

**SECTION 312319
DEWATERING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Dewatering of site during construction.

1.02 RELATED SECTIONS

- A. Section 31100 - Site Clearing
- B. Section 312316.13 - Trenching: Excavating and backfilling for site subdrainage systems.

1.03 PROJECT CONDITIONS

- A. The Contractor is to provide any temporary piping required to reroute downspout and roof drains away from the work areas until the permanent drainage system is installed and in working order.
- B. Dewatering systems shall be installed prior to excavation activities in order to control surface and ground water flows. Dewatering measures shall be maintained and remain installed for the duration of project activities.
- C. Damage or destabilization/degradation of the on-site soils due to failure to dewater or otherwise prepare the site will be repaired at the Contractors expense.

1.04 PERFORMANCE REQUIREMENTS

- A. Dewatering Performance:
 - 1. Design, furnish, install, test, operate, monitor and maintain dewatering system of sufficient scope, size and capacity to control surface and ground water flow into excavations and permit construction to proceed on dry stable subgrades.
 - 2. Dewatering systems shall be installed prior to excavation activities in order to control surface and ground water flows. Dewatering measures shall be maintained and remain installed for the duration of project activities.
 - 3. Prevent water from ponding inside foundation walls, including after the floor slabs have been installed, and causing the foundation soils to become saturated.

PART 2 - NOT USED

PART 3 EXECUTION

3.01 INSTALLATION

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades and from flooding the Project site and surrounding areas.
- B. Reroute surface water away from excavated areas. Do not allow water to accumulate in excavations. Do not use utility or other trenches as temporary drainage ditches unless specifically designed for only that purpose.
- C. Do not use open-sump pumping that leads to loss of fines, soil piping, subgrade softening and slope instability.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property and portions of work under construction or completed. Avoid creating an inconvenience to others, and maintain sedimentation controls as required by authorities having jurisdiction.
- E. All dewatering discharge is to be routed to a sediment pond or sediment bags so that the sediment can settle prior to the discharge water leaving the site or entering any waterway or storm sewer.

3.02 FIELD QUALITY CONTROL

- A. Dewatering systems are to be inspected at least weekly and any and all repairs or refinements performed to maintain a fully operational system that achieves the intended purpose.
- B. Standby equipment is to be maintained on site so that it can be immediately installed if failure of primary equipment occurs.

3.03 PROTECTION

- A. Protect pipe and dewatering system from other construction activities.
- B. Remove dewatering system at the completion of construction or when determined by the Architect that it is no longer needed. Any holes in interior slabs and voids under the slabs are to be repaired using lean concrete for the voids and a non-shrink concrete repair grout for the slabs.

END OF SECTION