

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5584-CD8GX8 Issue Date: April 25, 2022

Railside Industrial Group Inc. 5720 Schummer Line Regional Road 1 Brant, Ontario N0B 2A0

Site Location: Millbank Hardware Store 7003 Raymond Dr Township of Perth East, County of Perth, Ontario N0K 1L0

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:

SANITARY SEWAGE TREATMENT AND DISPOSAL

establishment, usage and operation of new non-municipal sewage works, for the treatment of sanitary sewage from the proposed Millbank Hardware Store at the above Site Location and disposal of effluent to subsurface via a Sewage Treatment Plant (RH2O MBBR Sewage Treatment System) and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Secondary

Details of Service Area

- Type of Occupancy: Commercial
- Type and Number of Units: 2,173 square metres of retail floor area

Design Capacity of Sewage Treatment Plant

Design Capacity with All Treatment Trains in Operation	Upon Completion of Construction of All Proposed Works
Maximum Daily Flow	17,840 litres per day (L/d)

Influent

Receiving Location	Type(s)
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

Proposed Works

Sewage Treatment Plant - RH2O Moving Bed Biofilm Reactor (MBBR) Sewage Treatment System

Equalization Tank (EQT)

• one (1) in-ground precast concrete equalization tank, having an approximate working volume of approximately 30 cubic metres, equipped with two (2) submersible pumps (one duty, one standby) each rated at a design flow rate of 169.4 litres per minute over a total dynamic head (TDH) of approximately 3.4 metres and a liquid level control system with a high level visual/audible alarm, receiving raw sewage from the proposed hardware store described above, and discharging effluent to the Online Sludge Storage/Primary Clarifier Tank (ON-SS/PC) described below via a forcemain;

Influent Sampling Point

• Sampling of Influent from the Equalization Tank (EQT);

Primary Treatment System

- one (1) in-ground 2-compartment precast concrete Sludge Storage/Primary Clarifier Tank (SS/PC), consisting of a sludge storage chamber with an approximate working volume of 4 cubic metres and a primary clarifier chamber with an approximate working volume of 2 cubic metres, receiving effluent from the flow equalization tank (EQT) described above, nitrified effluent recycle flow from the Bioreactor #2 Aerobic MBBR Tank (BIO#2) and sludge from the Second Clarifier (SC) and Final Clarifier (FC) described below, discharging effluent by gravity to the Pre-Denitrification/Bioreactor #1 Tank (PRE-DN/BIO#1) described below;
- sludge accumulated in the Online Sludge Storage/Primary Clarifier Tank (ON-SS/PC) shall be periodically transported for off-site disposal at an approved receiving facility;

Secondary Treatment System

• one (1) in-ground 2-compartment precast concrete Pre-Denitrification/Bioreactor #1 Aerobic MBBR Tank (PRE-DN/BIO#1), consisting of the following:

- Pre-Denitrification Anoxic MBBR Cell, having an approximate working volume of 1.3 cubic metres and containing 0.5 cubic metres of engineered plastic carrier media providing 250 square metres of media surface area; and
- Bioreactor #1 Aerobic MBBR Cell for BOD5 removal, having an approximate working volume of 2.7 cubic metres and containing 1 cubic metre of engineered plastic carrier media providing 500 square metres of media surface area, equipped with four (4) fine bubble diffusers installed longitudinally on one side of the reactor and one (1) blower rated at 11.5 normal cubic metres per hour, and discharging effluent to the Bioreactor #2 Aerobic MBBR Tank (BIO#2) described below;
- one (1) in-ground 2-compartment precast concrete Bioreactor #2 Aerobic MBBR Tank (BIO#2) for nitrification, having an approximate working volume of 4.0 cubic metres and containing 1.5 cubic metres of engineered plastic carrier media providing 750 square metres of media surface area, equipped with seven (7) fine bubble diffusers installed longitudinally on either side of the reactor, two (2) blowers each rated at 23 normal cubic metres per hour, and one (1) effluent recirculation pump that discharges nitrified effluent recycle flow from the reactor to the Online Sludge Storage/Primary Clarifier Tank (ON-SS/PC), and discharging effluent to the Secondary Clarifier (SC) described below;
- one (1) Secondary Clarifier (SC), having a specified surface area of approximately 1.6 square metres with a hopper bottom, an effective working volume of approximately 0.9 cubic metres and overall dimensions of approximately 1.7 metres by 1.2 metres by 1.5 metres (H), equipped with one (1) sludge return pump and one (1) skimmer pump that discharge sludge into the Online Sludge Storage/Primary Clarifier Tank (ON-SS/PC), and discharging by gravity to the Post-Denitrification Anoxic MBBR Tank (POST-DN) described below;

Post-Secondary Treatment System

- one (1) in-ground Post-Denitrification Anoxic MBBR Tank (POST-DN) for post-secondary denitrification, having an approximate working volume of 4.0 cubic metres and containing a volume of 2.0 cubic metres of engineered plastic carrier media providing 1,000 square metres of media surface area, and discharging by gravity to the Tertiary Polisher Bioreactor Aerobic MBBR Tank (BIO#3) described below;
- one (1) in-ground Tertiary Polisher Bioreactor Aerobic MBBR Tank (BIO#3) for tertiary polishing (i.e., leftover BOD5 removal), having an approximate working volume of 2.9 cubic metres and containing a volume of 1.08 cubic metres of engineered plastic carrier media providing 540 square metres of media surface area, equipped with four (4) fine bubble diffusers installed longitudinally on one side of the reactor and one (1) blower rated at 11.5 normal cubic metres per hour, and discharging by gravity to the Final Clarifier (FC) described below;
- one (1) Final Clarifier (FC), having a specified surface area of approximately 2.5 square metres with a hopper bottom, an effective working volume of approximately 2.9 cubic metres and overall dimensions of approximately 2.1 metres by 1.5 metres by 1.7 metres (H), equipped with one (1)

sludge withdrawal pump and one (1) skimmer pump that discharge sludge into the Online Sludge Storage/Primary Clarifier Tank (ON-SS/PC), and discharging by gravity to the Effluent Pump Tank (EPT) described below;

Effluent Pump Tank (EPT)

• one (1) Effluent Pump Tank (EPT), having an approximate working volume of 2.9 cubic metres, equipped with two (2) submersible effluent pumps (one duty, one standby) each rated at a design flow rate of 22 litres per minute over a TDH of approximately 3.0 metres and a liquid level control system with high level visual/audible alarms, and discharging via a 50 millimetre diameter forcemains to the Type A dispersal bed described below;

Supplementary Treatment System

Carbon Addition

• one (1) carbon dosing system for denitrification, consisting of one (1) chemical storage tank with secondary containment and two (2) chemical dosing pumps, dosing carbon material (MicroC-2000 or approved alternate) into the Pre-Denitrification Anoxic MBBR Cell and the Post-Denitrification Anoxic MBBR Tank (POST-DN);

Final Effluent Flow Measurement and Sampling Point

- Final Effluent flow measurement device at the Effluent Pump Tank (EPT);
- Sampling of Final Effluent from the Effluent Pump Tank (EPT) prior to discharge to the Type A dispersal bed;

Final Effluent Disposal Facilities

Type A Dispersal Bed

Q = 4,875 litres per day

• one (1) in-ground Type A dispersal bed, consisting of a stone layer having an area of 100 square metres (20 metres by 5 metres), a thickness of 200 millimetres and protected by permeable geo-textile fabric, overlying a sand layer having an area of 625 square metres (25 metres by 25 metres) and a thickness of 300 millimetres, complete with five (5) runs of 19 metre long 75 millimetre diameter perforated distribution piping spaced 0.95 metres apart, centre to centre, in the stone layer, and a 300 millimetre thick sand mantle extending a minimum of 15 metres beyond the outermost edge of the stone layer in the direction in which the effluent from the filter bed will move laterally;

including all other mechanical system, electrical system, instrumentation and control system, standby power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the aforementioned Works in accordance with this Approval, in the context of process

performance and general principles of wastewater engineering only;

STORMWATER MANAGEMENT

the establishment of stormwater management Works to service the proposed Millbank Hardware Store development at the above Site Location, for the collection, transmission, treatment and disposal of stormwater runoff from a total catchment area of 5.44 hectares, to provide Normal Level water quality protection and erosion control, and to attenuate post-development peak flows to pre-development peak flows for all storm events up to and including the 100-year storm event, discharging to the Grieve Municipal Drain, Siegner Municipal Drain and an existing ditch east of the site, consisting of the following:

Proposed Works

- enhanced grassed swale (catchment area 0.95 hectares, 73% impervious), located along the east property boundary, providing Normal Level of protection, having a total length of approximately 126 metres, a bottom width of 1-1.5 metres, side slopes of 4:1, a channel depth of approximately 0.092 metres, a channel slope of 1% and flow velocities of 0.5 metres per second or less during a 4 hour 25 millimetre design storm event, receiving surface runoff from the east portion of the site (within Subcatchment 202C) via overland sheet flow or the on-site grassed swales, discharging to the dry pond as described below via a rip-rapped inlet;
- oil and grit separator (catchment area 3.62 hectares, 66% impervious): one (1) oil and grit separator, Hydroguard HG 8 or Equivalent Equipment, located immediately upstream of the dry pond described below and downstream of DCBMH.1, providing Normal Level of protection, having a sediment storage capacity of 4.9 cubic metres, an oil storage capacity of 1,850 litres, a total storage volume of approximately 10 cubic metres, and a maximum treatment rate of 614 litres per second, receiving surface runoff from the north, west and south portions of the site (within undeveloped Catchment 201 and developed Subcatchment 202A and Subcatchment 202B) via storm sewers and grassed swales across the site, discharging via a 600 millimetre diameter outlet pipe to the dry pond as described below via a rip-rapped inlet;
- stormwater management facility (catchment area 5.01 hectares, 83% impervious): one (1) dry pond, located at the southeast corner of the property, having a maximum available storage volume of 3,344 cubic metres and a maximum depth of 2.0 metres, complete with two (2) riprap-lined inlets (one connected to the enhanced grassed swale at the northeast corner and one connected to the on-site storm sewer system at the west berm), one (1) 3.0 metre wide emergency overflow weir and spillway lined with Turfstone, and one (1) DICB outlet structure, consisting of a 230 millimetre diameter inlet orifice and a 450 millimetre diameter storm outlet pipe equipped with a 250 millimetre diameter orifice, allowing a maximum discharge of 255 litres per second under the 100-year storm event to the Siegner Municipal Drain located southeast of the site;

including 0.73 hectares of external agricultural lands west of the site and a small area of the developed

site with stormwater runoff discharging uncontrolled to the Grieve Municipal Drain;

including 0.27 hectares of external agricultural lands north of the site with stormwater runoff discharging uncontrolled to the existing ditch located east of the site; and

including erosion/sedimentation control measures during construction of the Proposed Works and all other controls and appurtenances essential for the proper operation of the aforementioned Works;

all in accordance with the submitted application and supporting documents listed in **Schedule A** forming part of this Approval.

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. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
- 3. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 4. "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;
- 5. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
- 6. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 7. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
- 8. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, including all Bypasses, that are required to meet the compliance limits stipulated in the Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);
- 9. "Grab Sample" or "Grab" 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;
- 10. "Influent" means flows to the Sewage Treatment Plant from the collection system;
- 11. "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;
- 12. "Maximum Daily Flow" (also referred to as Peak Daily Flow Rate or Maximum Day Flow) means the largest volume of flow to be received during a one-day period for which the sewage treatment process unit or equipment is designed to handle;
- 13. "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;
- 14. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month,

calculated and reported as per the methodology specified in Schedule F;

- 15. "Normal Operating Condition" means the condition when all unit process(es), excluding Preliminary Treatment System, in a treatment train is operating within its design capacity;
- 16. "OBC" means the Ontario Building Code, Ontario Regulation 332/12 (Building Code) as amended to January 1, 2015, made under the *Building Code Act*, 1992, S.O. 1992, c. 23;
- 17. "Operating Agency" means the Owner, person or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;
- 18. "Owner" means Railside Industrial Group Inc., including any successors and assignees;
- 19. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40;
- 20. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;
- 21. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;
- 22. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 23. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;
- 24. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment plant site excluding the Final Effluent disposal facilities;
- 25. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;
- 26. "Works" means the approved sewage works, and includes Proposed Works.

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 PROVISIONS

- 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. The approval for the oil and grit separator (Hydroguard HG 8 or Equivalent Equipment) is based on a combined drainage area of approximately 3.62 hectares and an average imperviousness of approximately 66%. Any future development changes within the total drainage area of the site that might increase the required storage volumes of or flows to the oil and grit separator will require an amendment to this Approval.

2. CHANGE OF OWNER AND OPERATING AGENCY

- 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. B.17*, as amended, shall be included in the notification;

- 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. C.39*, as amended, shall be included in the notification.
- 2. The Owner shall notify the District Manager, in writing, of any of the following changes within **thirty (30) days** of the change occurring:
 - a. change of address of Operating Agency;
 - b. change of Operating Agency, including address of new Operating Agency.
- 3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.
- 4. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

3. CONSTRUCTION OF PROPOSED WORKS

- 1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within **five (5) years** of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Works not in operation. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least **six (6) months** prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).
- 2. Upon completion of construction of the Proposed Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Proposed Works is constructed in accordance with this Approval.
- **3.** One (1) week prior to the commencement of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
- 4. Within **one (1) year** of completion of construction of the Proposed Works, a set of record drawings of the Works shall be prepared or updated. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.
- 5. The Owner shall ensure that the treatment technologies are installed in accordance with the

manufacturer's installation manual.

- 6. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.
- 7. The Owner shall ensure that an imported soil that is required for construction of any subsurface disposal bed as per this Approval is tested and verified by the Licensed Engineering Practitioner for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.

4. 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.

5. DESIGN OBJECTIVES

- 1. The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the Final Effluent parameters design objectives listed in the table(s) included in **Schedule B**.
- 2. The Owner shall design and undertake everything practicable to operate the stormwater management Works that 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 or sheen or foam or discolouration on the receiving waters.

6. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Sewage Treatment Plant such that compliance limits for the Final Effluent parameters listed in the table(s) included in **Schedule C** are met.

7. OPERATION AND MAINTENANCE

1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance 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.

- 2. If applicable, any proposed storm sewers or other stormwater conveyance in this Approval can be constructed but not operated until the proposed stormwater management facilities in this Approval or any other Approval that are designed to service the storm sewers or other stormwater conveyance are in operation.
- 3. 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 or health hazard to the general public.
- 4. The Owner shall prepare an operations manual prior to the commencement of operation of the **sanitary sewage treatment & disposal** Works that includes, but is not necessarily limited to, the following information:
 - a. operating procedures for the Works under Normal Operating Conditions;
 - 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. procedures for the inspection and calibration of monitoring equipment;
 - e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition.
 - f. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Spills Action Centre (SAC) and District Manager;
 - g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.
- 5. The Owner shall prepare an operations manual prior to the commencement of operation of the **stormwater management** 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 spills and any other 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.
- 6. The Owner shall maintain up to date operations manual(s) and make the manual(s) 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.
- 7. The Owner shall undertake an inspection of the condition of the stormwater management 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.
- 8. The Owner shall ensure that the Operating Agency fulfills the requirements under O. Reg. 129/04, as amended for the Works, including the classification of facilities, licensing of operators and operating standards.
- 9. The Owner shall, upon the construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the treatment process/technology (i.e., RH2O MBBR Sewage Treatment System). The maintenance agreement must be retained at the site and kept current for the operational life of the Works.
- 10. 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.
- 11. The Owner shall visually inspect the general area where sewage works are located for break-out once every month during the operating season.
- 12. 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.
- 13. 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.
- 14. The Owner shall ensure that flow of treated effluent discharged into the subsurface sewage system does not exceed **4,875 litres per day**.
- 15. The Owner shall maintain a logbook to record the results of all inspections, repair and maintenance undertaken, calibrations, monitoring and spill response or contingency measures undertaken and shall make the logbook available for inspection by Ministry staff. The logbook shall include the following:
 - a. the name of the operator making the entry; and
 - b. the date and results of each inspection, repair, maintenance, calibration, monitoring, spill response and contingency measure.
- 16. 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.

8. MONITORING AND RECORDING

- 1. The Owner shall, upon commencement of operation of the Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in **Schedule D** and record all results, as follows:
 - a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.
 - b. definitions and preparation requirements for each sample type are included in document

referenced in Paragraph 2.b.

- c. definitions for frequency:
 - i. Bi-weekly means once every two weeks;
 - ii. Monthly means once every month;
 - iii. Annually means once every year.
- d. a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.
- e. The measurement frequencies specified in **Schedule D** in respect to any parameter may, after **three (3) years** of monitoring in accordance with this Condition, be modified by the Director in writing.
- 2. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:
 - a. the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;
 - b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;
 - c. the publication "Standard Methods for the Examination of Water and Wastewater", as amended; and
 - d. for any parameters not mentioned in the documents referenced in Paragraphs 2.a, 2.b and 2.c, the written approval of the District Manager shall be obtained prior to sampling.
- 3. The Owner shall monitor and record the flow rate and daily quantity 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 of the following:
 - a. Influent flow to the Sewage Treatment Plant by the record of pump run time;
 - b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations
- 4. 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. The Owner shall report to the District Manager orally **as soon as possible** any non-compliance with the compliance limits, and in writing within **seven (7) days** of non-compliance.
- 2. 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.
- 3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- 4. The Owner shall prepare performance reports for the operations of the sanitary sewage treatment & disposal and stormwater management Works on a calendar year basis and submit to the District Manager in an electronic format 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 (Note: Items a, b, c, d, h, i & j apply to the sanitary sewage treatment & disposal Works only and the rest of the items apply to both):
 - a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
 - b. a summary and interpretation of all flow data and results achieved in not exceeding the maximum daily flow discharged into the subsurface disposal system;
 - c. a summary and interpretation of all Final Effluent monitoring data, including concentration, flow rates and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
 - d. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;
 - e. a summary of all operating issues encountered and corrective actions taken;
 - f. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
 - g. a summary of any effluent quality assurance or control measures undertaken;

- h. a summary of the calibration and maintenance carried out on all Influent and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;
- i. a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in deterioration of Final Effluent quality;
- j. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- k. a summary of any complaints received and any steps taken to address the complaints;
- 1. a summary of all situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
- m. any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works;
- n. any other information the District Manager requires from time to time.

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

- 1. Condition 1 regarding general provisions 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.
- 2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the 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.
- 3. Condition 3 regarding construction of Proposed Works is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.

- 4. Condition 4 regarding temporary sediment and erosion control 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.
- 5. Condition 5 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
- 6. Condition 6 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
- 7. Condition 7 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.
- 8. Condition 8 regarding monitoring and recording is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and compliance limits.
- 9. Condition 9 regarding reporting 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 this Approval.

Schedule A

- 1. Application for Environmental Compliance Approval for Municipal and Private Sewage Works, dated November 2, 2021 and received on November 9, 2021, submitted by Railside Industrial Group Inc., including the design brief, final plans, specifications and all supporting documentation submitted in support of this application.
- 2. Millbank Hardware Store Sewage System Design Report (revised), dated March 2022 and prepared by Carolyn Chan, P.Eng. of GM BluePlan Engineering Limited.
- 3. Revised engineering drawings titled "Site Plan for Sewage Works" and "Septic System Sections and Details", dated March 31, 2022 and prepared by Carolyn Chan, P.Eng. of GM BluePlan Engineering Limited.
- 4. Millbank County Hardware Stormwater Management Design Report (revised), 7003 Raymond Drive, Township of Perth East (Millbank), dated March 23, 2022 and prepared by Brian Fritz, P.Eng. of GM BluePlan Engineering Limited.
- 5. Revised engineering drawings titled "Site Servicing and Grading Plan" and "Notes and Details", dated March 23, 2022 and prepared by Brian Fritz, P.Eng. of GM BluePlan Engineering Limited.
- 6. Technical Memo, dated February 14, 2022 and prepared by Carolyn Chan, P.Eng. of GM BluePlan Engineering Limited.
- 7. Technical Memo 2, dated March 24, 2022 and prepared by Carolyn Chan, P.Eng. of GM BluePlan Engineering Limited.
- 8. Technical Memo 3, dated March 30, 2022 and prepared by Carolyn Chan, P.Eng. of GM BluePlan Engineering Limited.

Schedule B

Final Effluent Design Objectives

Final Effluent Parameter	Averaging Calculator	Objective (milligrams per litre unless otherwise indicated)
Nitrate as Nitrogen	Monthly Average Effluent Concentration	2.5 mg/L
pН	Single Sample Result	6.5 - 8.5 inclusive

Schedule C

Final Effluent Compliance Limits

Final Effluent Parameter	Averaging Calculator	Limit
		(maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent	10 mg/L
	Concentration	
Total Suspended Solids	Monthly Average Effluent	10 mg/L
	Concentration	
Nitrate as Nitrogen	Monthly Average Effluent	3.0 mg/L
	Concentration	
pH	Single Sample Result	between 6.0 - 9.5 inclusive

Schedule D

Monitoring Program

Influent - Influent sampling point

Parameters	Sample Type	Minimum Frequency
BOD5	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Kjeldahl Nitrogen	Grab	Monthly

Final Effluent - Final Effluent sampling point

Parameters	Sample Type	Minimum Frequency
CBOD5	Grab	Bi-weekly
Total Suspended Solids	Grab	Bi-weekly
Total Ammonia Nitrogen	Grab	Bi-weekly
Total Kjeldahl Nitrogen	Grab	Bi-weekly
Nitrate as Nitrogen	Grab	Bi-weekly
Nitrite as Nitrogen	Grab	Bi-weekly
pH*	Grab/Probe/Analyzer	Bi-weekly
Temperature*	Grab/Probe/Analyzer	Bi-weekly

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

Sludge/Biosolids

– Online Sludge Storage/Primary Clarifier Tank (ON-SS/PC)

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 Ontario Land 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 ("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:

Registrar* Ontario Land Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5 OLT.Registrar@ontario.ca	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 <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5
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* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.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 25th day of April, 2022

Fariha Parnu.

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

SW/

c: District Manager, MECP London District Office Carolyn Chan, P.Eng. and Brian Fritz, P.Eng., GM BluePlan Engineering