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| Version | Date | Description of Revisions |
| 1 | October 27, 2015 | New Spec |
| |  |  |  | | --- | --- | --- | | **2** | **March 21, 2016** | **Revised Based on Legal comments #6409386-v1A (AAM)** | | 3 | May 1,2017 | Revised to reflect OPSS.MUNI 517 (Apr 2017) and OPSS.MUNI 518 (Apr 2017) | | | |

NOTE:

This is a CONTROLLED Document. Any documents appearing in paper form are not controlled and should be checked against the on-line file version prior to use.

**Notice:** This Document hardcopy must be used for reference purpose only.

**The on-line copy is the current version of the document.**

# GEneral

## Summary

### This Section includes the provision of the Water Control Plan, Dewatering and Discharge Plan and the Groundwater Monitoring Program.

## Related Sections

### *[Under "Related Sections", identify other Sections that are related to, and/or dependent on, the work results or information specified elsewhere. The list should be limited to Sections with specific information that the reader might expect to find in this Section, but is specified elsewhere. For example, if hardware for aluminum entrances is specified in the aluminum entrance Section, a cross-reference would be appropriate in the finish hardware Section. The purpose of this cross-referencing is for information only, to aid in finding those other requirements—not to define the scope of the Section.*

### *Cross-referencing here may also be used to coordinate assemblies or systems whose components may span multiple Sections and which must meet certain performance requirements as an assembly or system.*

### *This Section is to be completed/updated during the design development by the Consultant. If it is not applicable to the section for the specific project it may be deleted.]*

### *[List Sections specifying installation of products supplied but not installed under this Section and indicate specific items.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Execution requirements for [[item]... specified under this Section.

### [List Sections specifying products installed but not supplied under this Section and indicate specific items.]

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Product requirements for ...[item]... for installation under this Section.

### [List Sections specifying related requirements.]

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: [Optional short phrase indicating relationship].

#### Section 01060 – Regulatory Requirements

#### Section 01300 – Submittals

#### Section 01561 – Environmental Protection

#### Section 02240 – Dewatering - General

#### Section 02242 – Supply Install and Subsequently Remove Dewatering System

#### Section 02243 – Operate and Maintain Dewatering System

#### Section 02244 – Retain Specialty Subcontractor To Monitor Existing Groundwater Levels and Discharge Water Quality in Accordance With PTTW

#### Section 02245 – Restoration Works Associated With Dewatering Activities

#### Section 02246 – Bypass Pumping or Fluming and Unwatering

## References

### Conservation Authorities Act

#### R.R.O. 1990 Reg. 112: Conservation Areas- Lake Simcoe Region

#### R.R.O. 1990 Reg. 119: Conservation Areas- Metropolitan Toronto and Region

### Fisheries Act (RSC. 1985, c. F14)

### Ontario Endangered Species Act 2007

### Ontario Ministry of the Environment and Climate Change

#### Guide to Permit to Take Water

### Ontario Provincial Standards for Roads and Public Works (OPSS)

#### OPSS.MUNI 517 (Apr 2017) Dewatering of Pipeline, Utility and Associated Structure Excavation

#### OPSS.MUNI 518 (Apr 2017) Control of Water From Dewatering Operations

### Ontario Water Resources Act R.S.O. 1990 c. O.40

#### O. Reg. 387/04 Water Taking and Transfer

#### R.R.O. 1990, Reg. 903: Wells

### Regional Municipality of York

#### Bylaw 2011-56 Discharge of Sewage, Storm water and Land Drainage Bylaw (Amended 2014)

### Species at Risk Act (S.C. 2002, c. 29)

# PRODUCTS (Not Used)

# EXECUTION

## Dewatering and Monitoring Plan

### Prior to the commencement of any dewatering, the Contractor and the Dewatering Subcontractor shall prepare and submit to the Consultant a detailed Dewatering and Monitoring Plan describing timing, methodologies, treatment, equipment to be used, locations, parameters, applicable criteria, contingency plans, reporting frequency and reporting roles that meet or exceed the criteria and conditions imposed by the MOECC’s PTTW and the [TRCA’s][ LSRCA’s] permit.

## Dewatering Permit

### *[Note to Consultant – include TRCA/LSRCA Permit Number and Date and List conditions. A sample reference has been included for formatting purposes.]*Conditions of [TRCA][LSRCA] Permit No. [ ] dated [ ]:

### *[Note to Consultant- Make reference to appropriate condition in the Supplementary condtions]*

### The Dewatering and Monitoring Plan shall include, but not be limited to:

#### Proposed detailed dewatering methodology, schedule, equipment, method, standby equipment and power supply, including any lead times for any equipment to be used

#### Flow meters and data loggers for each dewatering and discharge location and for the final discharge piping at all dewatering and discharge locations

#### Location of generators and other noise producing equipment and the anticipated decibel levels, including any noise attenuation required and methods to be used to remain compliant to noise level thresholds from local noise by-law requirements and all other applicable local, provincial and federal standards

#### Relationship between dewatering equipment, new and existing structures, the excavation plan, and excavation shoring systems

#### Location of all dewatering discharge points

#### Location and dimensions of portable sedimentation tanks (if required), geotextile filter bags and straw or rock check dams

#### Details of screens, geotextile filter bags and other filter media to be employed

#### Location of the groundwater observation wells

#### Location of all piezometers and monitoring points

### Shop drawings are to bear the seal and signature of the Contractor’s engineer licensed in the province of Ontario.

#### These submittals are for record purposes only and will not be reviewed by the Consultant or the Region for adequacy

#### Submission of records for the dewatering and discharge rates at all locations.

### Any reports provided or referenced in the Contract Documents do not design a dewatering system, but provide an analysis of the geological and hydrogeological setting of the Site, as well as the expected rate of dewatering in order to obtain the desired drawdown. The most effective dewatering system to suit the prevalent ground conditions and the design of the dewatering operations are the sole responsibility of the Contractor.

### The Contractor shall determine the need for, designing and implementing any specific dewatering scheme to maintain the stability of excavations and ensure they are free of water. Excavations shall be monitored to ensure they remain stable and free of water.

### The Contractor shall comply with the applicable Fisheries Timing Windows where no in-stream works at the [ ] crossing shall be conducted outside of the *[insert window dates]* window. *[Consultant to insert information regarding applicable fisheries windows]*

### The Contractor shall also comply with any other requirements of the Ministry of Natural Resources and Forestry (MNRF) under the Endangered Species Act, as well as with the requirements of The Regional Municipality of York Sewer Use By-Law, By-Law No. 2011-56, and requirements of the Toronto and Region Conservation Authority (TRCA) and Department of Fisheries and Oceans (DFO). *[Consultant to amend list of applicable authorities as necessary]*

## Measurement and Payment

*[Choose one of the following payment language provisions that best suits the individual project.*

*If this Section is not specifically referenced by an item in the Bid Form, please use the following language:*

### 1. The work of this Section will not be measured separately for payment. All costs associated with the work of this Section shall be included in the Contract Price.

*OR If this Section is specifically referenced in the Bid Form, use the following language and identify the relevant item in the Bid Form:*

### All costs associated with the work of this Section shall be included in the price(s) for Item No(s). \_\_\_ in the Bid Form.

*If the work of this Section is to be measured and paid for by several different methods, please amend the standard wording given above to reflect the different methods of measurement and payment.*]

### The price for Item [ ] in the Bid Form shall include full compensation for all labour, materials and equipment required to complete the work of this Section. Payment shall be made upon the Region’s approval of the completed Dewatering and Monitoring Plan submitted by the Contractor. The Contractor shall revise and modify the Dewatering and Monitoring Plan as directed by the Consultant at no additional cost.

**END OF SECTION**