## X0426200 DEWATERING

Effective: January 23, 2017 Revised: January 25, 2019

**Description:** This work shall consist of all labor, equipment, and materials necessary to construct, maintain, and remove dewatering systems to allow for construction in dry conditions. The dewatering method shall be designed to pass the 2-year frequency flood at a minimum. The 2-year frequency flood is based on paragraph 9, Section 1-600 (Temporary Structures) in the IDOT Drainage Manual (a 1-year frequency flood for design of temporary structures used less than 3 months) doubled for a factor of safety for potential damage upstream. The applicability of the 2-year frequency flood should be evaluated based on each project. A larger event may be desired for longer dewatering durations or more sensitive project sites. Delete this note from the Contract Specifications.

**General:** The work shall be performed according to the following:

- The Contractor shall be responsible for the choice of products, equipment, design, installation, operation, and removal of the site dewatering work subject to review by the Engineer and Lake County Stormwater Management Commission (LCSMC). All products, equipment, and "means and methods" selected shall be adequate for the intended use/application. The Engineer's review does not relieve the Contractor from compliance with the requirements specified herein.
- Dewatering shall be continuous 24 hours a day, seven days per week, for the duration of the project.
- The Contractor's proposed excavation for cofferdams and/or the installation of other components of the proposed dewatering process shall not conflict with existing utilities. No additional compensation and/or time shall be allowed for delays caused by plan revisions due to utility conflicts.
- The Contractor shall select the pumps, the rate at which the pumps discharge, and provide adequate protection at the pump discharge point subject to review by the Engineer.
- The Contractor shall ensure that downstream water quality is not impaired. The water shall be discharged with adequate erosion and sediment control protection of the surface at the point of discharge.
- Water pumped or drained from the work area shall be disposed of in a safe and suitable manner without damage to adjacent waterways; wetlands; adjacent property or streets; and/or to other work under construction.

- Water shall not be discharged into storm or sanitary sewers, or within 50 feet of wetland boundaries.
- Water shall be discharged to an upland area to allow filtration through vegetation.
- Any and all damages caused by dewatering the work area shall be promptly repaired by the Contractor.

**Submittals:** The Contractor shall submit to the Engineer for review a description of dewatering techniques and equipment to be used. The submittal shall include detail drawings showing the lengths of discharge piping; the point(s) of discharge; and the included sediment and erosion control procedures using Best Management Practices (BMPs).

## **Best Management Practices:**

- Deep Sump Pits
- Pumps, Hoses, etc.
- Wellpoints
- Point Source Discharge Protection (Riprap with vegetative buffer, etc.)
- Flocculation Logs
- Flocculation Powder
- Erosion Control Blanket
- Rock Checks
- Ditch Checks
- Geotextile Fabric
- Dewatering Filter Bags
- Removal and proper disposal of all BMPs and sediment associated with dewatering
- Additional erosion and sediment control BMPs as per Engineer's direction

**Method of Measurement:** These items of work will be measured on a lump sum basis for furnishing, installing, maintaining, replacing, relocating and removing the dewatering systems required in the plans and these special provisions.

**Basis of Payment:** This work will be paid for at the contract unit price per lump sum for DEWATERING. *The unit price shall include all equipment, labor and materials required to construct, maintain and remove the dewatering system.*