

Project Conditions

Long Lake Substation Project

February 15, 2012

South Bremerton Long Lake Loop- Long Lake Substation
Project Conditions
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South Bremerton Long Lake Loop- Long Lake Substation

1.0 Project Scope and Description

- 1.1 Owner proposes to rebuild part of the Long Lake substation, an electric distribution substation in the Port Orchard area, to provide increased reliability to the customer base of south Kitsap County.
- 1.2 The Project shall be a general contract for the construction of these facilities in accordance with the Project Documents, including drawings, specifications, permits, maps, reports, logs, and other documents and attachments. This includes all labor, materials, tools, equipment and supervision necessary to complete the Work.
- 1.3 The Project consists of civil work required for replacing an existing circuit switcher with a breaker and installing a new breaker. This project will also consist of demolition of existing and construction of new foundations for the breakers, bus supports, and dead end towers,. The Project Scope is not limited to the provided summary listed below and may be augmented by subsequent addenda. The scope of this Project consists of:
 - 1.3.1 Grading- cut and fill
 - 1.3.2 Drainage installation
 - 1.3.3 Install SPCC curb and containment
 - 1.3.4 Foundation construction
 - 1.3.5 Final surfacing-yard rock
- 1.4 Project Location:
Long Lake Substation
4890 SE Sedgwick Rd
Port Orchard, WA 98367

2.0 Project Conditions

The following conditions are project specific conditions and shall not limit the generality of the provisions of the Contract For Construction.

2.1 **PC-1 Contract Order of Precedence**

- 2.1.1 In interpreting the terms and conditions of the Contract and the various Contract Documents incorporated by this reference and modifying the terms and conditions, the following order of precedence, which is presented in descending order, shall be followed:
 - 2.1.1.1 Change Orders with higher numbers having precedence over lower numbers
 - 2.1.1.2 Permit Conditions
 - 2.1.1.3 Project Description, Scope of Work and Project Conditions
 - 2.1.1.4 Project Drawings
 - 2.1.1.5 Engineering Specifications

- 2.1.1.6 Owner's Standard Specifications and Practices
- 2.1.1.7 The Contract for Construction and General Conditions
- 2.1.2 Unless otherwise stated all "day" or "days" are calendar days (Monday through Sunday).

2.2 PC-2 Project Representatives

2.2.1 Owner will be represented on this Project by the following individuals or their designee.

| Position | Name | Office # | Cell# |
|--------------------------|-----------------|--------------|--------------|
| Project Manager | Heather Brickey | 425-456-2848 | 425-647-4392 |
| Construction Manager | Tom Kerfonta | 425-456-2586 | 425-218-6392 |
| Construction Coordinator | Scott Robinson | | 425-350-1697 |
| Contract Administrator | Pete Anderson | 425-462-3920 | 206-604-3941 |
| Substation Engineer | Rob Stewart | 425-456-2714 | 425-213-2836 |

- 2.2.2 Contractor shall assign a Representative (Project Manager) for this Project to act as a single point of contact with Owner's management, and to coordinate, manage and oversee all aspects of Contractor's Work.
- 2.2.3 Contractor shall assign a General Foreman/Superintendent to manage and oversee Contractor's field operations, and to act as Contractor's representative on-site.
- 2.2.4 Contractor shall provide and identify a Certified Erosion and Sediment Control Lead (CESCL). The CESCL shall be responsible to ensure the correct placement and maintenance of all erosion control measures and repair any areas of erosion on the site as required by Owner, or by jurisdiction rules, regulations and permits.
- 2.2.5 Contractor shall provide dedicated Key Personnel (Project Manager, Foremen, General Foremen/Superintendents, and CESCL). It is expected that crews offered by Contractor and approved by Owner at the pre-construction meeting will not be changed prior to the start of construction.
- 2.2.6 Owner's Construction Manager shall be provided contact information (phone numbers and email addresses) of all Key Personnel and shall be fully informed of any changes in Key Personnel at least 72-hours in advance of initiating the changes.
- 2.2.7 Any changes in field Key Personnel (Superintendent, General Foreman, and CESCL) shall only be allowed with the approval of Owner's Construction Manager. Approval shall be given if Owner is satisfied that the transition has been conducted in a smooth and orderly fashion, the new crew possesses equivalent or superior skills, and there will be no delays in meeting Project schedule. Multiple changes in key personnel such as Foremen or the General Foremen/Superintendent will not be allowed.
- 2.2.8 Key Personnel, field crews and/or equipment or material, shall not be diverted from the Project to accomplish any other work for Owner or other clients without prior approval of Owner's Construction Manager or, if not available, Owner's Project Manager. Any such approval of reassignment of Contractor resources shall result in no adjustment to the Project cost or completion date; unless such adjustment is agreed to at the time resources are released from the Project. If approved, such

adjustments to the Project cost and/or schedule shall be documented by a Change Approval Record ("CAR") at the earliest practical opportunity.

2.3 PC-3 Meetings and Reports

- 2.3.1 There will be a pre-construction conference with Contractor's Project Manager, General Foreman/Superintendent and key subcontractors prior to commencing the Work. The date and time will be determined after Contract award.
- 2.3.2 Contractor shall conduct weekly Construction Coordination Meetings at the site or an agreeable location.
- 2.3.3 The purpose of these meetings shall be to review contract and design requirements, submitted and approved materials, the planned sequence of field activities, and potential safety hazards prior to the commencement of related work. The meetings shall include Owner's Construction Manager (and other Owner representatives as appropriate), Contractor's General Foreman/Superintendent, CESCL, safety personnel and appropriate subcontractors and material suppliers. Contractor is responsible for managing these meetings and providing meeting minutes within two business days for Owner's review.
- 2.3.4 Contractor's Project Manager shall submit a Weekly Status Report to Owner's Project Manager and Construction Manager. This report shall detail:
 - 2.3.4.1 Discuss Submittals and Requests For Information (RFI).
 - 2.3.4.2 Tasks completed since the prior report.
 - 2.3.4.3 Tasks planned to occur prior to the next scheduled report.
 - 2.3.4.4 A summary of any changes (CAR Log) or problems which occurred, and/or remain unresolved, since the prior report which may affect the Project scope or schedule.
 - 2.3.4.5 A safety report.
 - 2.3.4.6 A schedule of all Testing and Permit inspections.
 - 2.3.4.7 A correction log of all discrepancies.
 - 2.3.4.8 CESCL's Log
- 2.3.5 If Contractor's Weekly Status Report is not sufficient to effectively communicate the status of the Work, or to provide an adequate basis for management coordination of the Work, Owner may require additional Construction Coordination meetings.

2.4 PC-4 Schedule

- 2.4.1 Unless otherwise directed by Owner, Contractor shall commence the Work when scheduled and continue until completion of all the Work.
- 2.4.2 Without limiting the generality of Section 8 Construction Schedule; Progress Reports of the Contract For Construction, Contractor shall provide a detailed construction schedule, in either Primavera (preferred) or MS Project, to Owner's Project Manager. Contractor shall utilize the following milestones to develop its construction schedule to final inspection and punch list completion.
 - 2.4.2.1 Notice To Proceed (NTP)
 - 2.4.2.2 Mobilization

- 2.4.2.3 Contractor Permits submitted
- 2.4.2.4 Material pick-up
- 2.4.2.5 Major Equipment Delivery
- 2.4.2.6 Construction Start
- 2.4.2.7 Major Milestones (supplied by Contractor or Owner)
- 2.4.2.8 Construction Complete
- 2.4.2.9 Punch List complete
- 2.4.2.10 Accepted Work Sketches/Drawings
- 2.4.2.11 Project Closeout
- 2.4.3 Hours for operation shall be limited to 7:00 AM to 7:00 PM, Monday through Friday and 9:00 AM to 6:00 PM on Saturday. Sunday work shall not be allowed. Contractor shall comply with all jurisdiction requirements for construction work hour restrictions.
- 2.4.4 Parameter in which a schedule needs to be built around, includes the following:
 - 2.4.4.1 Outage Type: Continuous substation outage
 - 2.4.4.2 Transmission shoofly to bypass the substation will be in place April 1, 2012.
 - 2.4.4.3 Project Completion Date: 05/17/2012
- 2.4.5 Outage availability is subject to change due to system configuration and constraints.
- 2.4.6 Both Owner's Project Manager and Construction Manager shall be informed of all delays or changes in the schedule. Contractor shall provide, in writing, the reasons and a recovery plan.

2.5 ***PC-5 Safety and Quality Control Programs***

- 2.5.1 Contractor shall ensure that it has a Safety Program suitable for the type of work required for this Project. Contractor shall provide a copy of its Safety Program upon request by Owner. Owner will not accept any liability for the content of or Contractor's adherence to their Safety Program.
- 2.5.2 Contractor shall supply Owner with Project site specific safety plan to include, but not be limited to, identification of nearest emergency/urgent care facilities, and accident notification process. The plan must be approved by Owner's Construction Manager prior to work commencing. Report all recordable injuries to Owner's Construction Manager immediately.
 - 2.5.2.1 Contractor shall provide all personnel with proper protective clothing which includes but shall not be limited to safety vests, hard hats, eye protection and hearing protection and shall enforce their use at all times.
 - 2.5.2.2 Contractor shall furnish the Material Safety Data Sheets (MSDS) for all chemicals or solvents that will be used or supplied during the course of the Work which shall include but not be limited to paint thinners, cleaning fluids and lubricants.
- 2.5.3 Contractor shall furnish all temporary fire protection for the Work in accordance with requirements of WAC 296-24. Contractor shall furnish all the necessary fire extinguishing equipment and safety equipment during construction.

2.5.4 Contractor shall ensure that it has a Quality Control Program suitable for the type of work required for this Project. Contractor shall provide a copy of its Quality Control Program upon request by Owner. Owner will not accept any liability for the content of or Contractor's adherence to their Quality Control Program.

2.6 **PC-6 Qualified Electrical Workers**

2.6.1 All work on electrical equipment, bus, cable, conduit, conductor, grounding and controls shall be performed by qualified electrical workers.

2.7 **PC-7 Quality and Compliance Observations, Inspection and Testing**

2.7.1 Owner may observe all aspects of construction for this Project, for purposes including ensuring the quality of the Work, ensuring the timely identification of needed corrections, and facilitating later acceptance of the Project.

2.7.2 Owner will contract with an independent testing agency for inspection and testing services.

2.7.3 Contractor's General Foreman/Superintendent shall be responsible for coordinating observations, inspections and tests; and shall:

2.7.3.1 Prepare and maintain a schedule of all required or anticipated inspections and Owner observations.

2.7.3.2 Coordinate the Work to assure that obstructions are not put in place until required inspections or observations have been performed.

2.7.3.3 Notify Owner's Construction Manager and all relevant testing or inspection agencies 24-hours in advance of scheduled inspections, observations or approvals. Independent testing agencies shall be provided with adequate time and full access for each test area, inspection item and/or structural element. If inspection cannot be performed, the General Foreman/Superintendent shall submit a plan to Owner's Construction Manager for verification of conformance of the work element in question.

2.7.3.4 Monitor and log the correction of all discrepancies noted by Owner's representative or by independent testing agencies.

2.8 **PC-8 Construction Coordination**

2.8.1 Contractor will be issued one full-size stamped "Foreman's Copy" and two working copies (1 full and 1/2 size) of Construction Drawings.

2.8.2 Contractor shall take field direction only from the PSE Construction Manager or Construction Coordinator.

2.8.3 Contractor shall be responsible for having all existing utilities located before construction.

2.8.4 Contractor shall be responsible for the installation, maintenance, and removal of plates (tacked or pinned). Plates shall be the non-skid type.

2.8.5 Contractor shall be responsible for providing all necessary temporary power and communication required during construction, including permitting and inspection.

Temporary power shall transfer to Owner control after Contractor work has been completed and final acceptance by Owner.

- 2.8.6 Contractor shall furnish all sanitary facilities for their crews.
- 2.8.7 Contractor shall provide for surveying services. Surveying shall include, but not be limited to, the establishment of the baselines, an elevation reference monument, locations of necessary vaults, As-Built drawings for drainage, foundations and general grade elevations.
- 2.8.8 Contractor shall not delay the start of the Project due to incomplete inventory of material or equipment.
- 2.8.9 Any delay as a result of Contractor's action is the sole responsibility of Contractor.

2.9 **PC-9 Change Approval Record (CAR)**

- 2.9.1 Any deviation from Project documentation, including drawings, permits, procedures, Owner's operating standards, and pre-construction discussion shall be administered using the Change Approval Record (CAR) process.
- 2.9.2 Owner recognizes that revision(s) to the Description of Work after Contract award may be required. Total costs incurred by Contractor for subcontractor charges and/or material invoices, which are a direct result of an authorized revision to the Project Scope, may include a markup of not more than 5% for the pass through of the charges. No markup will be allowed on the Contractor's own labor and equipment rates or costs. *Costs for additional insurances, B&O taxes, and bonds shall be considered Contractor overhead and is not subject to direct recovery.*
 - 2.9.2.1 The markup for all charges from subcontractors of every tier may include a markup of no more than 5% of material costs and posted labor and equipment costs.
- 2.9.3 Contractor shall submit a proposed change request to Owner's Construction Manager no later than three days after a discovery of a contract change. Supporting documentation (including but not limited to, copies of detailed subcontractor proposal, material invoices, updated schedule, detailed timesheets) will be submitted to Owner's Construction Manager. Owner's Construction Manager shall prepare a CAR form, with all the documentation submitted, for signatures. Contractor shall transmit a change request to Owner's Construction Manager via e-mail.
- 2.9.4 One or more CAR's will be presented to Contractor on a formal Change Order. Contractor shall not invoice on a CAR, only on an executed Change Order(s).

2.10 **PC-10 Substation Entry Orientation**

- 2.10.1 Substation Entry Orientation shall be required for all Contractor personnel performing any work by their employees within an energized substation. Contractor shall contact Owner's Construction Manager to schedule the Orientation, no later than 14 days prior to Work within the energized substation. This Orientation will be conducted at the substation.
- 2.10.2 If new personnel are added to Contractor's list of personnel at anytime during the Construction phase:
 - 2.10.2.1 Contractor's Supervisor shall conduct an on-site Orientation prior to the new employee being allowed to enter or perform work at Owner's substation.

- 2.10.2.2 Contractor's Supervisor shall schedule an Orientation, within five days of employee's start date, through Owner's Construction Manager. This must be completed within 14 days of employee's start date.
- 2.10.3 Contractor shall be responsible for notifying Owner's Construction Manager immediately upon discovery of any safety or entry guideline incidents or procedure violations.

2.11 **PC-11 Work Site Restrictions**

- 2.11.1 All work is located inside of an energized substation; Contractor shall comply with substation practices noted in WAC 296-45. Also, Contractor shall provide safety watch for all nonqualified persons as described in WAC 296-45.
- 2.11.2 Operations at work site structure locations shall be confined to the immediate area surrounding the structure.
- 2.11.3 Contractor shall ensure setup of all equipment, including but not limited to trucks, augers, cranes, etc. shall be restricted in sensitive areas. Any Work performed in sensitive areas shall have a written plan approved by Owner's representative prior to Work commencing.
- 2.11.4 Prior to mobilization to a new work site, Contractor's Foreman shall review all site restrictions with Owner's Construction Manager. Owner's Construction Manager may review that all conditions have been met before work commences.
- 2.11.5 It is Contractor's responsibility to prevent anyone from entering the construction site without being properly equipped with appropriate personal safety devices.
- 2.11.6 Access keys or locks, as needed may be obtained from Owner's Construction Manager upon Contract award.
- 2.11.7 Contractor parking around the Project shall not hinder normal facility operations and shall not, at any time, block fire lanes or access to any portions of any facility. Vehicle access to the Project will be limited to work vehicles only.
- 2.11.8 Contractor and its subcontractor personnel shall not park their personal vehicles on the street or in the commercial areas where general parking has been prohibited for construction or safety purposes. Under no circumstances shall Contractor personnel park their personal vehicles in private business parking lots without prior written approval from the business owner, at Contractor's expense.

2.12 **PC-12 Inadvertent Discoveries**

- 2.12.1 Contractor shall abide by all regulations pertaining to discovery of archaeological resources, including but not limited to the Revised Code of Washington (RCW) Chapters 27.34, 27.53, 27.44, 79.01, and 79.90 and the WAC Chapter 35.48 as applicable, or their successors.
- 2.12.2 Inadvertent Discovery of Archaeological Deposits:
 - 2.12.2.1 In the event of an archaeological find during any phase of construction, Contractor shall take actions as necessary to secure the immediate area to protect the findings, with as little disruption to the archaeological site as possible.

2.12.2.2 Contractor shall immediately notify Owner's Construction Manager. If Owner's Construction Manager is not reachable then Contractor shall contact Owner's Project Manager.

2.12.3 Inadvertent Discovery of Burial Sites or Human Remains:

2.12.3.1 In the event of an inadvertent discovery of human remains or associated burial objects, Contractor will take actions as necessary to secure the immediate area to protect the findings, with as little disruption to the remains as possible.

2.12.3.2 Contractor shall immediately contact Owner's Construction Manager. If Owner's Construction Manager is not reachable then Contractor shall contact Owner's Project Manager.

2.13 **PC-13 Security**

2.13.1 If the site is currently equipped with a security system, Contractor will need to disarm and arm the system every time entering or leaving the site.

2.13.2 Contractor shall be responsible to call Owner's Load Office at 425-882-4650 every time they enter/disarm the station and exit/arm the transmission switching station.

2.13.3 Contractor shall be responsible to call Owner's Western Division System Operator at 425-882-4629 every time they enter/disarm the station and exit/arm the distribution station.

2.13.4 Contractor shall immediately notify Owner's Construction Manager of any incidents or abnormal events that appear to be a threat to Owner's facilities or may disrupt Contractor's construction.

2.14 **PC-14 Submittals**

2.14.1 After NTP, Contractor shall provide a populated Submittal Log to Owner's Construction Manager as the initial contract submittal. Contractor shall manage the Submittal Log throughout the duration of the Project.

2.14.2 Testing and certification of materials required for submittals shall be paid for by the Contractor.

2.14.3 Unless otherwise specified by Owner's Construction Manager, submittals shall be received by Owner's Construction Manager a minimum of 14 days before any task is performed relating to the required submittal.

2.14.4 Failure to adhere to this requirement may result in work stoppage by Owner. All costs associated with Owner directed work stoppage or any subsequent rework shall be at Contractor's expense. Work shall resume when directed by Owner.

2.14.5 In the event that a submittal is rejected or sections are required to be resubmitted as noted by Owner, Contractor is required to resubmit within three days of being notified of the rejection or resubmittal. Owner's review time is reset to seven days for the new submittal.

2.14.6 The Submittal Log template is available in Appendix D of the Engineering Specifications.

2.15 **PC-15 Permits**

- 2.15.1 In the event of a discrepancy between the Contract Documents and any permit requirements, the more stringent shall prevail.
- 2.15.2 Contractor shall obtain all permits required for the performance of the Work. It is Contractor's responsibility to arrange for all permit inspections and appropriate inspector authorized signatures. Local codes and permit conditions are incorporated by reference herein.

2.16 **PC-16 Traffic Control**

- 2.16.1 Contractor shall be responsible for developing, submitting, and receiving approval for Traffic Control Plans (TCP) for the Project prior to starting construction. TCP shall cover project site ingress/egress and all work residing within the jurisdictional Rights Of Way (ROW). Contractor shall comply with the jurisdiction's traffic control standards.
- 2.16.2 Any traffic control required by Contractor outside the work hours stated in the permit must be approved in advance by the jurisdiction and Owner's Construction Manager and will be furnished at Contractor's expense.
- 2.16.3 Contractor shall provide all traffic control devices and personnel, including but not limited to, signs, flashers, barricades, arrow boards, Traffic Control Supervisor (TCS), off-duty police officers and flaggers. All traffic control devices and personnel shall conform to the jurisdiction's requirements or street use permits.
- 2.16.4 Contractor shall use flaggers and install signs and other warning devices in accordance with Federal Highway Administration's Manual on Uniform Traffic Control Devices and the Washington Administrative Code (WAC).

2.17 **PC-17 Equipment**

- 2.17.1 Equipment and tools to be used for the Work shall be in good working order and of adequate capacity. Owner shall provide no equipment or tools for Contractor's use, unless otherwise specified.
- 2.17.2 Contractor (and its' support) shall provide proper equipment on site or available on short notice to accommodate any unforeseen changes in the field conditions or in the construction practice. Delays, caused by the lack of available or appropriate equipment, are at Contractor's expense.
- 2.17.3 Vehicles shall not be fueled at the construction site unless prior written approval has been given to Contractor by Owner's Environmental representative through Owner's Construction Manager. Precautions shall be taken to prevent and contain any spillage. Fueling will not be allowed within 100-feet or adjacent to any sensitive areas/buffers.
- 2.17.4 Contractor shall identify and secure the sites for their construction trailer, equipment, material laydown areas, and temporary field office. Contractor will not be allowed to use Owner's properties such as substations, etc.

2.18 **PC-18 System Operations Orientation**

- 2.18.1 Contractor personnel identified as Superintendent, Foreman and any journeymen are required to attend Owner's System Operations Orientation prior to starting Work.

This orientation will take place at the Owner's facility in Redmond, WA. Owner's Construction Manager will coordinate the Orientation prior to the start of the Project.

- 2.18.2 If the above mentioned Contractor personnel have completed the Orientation and have continuously worked on Owner's property without a break of 12 months or longer, they may not be required to attend the Orientation. If during the last 12 months they have not taken a clearance, they are required to attend the Orientation.

2.19 **PC-19 Outages**

- 2.19.1 Puget will have substation de-energized before work starts.
- 2.19.2 Contractor shall coordinate outage scheduling on the existing substation, transmission and distribution lines with the assistance of Owner's Construction Manager and Owner's Operations Center for all construction activities.
- 2.19.2.1 Contractor shall determine any unplanned high voltage outage requirements for the Work. The information found on the "Outage Request" form shall be called-in to arrange for an outage. All outages required must be coordinated through Owner's Load Dispatcher. He can be reached at 425-882-4640, 0830 to 1330, Monday through Friday.
- 2.19.2.2 Contractor shall coordinate all outages and/or hot transfers for all distribution circuits with the Owner's Day Operations. He can be reached at 425-861-4862.
- 2.19.2.3 Owner will provide one radio to communicate with either Load Dispatcher and/or System Operator for outage coordination. The radio will be used to obtain and release all clearances. The radio shall be "ON" at all times during construction activities.
- 2.19.3 Contractor shall be responsible for the installation and removal of all grounding, as required, for all de-energized lines.
- 2.19.4 Contractor will be notified of all pre-arranged outages that have been obtained on any of the lines, so that he may better coordinate the construction activities.
- 2.19.5 Owner will provide Contractor the latest version of Owner's distribution circuit maps, and transmission one-line drawings showing the affected lines. Contractor shall review and evaluate the circuit maps to develop his outage plan. Questions concerning what will be allowed in the way of outages shall be discussed with Owner's Construction Manager.
- 2.19.6 Contractor shall be required to submit to Owner's Construction Manager a written plan seven days in advance for all outage/clearance requests. An Owner's representative will review the plan. A field meeting may be held to ensure complete understanding by Owner and Contractor on where the clearance points will be taken.
- 2.19.7 Owner shall be responsible for all switching activities and may require up to **72-hours** notification prior to receiving requested outage.

2.20 **PC-20 Erosion and Sediment Control**

- 2.20.1 Contractor shall be responsible for all aspects of erosion and sediment control, in accordance with WAC 173-226, including implementing any required corrective actions, and/or changes to Best Management Practices (BMPs) or operating

procedures that are necessary to maintain the Project in compliance with these laws and regulations.

- 2.20.2 Contractor shall review with Owner's Construction Manager, within 12 hours of it becoming known, the details of any exceedance of water quality standards that is required by law to be reported to WSDOE within 24 hours. Such review shall occur prior to the report being submitted to WSDOE.

2.21 **PC-21 Environmental Contamination**

- 2.21.1 In the event of an environmental incident (i.e. any oil spill), Contractor shall immediately contact Owner's Construction Manager and notify Owner's Spill Pager (206-994-3186). Contractor shall initiate spill containment measures.
- 2.21.2 Contractor shall coordinate with Owner's Environmental Services Department for the excavation and removal of contaminated soil and concrete samples. Contractor is advised that soil testing and results can take up to four working days. If the tests are positive, additional cleanup and testing will be required. Contractor shall allow adequate time in the bid and Project Schedule for this activity.
- 2.21.3 Contractor shall comply with BMPs and be responsible for providing all erosion control materials. Materials shall include, but not limited to, straw bales, straw mulch, wood stakes, silt fencing fabric and posts, jute matting, sandbags, bentonite, plastic, quarry spawl and rock check dams. These materials will be used around, but not limited to, irrigation and drainage ditches, and adjacent to streams, creeks and rivers, wetlands and wetland buffers. Contractor shall be responsible for any sediment that escapes containment.
- 2.21.4 When working in wetlands, wetland buffers or stream buffers, Contractor shall mulch all areas disturbed by construction activities or egress/ingress traffic after work is completed, or within seven days of finishing work at a specific site. Contractor shall limit the work area as identified by Owner and implement Owner Standard 0150.3200 Techniques for Temporary Erosion and Sediment Control.
- 2.21.5 Contractor shall ensure that fill, sediment, and/or untreated storm water is not discharged into adjoining wetlands, sediment or surface waters, including drainage systems, ditches, catch basins and any area that drains to surface waters.
- 2.21.6 Any wetland or riparian system damage resulting from Contractor activities outside of areas strictly defined within Owner's permit package shall be the sole responsibility of Contractor.
- 2.21.7 Listed below are Owner approved options available for handling soil within the fenced boundary of the substation. Contractor shall comply with Owner's standard substation for soil handling procedures.
- 2.21.7.1 Excess soil may be reused within the substation boundary as approved by Owner's Construction Manager. Owner requires that the BMP be followed to ensure construction actions eliminate the risk of off-site transport of soil by erosion or other natural processes. Soil within the fenced portion of the substation should not be placed outside of the fenced substation boundary.
- 2.21.7.2 Excess soil that can not be re-used shall be transported off site for disposal at an Owner-approved permitted facility at which the soil is land filled as "alternative conditional cover" and not recycled or redistributed.

2.22 **PC-22 Materials**

- 2.22.1 Quantities, when shown in the Project Documents, are for Owner's estimating purposes only. Contractor shall prepare its own estimated quantities that are required to complete the Work per the drawings, specifications and Contract.
- 2.22.2 Contractor shall designate a Material Coordinator who is responsible for inventory, requests, pick-up, issues, etc. Additionally, this person shall coordinate material activities through Owner's Construction Manager.
- 2.22.3 Owner will furnish to Contractor the material identified in the SAP Materials List to be incorporated or installed into the Work or used in performing the Contract. All other material listed on the Project Documents but not on SAP Materials List are to be provided by Contractor.
- 2.22.4 Owner will load material onto Contractor furnished vehicles under the direction of Contractor. Contractor shall verify the quantity and condition of materials received on the SAP Materials List. Also, any discrepancy, such as shortages or missing material, shall be noted on the SAP Materials List. The original copy of this documentation shall be provided to Owner's Construction Manager within 72-hours of receipt of materials. Contractor will transport and unload the material at the site at its own expense unless otherwise specified. Once the material has been signed for by Contractor it becomes Contractor's responsibility, any shortages or missing material shall be replaced at Contractor's expense.
- 2.22.5 Material that is shipped directly to the job site from a vendor facility is Contractor's responsibility to unload, inventory, inspect and sign for upon delivery. The signed shipping manifest must be returned to Owner's Construction Manager within 48-hours of delivery. Owner's Construction Manager must be notified immediately of any rejections and/or discrepancies at the time of receipt. Once the material has been signed for by Contractor it becomes Contractor's responsibility; any shortages or missing material shall be replaced at Contractor's expense. Contractor shall follow manufacturer's specifications, guidelines, and drawings for offloading, handling and storage of materials.
- 2.22.6 Contractor shall have, maintain and secure a staging site for all materials. The staging site shall be able to support a flat bed trailer delivery and off-load.
- 2.22.7 Contractor shall request, in writing, material pick-up a minimum of 14 days in advance through Owner's Construction Manager. Owner shall kit this material pick-up.
- 2.22.8 Material may be picked up between the hours of 7:00 AM and 3:00 PM.; **Contractor must pick up all staged materials within five days of the initial pick-up date**, unless otherwise directed by Owner's Construction Manager.
- 2.22.9 Substation coded material will be furnished at Owner's Shuffleton Warehouse, 1101 Lake Washington Blvd. N., Renton, WA 98056
 - 2.22.9.1 All visitors must check-in at the office.
 - 2.22.9.2 Vest, hardhat and safety glasses must be worn at all times.
- 2.22.10 Pick up of any additional material must be scheduled a minimum 48-hours in advance through Owner's Construction Manager.
- 2.22.11 At the end of the Project, all material returns must be scheduled through Owner's Construction Manager. All material must be broken down, sorted **by material type** and labeled with the proper job number or it will not be accepted. Contractor shall deliver returns to Owner's Shuffleton Warehouse; a 48-hour notice is required.

2.23 PC-23 Weather Conditions

- 2.23.1 Owner reserves the right to determine when weather conditions will materially affect the quality of the Work. During such weather conditions, the Owner may direct Contractor to delay performance of Work until such time that the quality of the Work will no longer be affected.
- 2.23.2 Contractor shall allocate 3 weather days due to wet season construction (typically November through April) in their schedule. Owner's Construction Manager shall approve weather days.

2.24 PC-24 Road Maintenance

- 2.24.1 Contractor shall be responsible for any repair or maintenance of public or private roads required as a result of its work.
- 2.24.2 Contractor shall be responsible for providing and maintaining any access roads, including snow removal for the duration of construction.

2.25 PC-25 Paving and Surface Restoration

- 2.25.1 Contractor shall provide all saw cutting, coring, and grinding of asphalt or concrete.
- 2.25.2 Contractor shall conform to jurisdiction's requirements for curb, gutter and sidewalk restoration.
- 2.25.3 Contractor shall be responsible for all paving restoration, temporary and permanent. This includes, but is not limited to concrete or asphalt.
- 2.25.4 Contractor shall comply with the jurisdiction's restoration standards for all permanent paving restoration residing within the jurisdictional ROW.

2.26 PC-26 Ground Resistance testing

- 2.26.1 Once the ground grid installation is complete, a ground grid resistance test (refer to Owner's Standard 8325.8210 Station Ground Grid Resistance Test) needs to be completed. This test will be completed by Owner and will be coordinated by Owner's Construction Manager.

2.27 PC-27 Demolition and removal of Substation equipment

- 2.27.1 Before starting any demolition or removal of any equipment within the substation, all control wiring must be disabled or isolated and verified by Owner's representative.
- 2.27.2 Contractor shall fill out all install/remove forms before any demolition or removal begins. Contractor shall attach ID tags to each piece of returned equipment with Owner's substation name and Removal Work Order number.
- 2.27.3 All oil-filled equipment shall be prepared for removal and or temporary storage per Owner's Standard 0150.3125 Temporary Storage of PCB Items. Contractor shall work with Owner's Construction Manager to help coordinate removal of equipment.
- 2.27.4 Contractor shall be responsible to contain leaking equipment (e.g., transformers, CTs, PTs, etc.) that contains oil. Contractor shall have an area designated for

leaking oil per Owner's Standards 0150.3100 Cleanup of Oil Spills and 6315.0101 Identifying New, Used and Board Order Electrical Equipment. Contractor shall also have tubs, absorbent bags, etc. available on-site. Contractor shall contact Owner's Construction Manager for proper disposal as it occurs (not at the end of the Project).

2.27.5 Contractor personnel shall be qualified to handle Hazardous Waste, if required.

2.28 PC-28 Restoration and Mitigation

2.28.1 Restoration shall include but not be limited to general removal of all litter and debris, repair of damaged asphalt or concrete, roadway and sidewalk restoration, agency-approved removal of any erosion and/or sediment control measures installed by Contractor, and the removal of any deep rutting and any manmade devices (such as sumps, construction access points, etc.) due to construction activities, and stabilization of all areas of soil disturbance created by the Work.

2.28.2 Contractor shall, upon completion of activities at each site or within seven days, be required to restore any natural areas with approved "Weed-Free" straw and seed mixtures (or in accordance with specific permit requirements that may apply). All associated mitigation costs shall be the responsibility of Contractor.

2.28.3 If Owner or Contractor receives complaints from an impacted property owner or permitting jurisdiction, or if Contractor has substantially suspended construction activities for five days, restoration shall be completed immediately by Contractor at Contractor's expense. This out of sequence work shall not constitute a CAR.

2.28.4 Contractor shall accomplish mitigation work in accordance with permitting authority or jurisdiction requirements or Owner Standards, whichever is more stringent.

2.29 PC-29 Project Close-out and Acceptance

2.29.1 Contractor shall notify Owner's Construction Manager, in writing, when work is completed and the Contractor is ready for final inspection. Owner's representatives shall perform a final inspection or quality audit of the Project, and a punch list of items deemed to be deficient and in need of rework shall be developed and forwarded to Contractor. Contractor shall correct all items on the punch list to Owner's satisfaction.

2.29.2 Contractor shall make every reasonable effort to rectify all punch list items within 14 days of receipt of the punch list. Delays beyond 14 days because of lack of equipment or qualified personnel are not acceptable. If the original crew has been removed from the work site, labor resources and equipment of equal or better quality shall be used in completing the rework.

2.29.3 Upon completion of construction, Contractor shall complete all required Owner documentation including, but not limited to, a completion letter, as-built drawings, CAR's and resulting Change Orders, equipment install/remove forms, and other documentation.

2.29.4 The Foreman's Copy shall be returned with all field changes marked in red and Contractor's Foreman must sign all sheets. This as-built drawing must be reviewed by Owner's Construction Manager and returned to Owner's Project Manager prior to final payment to Contractor.

2.29.5 Owner will provide Contractor with a Letter of Acceptance of the Work; upon Contractor's correction of all punch list items and Owner's receipt of all required documentation. Commencement of construction warranties and final payment to Contractor will occur only upon issuance of this Letter of Acceptance.

3.0 Project Documents and Attachments

3.1 Drawings

3.1.1 Drawing List

3.1.2 Substation Drawing Set

3.2 Engineering Specifications

3.3 SAP Materials List

3.4 Geotechnical Reports and Additional Reports for Reference Only

3.5 Site Safety Plan

3.6 Approved Yard Rock Sources

3.7 Request For Information (RFI) form

3.8 Approved Disposal Facilities