

SECTION 02010

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes dewatering of groundwater as indicated in soil borings. All work shall conform to MDOT Standards and Specifications as modified by the Holland BPW. All non-itemized work shall not be paid for separately.
- B. Section also includes the dewatering of water main as necessary to perform the work.

1.2 PERFORMANCE REQUIREMENT

- A. Design, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control groundwater flow into excavations and permit construction to proceed on dry, stable subgrades. Remove dewatering system when no longer in use.
 - 1. Maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, prevent excavation flooding and prevent damage to subgrades and permanent structures.

1.3 SUBMITTALS

- A. Signed and sealed shop drawings showing arrangement, locations, and details of wells and well points; locations of headers and discharge lines; and means of discharge and disposal of water. Include emergency response procedures.
- B. Signed and sealed survey of adjacent structures and infrastructure establishing exact elevations, clearly identifying benchmarks.
- C. Sufficiently detailed photographs and video recording of existing conditions of adjoining structures and infrastructure.
- D. Record drawings at project closeout identifying and locating capped utilities and other subsurface structural, electrical, or mechanical conditions encountered during dewatering. Note locations and capping depth of wells and well points.
- E. Prior to disposal, chlorinated water shall be treated as necessary with Vita-D-Chlor or BPW approved equal to obtain a residual chlorine value < 0.1 ppm. BPW personnel shall test the treated water for conformance to this specification.

1.4 QUALITY ASSURANCE

- A. Comply with water disposal requirements of jurisdictional authority.

1.5 PROJECT CONDITIONS

- A. Existing utility service shall not be interrupted unless permitted in writing. Temporary utility facilities shall be constructed.

- B. During dewatering, regularly survey adjacent structures and infrastructure in order to generate an accurate log of elevations for comparison to original elevations. Promptly notify Engineer if changes in elevations occur or if cracks, sags or other damage is evident in adjacent construction.

PART 2 - EXECUTION

2.1 PREPARATION

- A. All electrical supply to dewatering devices shall be placed underground in NEC approved direct burial cable or within conduit. All electrical facilities shall be equipped with suitable locking devices to prevent injury to workers and the general public.
- B. Dewatering devices shall be placed under driveways and roadways and shall not interfere with vehicular access.
- C. The replacement of all pavement removed to permit installation of dewatering devices shall be considered incidental to dewatering.
- D. Prior to installation, all dewatering devices shall have a Holland BPW approved discharge point.
- E. The Contractor shall perform a pump test on all dewatering wells for 72 hours. During the test period the Owner shall take periodic samples to verify the hydrogen sulfide content of the discharge water. As many as 7 days are required to receive test results. If the hydrogen sulfide content is deemed unacceptable for storm drain drainage then all dewatering facilities will be required to discharge to the sanitary sewer system.

END OF SECTION