

RESTAURANT UTILITIES PROJECT

TULALIP, WASHINGTON

SECTION 31 23 19 – DEWATERING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. The work under this section shall consist of providing all work, materials, labor, equipment, and supervision necessary to provide for dewatering as required in these specifications, on the drawings and as otherwise deemed necessary to complete the work.

1.02 RELATED WORK

- A. Division 1 Specification Sections.
- B. Specification Section 31 12 00 – SITE CLEARING
- C. Specification Section 31 20 00 – EARTHWORK
- D. Specification Section 31 25 00 – EROSION AND SEDIMENT CONTROL
- E. Specification Section 33 11 00 – WATER UTILITY DISTRIBUTION PIPING
- F. Specification Section 33 30 00 – SANITARY SEWERAGE UTILITIES

1.03 REFERENCE STANDARDS

- A. Technical specifications, design detail, construction detail and materials shall conform to the following reference documents:
 - 1. Water Distribution Design and construction Standards and Specifications, City of Marysville, November 1998, revised May 2007.
 - 2. Standard Specifications for Road, Bridge and Municipal Construction, WSDOT/APWA, latest edition.
 - 3. Standard Plans for Road and Bridge Construction, WSDOT/APWA, latest edition.
- B. Where conflicts between Standards and specifications occur, the more stringent shall apply.

1.04 SUBMITTALS

- A. When deep wells or well point systems are utilized, provide copies of the site assessment, system design computations for removal of groundwater, and design information for sediment removal practices.
- B. For sump dewatering in trenches or excavations, provide copies of sediment removal practice selection and discharge design calculations or information.

RESTAURANT UTILITIES PROJECT

TULALIP, WASHINGTON

- C. Provide copies of all permits required for dewatering.
- D. Provide copies of daily monitoring and testing logs.
- E. Provide copies of all borehole abandonment forms.
- F. Within ten (10) work days after award of contract, Contractor shall submit to Owner a schedule, detailing sequence and time of completion of phases of work under this section.

1.05 QUALITY ASSURANCE

- A. Provide and submit a quality assurance program for maintaining erosion control and sediment control practices. As work progresses through phases of the contract, submit copies of the updated quality assurance program for erosion control and sediment removal practices.
- B. Provide at least one (1) person who shall be present at all times during execution of this portion of the work, be thoroughly familiar with the type of work being performed and the best methods for its execution and who shall direct all work performed under this section.

1.06 PERMITS/FEES

- A. Owner will be responsible for obtaining the Building Permit for the Project.
- B. Contractor shall be solely responsible for obtaining all other permits necessary to complete the Work.
- C. Contractor shall pay all fees associated with the completion of the Work, including but not limited to permit fees, inspection fees, and temporary utility connection fees.

1.07 SAFETY

- A. Prevent public access to dewatering system components. Refer to Specification Section 017800 – SAFETY for general safety requirements.

1.08 ENVIRONMENTAL

- A. Erosion and Sediment Control
 - 1. Comply with the requirements of the Erosion Control Plan.
 - 2. Upon installation of the dewatering system, immediately remove from the site any mud, sediment or drilling fluid generated by operations.
 - 3. Inspect dewatering system daily for signs of erosion and eliminate cause of erosion.

RESTAURANT UTILITIES PROJECT

TULALIP, WASHINGTON

4. Monitor dewatering system discharge regularly for signs of chemicals or other environmental contaminants.
 5. If chemicals or environmental contaminants are observed, terminate dewatering system operation immediately and contact the Owner's Representative and Project Manager.
 6. Prevent introduction of contaminants into the soil or groundwater through the dewatering system.
- B. Abandon boreholes in accordance with applicable federal codes immediately following use.
- C. Provide mufflers, housing, berms and fencing as necessary to minimize noise pollution resulting from dewatering system operation.

PART 2 – MATERIALS

2.01 GENERAL

- A. All materials to be furnished by the contractor, as needed.

PART 3 – EXECUTION

3.01 GENERAL

- A. Comply with all tribal and federal regulations.
- B. Coordinate installation of dewatering system with other contractors. Locate dewatering system components in locations that do not interfere with site operations or other construction activities.
- C. Pump groundwater at lowest rate necessary to dewater site as required to accommodate other site work.
- D. BMPs shall be in place, inspected and functioning prior to starting work.
1. Note that once sediment is separated, water to be discharged from the site can enter the storm water system in a pH neutral condition.
 2. Provide filter material, trash screens and other devices around pump or intake to avoid pumping of sediment. Provide sediment tanks, filters, and flocculants as required for sediment control. Inspect discharge daily and install and maintain erosion control and sediment removal practices.
- E. Prior to all work of this Section, Contractor shall become thoroughly familiar with the site, site conditions, and all portions of the work falling within this Section.
- F. Keep active utilities intact and in continuous operation, street drains and sewers open for free drainage at all times.

RESTAURANT UTILITIES PROJECT

TULALIP, WASHINGTON

- G. Carefully maintain benchmarks, monuments, and other reference points. If disturbed or destroyed, replace as directed by the Owner at no additional cost to the Owner.
- H. Protect streets and adjacent property throughout the operations. Allow no debris to accumulate in structures or on the site.
- I. Stockpile topsoil material on the site as directed by the Owner.
- J. Haul unsuitable material and debris away from site and dispose of legally and as required by applicable Federal, State and Tribal regulations and by authorities having jurisdiction at no additional cost to the Owner.
- K. Sump Dewatering (as required)
 - 1. Install collection sump in the low point of the excavation(s).

3.02 WELL INSTALLATION

- A. Install wells by rotary, driven or hydraulic jetting methods.

3.03 OPERATION

- A. Provide personnel, equipment and power necessary to maintain and operate the dewatering and sediment control systems as required to complete construction at the site.
- B. Do not discharge water containing sediment, debris or contaminants into the sanitary sewer system or waters of the state.

3.04 REMOVAL/ABANDONMENT

- A. Remove all dewatering system components immediately following use.
- B. Clean receiving storm sewer system of any sediment or debris deposits resulting from dewatering system operation.

END OF SECTION 31 23 19