

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 7086-C74LWU Issue Date: November 10, 2021

2639025 Ontario Inc. 4370 St. John's Side Road, City of Markham, Ontario, L4A 2T7

Site Location: 225 Line 7 North, Oro-Medonte

Lot 19, Concession 8

Township of Oro-Medonte,

County of Simcoe, Ontario, L0L 2E0

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the establishment of sewage works for the collection, transmission, treatment and disposal of stormwater from the 86.1 ha. site for development and sanitary sewage and subsurface effluent disposal for a design capacity of 104 cu.m./day to service an Automotive/industrial themed development, consisting of the following:

Stomwater Management (SWM) Facilities: for conveyance Control of Post development flows to predevelopment levels for all storms upto and including 100-year events and Quality Control of stormwater run-off to enhanced (80% TSS removal) level, consisting of following elements:

- **1. Conveyance stormsewers:** The interior track will be serviced by approximately 2,800 m of PVC and concrete storm sewers, designed to convey minor flows generated by the 5-year storm event from all contributing drainage areas. Storm sewer run-off will drain south to Outlet #1 after being routed through the Stormwater Management Facilities (SWM Facility #1, SWM Facility #2 and SWM Facility #3) or routed through ditching along Line 7 North to Outlet #1.
- 2. Detention and Treatment Facility #1 (catchment area 33.3 ha, imperviousness 18.8%):

One (1) dry pond located in the south-western quadrant of the site with three (3) inlet structures including rip-rap pads at the entrance of Temporary Enhanced Swale #1, Temporary Enhanced Swale #2 and Temporary Ditch # 1, having a maximum available storage volume of 13,765 cubic metres, an extended detention volume of 2,434 cubic meters, at a maximum depth of 1.43 m,

governed by a four-stage outlet control structure comprised of one (1) 172 mm diameter orifice plate located within one (1) 1,200 mm diameter CSP riser to discharge via a 300 mm diameter CSP culvert, a 300 mm diameter CSP culvert, a 450 mm diameter CSP culvert and a 530 mm deep trapezoidal weir with bottom width of 4.25 m and 10:1 side slopes allowing for a maximum discharge rate of 1.48 cubic metres per second during the 1:100-year storm event to the roadside ditch along Line 7 North to Outlet #1, and ultimately into Burl's Creek approximately 840 m downstream;

An 11.0 m wide, 300 mm deep emergency rip-rap spillway at elevation 289.13 designed to safely convey the uncontrolled Regional (Hurricane Hazel) storm flow rate of (3.51 cubic meters per second) in the event the outlet structures become blocked.

3. Detention and Treatment Facility #2 (catchment area 7.8 ha, imperviousness 42.1%):

One (1) dry pond located in the interior track area of the site with two (2) inlet structures comprised of rip-rap pads at the entrance of Permanent Enhanced Swale #1 and Temporary Enhanced Swale #3, having a maximum available storage volume of 3,685 cubic metres, an extended detention volume of 778 cubic meters, at a maximum depth of 1.32 m, governed by a two-stage outlet control structure comprised of one (1) 111 mm diameter orifice plate located within one (1) 1,200 mm diameter CSP riser to discharge via a 300 mm diameter CSP culvert and two (2) 525 mm diameter CSP culverts, allowing for a maximum discharge rate of 0.55 cubic metres per second during the 1:100-year storm event to a 2.4 m by 1.2 m concrete box culvert (Permanent Conveyance Culvert #2), to convey run-off under the Track to the Line 7 North roadside ditch to Outlet #1 and ultimately into Burl's Creek.

A 3.25 m wide, 300 mm deep emergency overflow weir designed to provide conveyance of the uncontrolled peak flow Regional (Hurricane Hazel) of (1.09 cubic meters per second) in the event the outlet structures become blocked.

4. **Detention Facility #3** (catchment area 3.5 ha, imperviousness 34%):

One (1) underground storage facility with a footprint area of approximately 622.0 m², located downstream of storm maintenance structures STM MH115 and STM MH116, comprised of 1,408 Layfield single-stacked ST-24 StormTank modules, enclosed within an impermeable liner complete with a debris header row to allow additional sediment to collect in a dedicated cell of the system allowing for easier maintenance/clean-out access, to provide 400 cubic metres within the StormTank modules and 13.8 cubic meters and 26.5 cubic meters storages in the upstream storm sewer manhole structures and storm sewers respectively. Detention and release rates from SWM Facility #3 to be governed by a 450 mm diameter outlet storm sewer to discharge south at a maximum flow rate of 0.31 cubic metres per second to the interior track area, to Permanent Culvert #2 and convey all run-off under the track to the Line 7 North roadside ditch to Outlet #1 and ultimately into the Burl's Creek.

5. Treatment Facility - Oil Grit Separator Unit #1 (OGS #1 for catchment area 0.4 ha, imperviousness 57%):

OGS #1: an on-line unit (Downstream Defender Model DD4- Hydro International or approved equivalent) located downstream of the North Pit lane and is a 1,200 mm diameter structure having a total volume **of** 1.75 cu.m., including 265 Litres of oil storage and 0.87 cu.m. of sediment volume with a treatment flow rate of 85 litres per second; to discharges via a 300 mm diameter outlet pipe to Permanent Enhanced Swale #1 and ultimately into SWM Facility #2 as described above.

6. Treatment Facility - Oil Grit Separator Unit #2 (OGS #2) (catchment area 0.8 ha, imperviousness 79%):

OGS #2: an on-line unit (Downstream Defender Model DD6- Hydro International or approved equivalent) located downstream of the South Pit lane and is a 1,800 mm diameter structure having a total volume of 5.34 cu.m., including 818 Litres of oil storage and 2.37 cu.m. of sediment volume with a treatment flow rate of 227 litres per second; to discharges via a 450 mm diameter outlet pipe overland to Temporary Enhanced Swale #1 and ultimately into SWM Facility #1 as described above.

7. Detention and Treatment Facilities-Enhanced Grass Swales:

Temporary Enhanced Swale #1: located east of SWM Facility #1 and is 480 m long, trapezoidal channel with bottom width of 4.0 m and 3:1 side slopes, 0.30% channel slope, a total flow depth of 0.50 m to receive drainage from 11.6 ha area during minor and major storm events and is designed to provide water quality treatment during the 25 mm storm event at a maximum velocity of less than 0.50 m/s and peak flow conveyance of the 1:100-year storm event flow of 1.57 m3/s without overtopping, finally to discharge into SWM Facility #1 as described above.

Temporary Enhanced Swale #2: located north of SWM Facility #1 and is 500 m long, trapezoidal channel with bottom width of 5.5 m and 3:1 side slopes, 0.3% channel slope, a total flow depth of 0.50 m to receive drainage from 15.4 ha area during minor and major storm events and is designed to provide water quality treatment during the 25 mm storm event at a maximum velocity of less than 0.50 m/s and peak flow conveyance of the 100 year storm event flow of 2.05 m3/s without overtopping, to discharge into SWM Facility #1 as described above.

Temporary Enhanced Swale #3: located west of SWM Facility #2 and is a 145 m long, trapezoidal channel with bottom width of 2.75 m and 3:1 side slopes, 0.5% channel slope, a total depth of 0.50 m to receive drainage from 2.8 ha area during minor storm events and 3.2 ha area during major storm events and is designed to provide water quality treatment during the 25 mm storm event at a maximum velocity of 0.50 m/s along with safe conveyance of the 1:100-year peak flow of 0.68 m3/s without overtopping, to discharge into SWM Facility #2 as described above.

Permanent Enhanced Swale #1: located north of SWM Facility #2 and is a 120 m long, trapezoidal channel with bottom width of 2.3 m and 3:1 side slope, channel slope between 0.3% and 3.0%, a maximum depth of 0.50 m and to receive drainage from 3.8 ha area during minor storm events and 3.4 ha area during major storm events and is designed to provide water quality treatment during the 25 mm storm event at a maximum velocity of 0.50 m/s along with safe conveyance of the 1:100-year peak flow of 0.76 m3/s without overtopping, to discharge into SWM Facility #2 as described above.

Permanent Enhanced Swale #2: located in the southeast quadrant of the site, is 100 m long, trapezoidal channel with bottom width of 0.5 m and 3:1 side slopes, 0.5% channel slope, a maximum depth of 0.50 m to receive drainage from 0.7 ha area during minor and major storm events and is designed to provide water quality treatment during the 25 mm storm event at a maximum velocity of 0.50 m/s along with safe conveyance of the 1:100-year peak flow of 0.21 m3/s without overtopping, to discharge southeast to Owner's undeveloped land and ultimately into the Burl's Creek;

and other ancillary drainage structures including culverts and ditches, including erosion and sediment control measures and all other appurtenances essential for the proper operation of the aforementioned sewage works;

<u>Sanitary Sewage Works:</u>-establishment, usage and operation of new non-municipal sewage works, for the treatment of sanitary sewage from the development and disposal of effluent to a subsurface septic system via a Sewage Treatment Plant and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Secondary

Details of Service Area:

• Type of Occupancy: Commercial/Industrial/Permanent

Design Capacity of Sewage Treatment Plant:

Design Capacity with All Treatment Trains in Operation	New Works
Maximum Daily Flow (MDF)	104 m³/d
Average Daily Flow (ADF- design flow after flow balancing)	43 cu.m./day

Influent and Imported Sewage

Receiving Location	Types
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	Sanitary Sewage

Proposed Works:

Sanitary Sewage Pumping Stations

Pumping Station 2 (SPS-2):

• One (1) 2 m diameter and 6 m deep fibreglass wet well equipped with secured access hatches, PVC vent with activated carbon filter, duplex submersible sewage pumps (duty point approximately 2.7 L/s at 18.9 m TDH), and control float switches, to discharge through a 50 mm diameter forcemain to MH 10 located upstream of Pumpstation 1 (SPS #1) as described below.

Pumping Station 1 (SPS-1):

• One (1) 3 m diameter and 6.7 m deep fibreglass wet well equipped with secured access hatches, PVC vent with activated carbon filter, duplex submersible sewage pumps (duty point approximately 5.1 L/s at 11.3 m TDH), and control float switches, to discharge through a 50 mm diameter forcemain to STP #1.

Sewage Treatment Plant (STP #1): A package sewage treatment plant consists of the following elements:

Preliminary Treatment System:

Screening: None;

Primary Treatment System

- A 38 m³ capacity primary clarifier, 3.05 m diameter by 5.88 m long, with clarified raw sewage decanted into the equalization tank and sludge pumped out as required by vacuum truck;
- Two (2) 100 m³ capacity flow equalization tanks; each sized 3.05 m in diameter and 15.33 m long, equipped with coarse bubble air diffusers, submersible sewage pumps

(duty and stand-by), common level transmitter, and three blowers; to discharge into the biological treatment tank as follows:

Secondary Treatment System: Biological Treatment Tank

- A 47 m³ capacity tank, sized 3.05 m in diameter 7.25 m long, equipped with fine bubble diffusers, submersible sewage pumps (duty and stand-by), level transmitter for pump control, and to discharge liquid into a membrane filtration system as described below and with waste activated sludge pumped to the sludge holding tank as described later; and
- two (2) additional blowers (1 duty and 1 stand-by), each rated at 205.5 Nm³/hr; and
- two (2) in-line fine screens.

Post-Secondary Treatment System

- Membrane Filtration System
 - two (2) parallel trains of membrane filtration system rated at a Peak Hourly Flow of 10.65 m³/h, consisting of three (3) number of filtration cassettes in each, complete with a common intermittent backwash system, and activated sludge return to the inlet of the biological treatment tank;

Disinfection System

None.

Sludge Management System

• One (1) sludge holding tank, with a storage capacity of 45 cu.m., consisting of coarse bubble air diffusers, a submersible sewage pump, level switches for pump control, and two blowers.

Supplementary Treatment Systems / Chemical dosing and storage:

- Phosphorus Removal
 - one (1) 2,000 L capacity chemical storage tank and one (1) metering pump rated at 0 1 L/h; to dose into the Biological treatment tank;
- Alkalinity Addition
 - one (1) 1,000 L capacity chemical storage tank and one (1) metering pump rated at 0 1 L/h; to dose into the Biological treatment tank;

Final Effluent Pumping Chamber (EPC-1) Flow Measurement and Sampling Point

- **Pumping Chamber**: one (1) 3 m diameter and 5.6 m deep precast concrete wet well equipped with access hatches, duplex submersible sewage pumps (duty point approximately 1.5 L/s at 18.8 m TDH), high level float control switch with audible/visual alarm and vent pipe. The effluent pumping chamber will discharge via a 50 mm diameter forcemain to an Automatic distribution valve(s) for distribution into a leaching bed (LB #1) for subsurface disposal.
- Flow meter and sample port: located on the discharge line of each membrane permeate pump prior discharge into the subsurface effluent disposal leaching bed as described below:

Subsurface Effluent Disposal:

• Leaching Bed (LB #1): One fully raised, Type A dispersal bed constructed within the northern track, consisting of four (4) zones, each with a stone layer encompassing gravity flow distribution piping and an underlying layer of leaching bed fill with sand materials mixed with high silicate and iron particles with composite percolation rate of 10 minutes/cm., each leaching bed zone is divided in three cells, each consisting of six (6) runs of 100 mm diameter, 27 m long distribution pipes; complete with the automatic distribution valves, sequentially dose one cell at a time with each pump cycle, evenly distributing effluent throughout the leaching bed;

including all other mechanical system, electrical system, instrumentation and control system, stand-by power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only;

all in accordance with the submitted supporting documents listed in **Schedule A.**

For the purpose of this environmental compliance approval, the following definitions apply:

- 1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
- 2. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
- 3. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
- 4. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 5. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
- 6. "Owner" means 2639025 Ontario Inc. and its successors and assignees;
- 7. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
- 8. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
- 9. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 10. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, that are required to meet the design objectives stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);
- 11. "Grab Sample" means an individual sample of at least 1000 millilitres collected in an appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;
- 12. "Influent" means flows to the Sewage Treatment Plant from the collection system but excluding process return flows.
- 13. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28;
- 14. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40;
- 15. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;
- 16. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 17. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage

treatment plant site excluding the Final Effluent disposal facilities;

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

- 1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
- 3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 4. The issuance of, and compliance with the conditions of, this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage works; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.
- 5. This Approval is for the treatment and disposal of stormwater run-off from the proposed development of approximately 86.1 hectares of the site. This Approval is also for the conveyance of stormwater run-off from an external area of approximately 16.4 hectares draining through the site. The Approval is based on a Phase 1 development area with imperviousness of approximately 17%. This approval will require an amendment if:
 - a. future development, or changes within the total drainage area result in a requirement for increased storage volumes or increase the flows to or from the stormwater management facilities,
 - b. any structural/physical changes to the stormwater management facilities are required,
 - c. additional inlets or outlets to the stormwater management facilities are proposed.

2. EXPIRY OF APPROVAL

- 1. This Approval will cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.
- 2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than **five (5) years**, the Owner shall submit an application for extension at least twelve (12) months prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

3. CHANGE OF OWNER

- 1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of address of Owner;
 - b. change of Owner, including address of new owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c.B17* shall be included in the notification to the District Manager; or
 - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C39* shall be included in the notification to the District Manager.
- 2. In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.
- 3. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

4. CONSTRUCTION OF THE WORKS

1. Upon the construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.

2. Within one (1) year of the construction of the *Sewage works* a set of as-built drawings showing the works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

5. OPERATION AND MAINTENANCE

- 1. The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety, health or flooding hazard to the general public.
- 2. The Owner shall undertake an inspection of the condition of the Stormwater Management (SWM) Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.
- 3. The Owner shall construct, operate and maintain the **(SWM)** Works with the objective that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam or discoloration on the receiving waters.
- 4. The Owner shall ensure the immediate clean-out of the Works after a fuel or oil spill capture.
- 5. The Owner shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:
 - a. loss of fuel or oil to the Works; or
 - b. a spill within the meaning of Part X of the EPA.
- 6. The Owner shall prepare an operations manual prior to the commencement of operation of the Works that includes, but is not necessarily limited to, the following information:
 - a. operating and maintenance procedures for routine operation of the Works;
 - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - c. repair and maintenance programs, including the frequency of repair and maintenance

for the Works;

- d. contingency plans and procedures for dealing with potential abnormal situations and for notifying the District Manager; and
- e. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
- 7. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference at the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- 8. The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the Works for inspection by the Ministry. The logbook shall include the following:
 - a. the name of the Works;
 - b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the Works; and
 - c. the date of each spill within the catchment area, including follow-up actions and remedial measures undertaken.
- 9. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.
- 10. The Owner shall ensure that, at all times, the **Sanitary Sewage Works** and the related equipment and appurtenances used to achieve conformance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and relevant regulations made under the OWRA, process controls and alarms and the use of process chemicals and other substances used in the Works.
- 11. The Owner shall, upon the construction of **Sanitary Sewage Works**, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.
- 12. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground

works is protected from vehicle traffic.

- 13. The Owner shall visually inspect the general area where sewage works (subsurface disposal bed) are located for break-out once every month during the operating season.
- 14. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:
 - a. sewage discharge to that subsurface disposal system shall be discontinued;
 - b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;
 - c. submit a written report to the District Manager within one (1) week of the break-out;
 - d. access to the break-out area shall be restricted until remedial actions are complete;
 - e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and
 - f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.
- 15. The Owner shall have a valid written agreement with a hauler who is in possession of a Waste Management Systems Approval, for the treatment and disposal of the sludge generated from the Works, at all times during operation of the Works.
- 16. The Owner shall ensure that flow of treated effluent discharged into the subsurface sewage system does not exceed 104,000 litres per day.

6. TEMPORARY EROSION AND SEDIMENT CONTROL

- 1. The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every two (2) weeks and after each significant storm event (a significant storm event is defined as a minimum of 25 millimetres of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.
- 2. The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and erosion control measures.

7. EFFLUENT OBJECTIVES

- 1. The Owner shall design and undertake everything practicable to operate the Works in accordance with the following objectives:
 - a. Effluent parameters design objectives listed in the table(s) included in **Schedule B**.
 - b. Effluent from the **Stormwater Management Works** is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.
- 2. In the event of an exceedance of the objective of **Sanitary Sewage Works** set out in subsection 1, the Owner shall:
 - a. notify the District Manager as soon as possible during normal working hours;

9. EFFLUENT MONITORING

- 1. The Owner shall, upon commencement of the operation of the **Sanitary Sewage Works**, carry out the monitoring program identified in **Table 2 of Schedule B**. All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- 2. Samples shall be collected at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the effluent monitoring tables in **Schedule B.**
- 3. The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - a. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;
 - b. the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions;
 - c. for any parameters not mentioned in the documents referenced in Paragraphs 3.a and 3.b, the written approval of the District Manager shall be obtained prior to sampling.
- 4. The measurement frequencies specified in the effluent monitoring and sludge solids monitoring prior to disposal in tables in **Schedule B** in respect of any parameter are

- minimum requirements which may, after (24) months of monitoring in accordance with this Condition, be modified by the Director in writing from time to time.
- 5. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.
- 6. definitions for frequency:
 - i. Bi-weekly means once every two weeks;
 - ii. Monthly means once every month;
 - iii. Annually means once every year;
- 7. The Owner shall monitor and record the **Sanitary Sewage** effluent flow rate and daily quantity dosed into the subsurface disposal beds, using flow measuring devices or other methods of measurement as approved below calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flowrate.
- 8. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

9. **REPORTING**

- 1. One (1) week prior to the start-up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
- 2. The Owner shall, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- 3. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption Of Spills and Reporting of Discharges), the Owner shall, within fifteen (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and Ontario Regulation 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.
- 4. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
 - a. a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 7, including a summary and interpretation of all monitoring data, including

an overview of the success and adequacy of the sewage Works;

- b. a description of any operating problems encountered and corrective actions taken;
- c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works, including an estimate of the quantity of any materials removed from the Works;
- d. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- f. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- g. a summary of all spill or abnormal discharge events; and
- h. any other information the District Manager requires from time to time.

10. SPILL CONTINGENCY PLAN

- 1. Within six (6) months from the issuance of this Approval, the Owner shall implement a spill contingency plan that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. The Owner shall, upon request, make this plan available to Ministry staff. This plan shall include as a minimum:
 - a. the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;
 - b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;
 - c. a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);
 - d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;
 - e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and Ministry Spills

Action Centre 1-800-268-6060;

- f. Safety Data Sheets (SDS) for each hazardous material which may be transported or stored within the area serviced by the Works;
- g. the means (internal corporate procedures) by which the spill contingency plan is activated;
- h. a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;
- i. an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and
- i. the date on which the contingency plan was prepared and subsequently, amended.
- 2. The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.
- 3. The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
 - Condition 1.4 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
- 2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
- 3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 4. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
- 5. Condition 5 is included as regular inspection and necessary removal of sediment and excessive

decaying vegetation from the Works are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the Works. The Condition also ensures that adequate storage is maintained in the Works at all times as required by the design. Furthermore, this Condition is included to ensure that the Works are operated and maintained to function as designed.

- 6. Condition 6 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.
- 7. Condition 7 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to meet on an ongoing basis. Also imposed are procedures to be followed to minimize environmental impact in the event the objectives are exceeded.
- 8. Condition 8 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the design and effluent objectives specified in the Approval and that the approved works does not cause any impairment to the receiving watercourse.
- 9. Condition 9 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
- 10. Condition 10 is included to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

Schedule A

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted by Jason Covey, P.Eng. of Tatham Engineering Limited, dated July 21, 2021, and signed by Geoffrey Campbell, Managing Partner, 2639025 Ontario Inc., and all supporting documentation and information.

Schedule B

Table 1: Sanitary Sewage - Final Effluent Design Objectives

Concentration Objectives upon completion of construction of all Proposed Works

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise indicated)
CBOD5	Annual Average Effluent Concentration	10 mg/L
Total Suspended Solids	Annual Average Effluent Concentration	10 mg/L
Total Phosphorus	Annual Average Effluent Concentration	0.50 mg/L

Monitoring Program

Table 2: Sanitary Sewage - Final Effluent Sampling Point at Permeate Pump discharge

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Bi-Weekly
Total Suspended Solids	Grab	Bi-Weekly
Total Phosphorus	Grab	Bi-weekly
Total Ammonia Nitrogen	Grab	Monthly
pH* and Temperature	Grab/Probe/Analyzer	Bi-Weekly
Un-ionized Ammonia**	As Calculated	Monthly

^{*}pH and temperature of the Final Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen.

^{**}The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended.

Monitoring Program (continued)

Table 3: Sanitary Sewage - Sludge/Biosolids Sampling Point at Holding tank/truck loading bay

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate as Nitrogen	Grab	Annually
Metal Scan	Grab	Annually
- Arsenic		
- Cadmium		
- Cobalt		
- Chromium		
- Copper		
- Lead		
- Mercury		
- Molybdenum		
- Nickel		
- Potassium		
- Selenium		
- Zinc		

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3

AND

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 10th day of November, 2021



Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

MN/

c: District Manager, MECP Barrie Jason Covey, P.Eng. Tatham Engineering Limited