08-3018 15 PLANTING PLAN.dwg