MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**BYPASS PUMPING**

GND:JAS 1 of 2 APPR:DMG:RPB:04-09-24

**a. Description.** This work consists of installing, maintaining, and removing a temporary bypass pumping system at the locations determined by the Contractor to divert existing stream flow during construction. Temporary bypass pumping will be required to operate 24 hours a day, 7 days a week for the required duration.

**b. Materials.** Furnish materials in accordance with sections 208, 401, and 818 of the Standard Specifications for Construction and as specified herein.

**c. Construction.** Conduct the work in accordance with the standard specifications and as specified herein. Submit a detailed bypass pumping plan in PDF to the Engineer for review and approval 10 days prior to starting the work. Do not begin work until the Engineer’s approval of the bypass pumping plan is obtained.

Size the pumps to accommodate a minimum flow for a 10-year storm event. Bypass pumping is required for, but not limited to, unnamed drain (east of Hile Road) as listed below:

Unnamed drain (east of Hile Road) 40 cubic feet per second

Flow information for additional culvert crossing locations will be made available upon request.

Ensure the plan includes, but is not limited to, the following:

1. Staging areas for pumps;

2. Culvert plugging method and types of plugs;

3. Temporary wet wells as needed;

4. Number, size, and location of pumps and piping;

5. Standby power generator size and location;

6. Downstream discharge plan;

7. Method of noise control for each pump and/or generator;

8. Schedule for installation, operation, maintenance and removal of system;

9. Coordination with the proposed construction activities;

10. Contingency plan for inadvertent system shutdown including a 24 hours a day emergency contact;

11. Soil erosion and sedimentation control measures to be implemented, including during high flow events where bulkheads may be partially or fully removed to maintain flow without allowing sediment to be released into downstream watercourses.

Ensure all pumps are fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in the priming system. The pumps may be electric or diesel powered.

Maintain at least one stand-by pump of each size on site.

**d. Measurement and Payment.** The completed work, as described, will be measured as a lump sum and paid for at the contract price using the following pay item:

**Pay Item** **Pay Unit**

Bypass Pumping Lump Sum

**Bypass Pumping** includes designing, furnishing, installing, maintaining, and removing the required materials, supplies, and equipment needed to implement a temporary bypass pumping system for the purpose of diverting the existing flow around the portions of the project which require such a temporary bypassing system.