

- 1 General
- 1.1 **SUMMARY**
 - .1 Section Includes
 - .1 Labour, Products, equipment and services necessary to complete the Work of this section.
 - .2 Conform with all sections of Division 1, 21, 22, 23 and 25 as applicable.
- 1.2 **SUBMITTALS**
 - .1 Shop Drawings
 - .1 Submit Shop Drawings in accordance with Section 01 33 00.
 - .2 Operation and Maintenance Data
 - .1 Submit printed operation instructions and maintenance data in accordance with Section 01 33 00.
- 2 Products
- 2.1 **OIL INTERCEPTORS, GREASE INTERCEPTOR**
 - .1 Prefabricated Option
 - .1 Polyester resin basin or double wall steel.
 - .2 Control panel with level monitoring and local alarm.
 - .3 Suitable for underground installation.
 - .4 Extended manway to suit installation depth.
 - .5 Thirty year warranty against leakage, corrosion and structural failure.
 - .6 Discharge to 10 ppm hydrocarbons.
 - .7 Internal oil reservoir with alarm monitoring system, remote control unit mounted in visible area complete with light and audio alarm.
 - .8 Cam and groove couplers
 - .1 Cam and groove complete with dust PWG type "D" and "DP", 100 mm diameter for oil interceptor through the wall remote discharge line. Product to be interchangeable with oil interceptor.
 - .9 Acceptable Manufacturers:
 - .1 Proceptor Model OMC 6000 - Green Turtle Technologies – oil interceptor
 - .2 Proceptor Model GMC 500 - Green Turtle Technologies – grease interceptor
 - .3 Zurn
 - .4 STRIEM

.10 Control and Monitoring Systems (*Future* BAS Integration)

- .1 Any vendors that are authorized dealers or distributors of the following control systems are acceptable:
 - .1 Delta Controls
 - .2 Reliable Controls
 - .3 Schneider Electric SmartX Series
 - .4 Distech Controls
 - .5 Johnson Controls Facility Explorer
 - .6 Honeywell CIPer series, Spyder Models 5 or 7
- .2 BAS System Integration:
 - .1 All control systems must be integrated to the City's J2 Innovations Fluid Integration (FIN) serve, including but not limited to the following:
 - .1 Graphical user interface (monitoring and control)
 - .2 Alarming
 - .3 Data Trending
 - .4 Data Archiving
 - .5 Project Haystack naming convention
 - .2 The installer must be licensed by J2 Innovations to sell, install, program and configure Fluid INtegration (FIN).
 - .3 Building Controllers (BC) must be Tridium Niagara JACE with the Haystack module and driver. The installer must be a licensed Tridium system integrator for any Tridium BCs or embedded or edge Niagara Framework products used. Soft JACE is not accepted.
- .3 Licensing Requirements
 - .1 Licenses shall be provided to and in the name of the City of Toronto
 - .2 Licenses shall be perpetual, transferrable, assignable and royalty free.
 - .3 **Tridium Licenses shall allow all workbench/supervisor brands complete system access and functionality.**
- .4 **Installer and Manufacturer Qualifications**
 - .1 **Installer shall have an established working relationship with Control System Manufacturer.**

- .2** Installer shall have successfully completed control system's control system training. Upon request, installer shall present record of completed training including course outlines.
- .3** It is the intent of these specifications to define an open protocol state-of-the-art distributed computerized Building Management and Control System, which is user friendly, has known reliability, is extremely responsive, and which is to be designed, installed, implemented, and supported by a local office of approved bidders.
- .4** BAS Contractor provides three locations for successful installations of similar open protocol computer-based systems. Sites provided must consist of more than 150 hardware inputs/outputs. Project sites must be local to the location of this project.

2.2 CONCRETE MANHOLE INCLUDING CAST IRON COVER

- .1** Provide concrete 1500 mm diameter maintenance manhole manufactured in accordance with OPSD 701.011 including precast base slab riser, transition, gaskets, heavy duty gas tight 792 mm diameter cast iron cover square frame with circular cover per OPSD 401.030 and hollow aluminum steps as per OPSD 405.010.
- .2** Height and configuration as per Drawings.
- .3** Manufacturer: M CON, Ottawa, 1-800-267-5515, or accepted equal.

2.3 CAST IRON COVERS

- .1** Provide square frames and cover for sanitary sump pit as per Drawings.

3 Execution

3.1 INSTALLATION

- .1** Oil Interceptors and Manholes
 - .1** Install interceptors in accordance with manufacturer's recommendations including concrete embedding at base to prevent buoyancy.
 - .2** Connect interceptor vents and manhole vents to outside as shown on Drawings.
 - .3** For oil interceptors, install discharge lines as shown on Drawings.
 - .4** Coordinate installation and concrete Work with general trades.
 - .5** Install control box on closest wall with disconnect switch in compliance with Section 26 05 02.

End Of Section