

CRH Canada Group Inc. 2300 Steeles Ave W, 4th floor Concord, Ontario L4K 5X6 Canada **T.** 905-761-7100 **F.** 905-761-7200

www.crhcanada.com

April 30, 2025

Chris Hyde
District Manager
Ministry of Environment,
Conservation and Parks
Barrie District Office
54 Cedar Pointe Dr., Unit 1201
Barrie, ON L4N 5R7

Neil Taylor Supervisor Ministry of Environment, Conservation and Parks Permit to Take Water Unit 125 St. Clair Avenue West Toronto, ON M4V 1P5

Dufferin Aggregates Teedon Pit - 2024 Annual Monitoring Report

Please find enclosed the Annual Monitoring Report for the Dufferin Aggregates Teedon Pit for the 2024 calendar year. This report fulfills the requirements for PTTW No. 6258-BRDJ2M, PTTW No. P-300-1196295834, ECA No. 1293-CF7J3M. Dufferin Aggregates is a CRH Company.

Hard copies of the report can be provided upon request.

Please do not hesitate to contact me if you have any questions or comments.

Yours sincerely,

Kevin Mitchell

Director of Approvals & Environmental Practices

Dufferin Aggregates, a CRH Company

M: 416-788-0015

E: kevin.mitchell@ca.crh.com

cc: Greg Athron, Senior Environmental Officer - MECP Barrie District Office Matt Zavitz – Dufferin Site Superintendent North



2024 Annual Monitoring Report

Teedon Pit

Dufferin Aggregates, a CRH Company 30 April 2025



Contents

1.	Introduction				
2.	Background				
	2.1	Geological/Hydrogeological Setting	1		
	2.2	Permit to Take Water (PTTW)	2		
	2.3	Environmental Compliance Approval (ECA)	3		
		2.3.1 Construction Dewatering	4		
3.	Site C	4			
	3.1	Construction of ECA Works	4		
4.	Hydra	5			
	4.1	5			
	4.2	6			
5.	Wate	7			
	5.1	7			
6.	Analytical Results				
	6.1	8			
	6.2	Private Water Well Sampling	9		
7.	Resp	onse to Public Inquiries	9		
8.	. Conclusions and Recommendations				
9.	Refer	rences	11		

Figure Index

Figure 1.1	Site Plan and Monitoring Locations
Figure 4.1	2024 Precipitation Summary
Figure 4.2	Groundwater Elevation Contours - Upper Aquifer - January 18, 2024
Figure 4.3	Groundwater Elevation Contours – Upper Aquifer - October 24, 2024
Figure 4.4	Hydrograph – Historical Groundwater Elevations
Figure 4.5	Hydrograph – 2024 Groundwater Elevations

Table Index

Table 4.1	Monitoring Well Completion Details
Table 4.2	2024 Groundwater Elevation Data
Table 5.1	Water Taking Summary (PTTW No. 6258 BRDJ2M) and Sump Pond Water Levels
Table 5.2	Water Taking Summary (PTTW P-300-1196295834)
Table 6.1	2024 Groundwater Analytical Data – SW1 and SW2

Appendices

Appendix A	Permit to Take Water No. 6258 BRDJ2M
Appendix B	Environmental Compliance Approval No. 1293-CF7J3M
Appendix C	Hydrographs
Appendix D	Permit to Take Water
	Appendix D.1 Permit to Take Water No. P-300-1196295834 Version 1
	Appendix D.2 Permit to Take Water No. P-200-1196295834 Version 2

1. Introduction

GHD was retained by Dufferin Aggregates, a CRH Company (Dufferin), to complete the 2024 Annual Monitoring Report (AMR) for the Dufferin Teedon Pit (Site) for the period between January 1 and December 31, 2024. This monitoring report was completed pursuant to and combines the associated monitoring results of:

- Ontario Ministry of the Environment, Conservation and Parks (MECP) Permit to Take Water (PTTW)
 No. 6258-BRDJ2M issued on January 14, 2021
- MECP PTTW No. P-300-1196295834 Version 1 issued on January 6, 2023
- MECP PTTW No. P-300-1196295834 Version 2 issued on December 21, 2023
- MECP Environmental Compliance Approval (ECA) No. 1293-CF7J3M issued on (December 6, 2022)

The Dufferin Teedon Pit is located at 40 Darby Rd, Township of Tiny, County of Simcoe, Ontario (north 1/2 Lot 79 Concession 1, PT south 1/2 Lot 80 Concession 1). Dufferin also owns land located to the North of the Site (Teedon Pit Extension). This AMR includes data collected by Dufferin and GHD and includes relevant data from the Teedon Pit Extension. A map of the Site and surrounding lands is presented on Figure 1.1.

The purpose of the AMR is to document the results of the 2024 monitoring program specified in the PTTW(s) and ECA. A copy of PTTW No. 6258-BRDJ2M is presented in Appendix A; copies of PTTW No. P-300-1196295834 Version 1 and Version 2 are presented in Appendix D-1 and D-2, respectively. A copy of the ECA is provided in Appendix B. An overview of the construction of works under ECA No. 1293-CF7J3M is documented herein, and the finalized works have otherwise been documented as required by the ECA.

The 2024 monitoring program and related activities include the following, which are discussed in detail in the subsequent sections:

- Quarterly hydraulic monitoring events (groundwater levels and datalogger downloads)
- Recording of water takings (completed by Dufferin)
- Daily Source Pond Water Level Monitoring (completed by Dufferin)
- Routine berm inspections (completed by Dufferin)
- Private water well sampling
- Sump Pond Water Quality Monitoring

2. Background

2.1 Geological/Hydrogeological Setting

The regional overburden deposits near the Site are approximately 140 to 150 metres (m) thick (Singer et al., 1999). They were deposited during and shortly after the Wisconsonian glaciation, and as such are all Pleistocene in age. The primary overlying deposits are the silty to sandy till. These deposits are stone-poor and carbonate-derived (OGS, 2003).

The top of bedrock elevations near the Site are approximately 130 to 140m AMSL (Singer et al., 1999). The bedrock beneath the overburden in this area is the Shadow Lake Formation, which is part of the Simcoe and Ottawa Groups and are Middle Ordovician in age (OSG, 2006). It is usually found to be more than 12 m thick, and due to its relative thinness the Shadow Lake Formation and overlying Gull River Formation are commonly portrayed as a single unit (Singer et al., 1999). The Shadow Lake Formation consists of shale, sandstone, limestone, and conglomerate.

The Teedon Pit is located above the Alliston Aquifer Complex (an overburden aquifer), which covers the entire area between the Oak Ridges Moraine and Georgian Bay. It consists of fine to coarse sand deposits that occur at variable

depths in close association with silt and clay deposits (Singer, 2003). All these materials were laid down in glacial and glaciolacustrine environments (Singer, 2003). The Alliston Aquifer Complex consists of multiple aquifers at shallow and deep levels. The Alliston Aquifer (referred to as the Upper Aquifer on-Site) has a relatively high permeability and generally has good water-yielding capacity. A localized, thick silt and clay aquitard underlies the source/sump pond, settling pond, and the unnamed pond and downstream unnamed tributary. The aquitard layer limits the interconnections between this shallow groundwater system (shallow groundwater zone) and the Upper Aquifer as is evidenced by the large (greater than 15 metres) water elevation difference between shallow groundwater zone monitoring wells and the Upper Aquifer monitoring wells (refer to Section 4.2).

2.2 Permit to Take Water (PTTW)

This monitoring report satisfies the requirements of the monitoring program under the MECP Section 34.1 of the Ontario Water Resources Act (OWRA) PTTW No. 6258-BRDJ2M which was issued on January 14, 2021 and amended January 19, 2021 as presented in Appendix A. The requirements of PTTW No. P-300-1196295834 are discussed in Section 2.3.1.

PTTW No. 6258-BRDJ2M includes the following authorized water takings, as specified in Table A, therein:

Source Name	Source Type	Taking Specific Purpose	Taking Major Category	Max Taken (L/min)	Max Hours Per Day	Max Taken (L/day)	Max Days Per Year
PW1-09 (WWR#7124734)	Well Drilled	Aggregate Washing	Industrial	950	24	1,368,000	210
Source Pond	Pond Dugout	Aggregate Washing	Industrial	7,274	12	5,237,280	210
					Total	6,605,280	

The PTTW No. 6258-BRDJ2M environmental monitoring requirements are presented in Condition 4.2 and summarized below:

Condition 4.2

- i. Install and maintain dataloggers at the on-Site and off-Site monitoring wells listed in Schedule B and monitor groundwater levels at a minimum frequency of every 4 hours. This monitoring shall occur, at a minimum, between February 15 and December 15 of each year for which the Permit is valid.
- ii. Should any other on-Site monitoring well be installed, then groundwater levels shall be monitored as per item (i) above and the data included in the Annual Monitoring Report.
- iii. Measure water levels in private water wells WWR 7150632 and WWR 5717709, if permission is granted by the well owners. Should the permission of either of these domestic water well owners be withdrawn, then the permit holder shall replace the well for which permission has been denied with a well in the same aquifer either on or off site.
- iv. Measure the water level elevation in the Source Pond between February 15 and December 15 when the pond is not frozen at a minimum frequency of twice per day, once in the early morning and once in the late afternoon or evening.

Please note the PTTW references the location, Source Pond (as above), the ECA also refers to this same location as the Sump Pond. Throughout this report this feature will be referred to as the Sump Pond; except were directly referencing a PTTW requirement. Within the Source/Sump Pond water levels and samples are collected in reference to monitoring location SW1, as shown on Figure 1.1.

2.3 Environmental Compliance Approval (ECA)

ECA No. 1293-CF7J3M was issued on December 6, 2022. Aggregate washing occurred on-Site in 2024 using the newly constructed aggregate washing system that was construction between November 22, 2023 and April 10, 2024.

ECA No. 1293-CF7J3M is presented in Appendix B.

Where applicable, prior to construction of the approved works, ECA No. 1293-CF7J3M routine environmental monitoring requirements were initiated in 2023 as presented in Condition 6.2 and Condition 7.2. The monitoring conditions are summarized below:

Condition 6.2 - Samples shall be collected and analyzed at the following sampling locations, at the sampling frequencies and using the sample type specified for each parameter listed:

SURFACE WATER MONITORING					
Sample Locations	1) The upgraded sump (source) cell (SW1); and				
	2)	The unnamed downstream pond (SW2)			
Sample 1) Before commencement operating season;		Before commencement of the operating season;			
	2) In April/May;				
	3)	In July/August; and			
	4)	In October/November			
Sample Type	e Grab				
Sample Parameters	Total Suspended Solids (TSS), Metals, Anions, Turbidity				

SURFACE WATER MONITORING				
Sample Locations	Water discharged from the upgraded sump (source) pond cell emergency overflow pipe discharging to the unnamed downstream pond			
Sample Frequency	During an emergency overflow event from the upgraded sump (source) pond cell emergency overflow pipe discharging to the unnamed downstream pond			
Sample Type	Grab			
Sample Parameters	Total Suspended Solids (TSS), Metals, Anions, Turbidity			

Condition 7.2 - Subject to landowner permission, samples of groundwater shall be collected at the location and frequency specified below, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

GROUNDWATER QUALITY MONITORING					
Sample Locations	Private water wells at the following addresses: 1) 127 Darby Road, Tay, Ontario; 2) 6970 Highway 93, Tiny, Ontario; 3) 7062 Highway 93, Tiny, Ontario; 4) 1189 Marshall Road, Tiny, Ontario; and 5) 1190 Marshall Road, Tiny, Ontario				
Sample Frequency	Quarterly (once every three months)				
Sample Type	Grab				
Sample Parameters	Total Suspended Solids (TSS), Metals, Anions, Turbidity				

It should be noted that under ECA Condition 7.0 groundwater quality monitoring is to be completed "until the installation of the lined recirculation cell has been completed".

2.3.1 Construction Dewatering

Prior to construction of the Approved ECA works, removal of water stored within the Sump Pond and on-Site discharge was required. On November 23, 2022, a Category 2 Permit to Take Water Application was filed and subsequently approved by MECP. PTTW No. P-300-1196295834 with an issue date of January 6, 2023.

PTTW No. P-300-1196295834 was issued with water taking restrictions (rate, volume, and hours of taking) consistent with PTTW No. 6258-BRDJ2M Table A for the Source Pond (see Section 2.2). The Taking Purpose of PTTW No. P-300-1196295834 was specified as Construction dewatering and not aggregate washing. The expiry date of PTTW No. P-300-1196295834 was December 31, 2023.

Water taken from the Source Pond was to be discharged on-Site within the lowest mined bench and allowed to infiltrate to the local groundwater system.

Due to a prolonged design phase, a request to extend PTTW No. P-300-1196295834 (Version 1) through May 31, 2024 was submitted on September 20, 2023 and renewed PTTW No. P-300-1196295834 (Version 2) was issued by MECP on December 21, 2023. No water was taken under PTTW No. P-300-1196295834 (Version 1).

PTTW No. P-300-1196295834 (Version 1) is presented in Appendix D-1 and PTTW No. P-300-1196295834 (Version 2) is presented in Appendix D-2.

Condition 4.2 of both permits requires that water takings be included in the Annual Monitoring Report which is required by Permit to Take Water No. 6258-BRDJ2M (Condition 4.3).

3. Site Operations

The Teedon Pit is licensed under the Ministry of Natural Resources (MNR) ARA Licence No. 3670 for above water table aggregate extraction of up to 600,000 tonnes annually. The Teedon Pit has an 85.39 hectare (ha) licensed area of which 50.5 ha can be extracted.

The Teedon Pit was acquired by Dufferin in 2017 and was previously owned by Cedarhurst Quarries & Crushing Limited since 1987. The accuracy of the hydraulic monitoring data collected prior to ownership by Dufferin, could not be confirmed as these data were collected by the previous owner; however, the data has been reviewed and deemed appropriate to include herein for context.

2024 Site operations included aggregate extraction and processing, which includes on-Site water use for aggregate washing operations, dust suppression, operational uses (i.e., equipment washing and filling office water supply), Sump Pond dewatering, and construction of the new ECA Works.

3.1 Construction of ECA Works

On November 22, 2023, Dufferin began construction of the works approved under ECA No. 1293-CF7J3M. Construction began with the removal of water stored within Sump Pond which began on November 22 and continued periodically through March 6, 2024.

Detailed structural/geotechnical design was completed by Geosyntec Consultants and construction of the works was completed by Dufferin (including third-party firms). On April 5, 2024, GHD completed an inspection of the works to confirm that the works were constructed in accordance with ECA No. 1293-CF7J3M as required by Condition 4.1. Following final confirmation from the design engineer at Geosyntec Consultants that the constructed works has been constructed as structurally designed and that outstanding ECA components identified during the April 5th Site visit were complete, a certification letter was prepared by GHD and submitted on to CRH on April 10, 2024 and provided to the MECP District Manager.

ECA Condition 5.11 requires that an operation manual be prepared prior to the introduction of wash water to the Works. However, it is GHD's understanding that the MECP District Manager granted an extension to allow for the operation of the works prior to finalization of the operations manual with the operations manual to be finalized by July 8, 2024. The operations manual and maintenance plan was finalized on July 8, 2024.

4. Hydraulic Monitoring

The following 2024 routine activities were completed by GHD at the Site, on behalf of Dufferin, and, on the dates presented below:

Date (2024)	Site-wide Hydraulic Monitoring	SW1 and SW2 Surface Water Sampling	Private Well Sampling			
January 18	Completed	NR	Completed			
April 5	NR	Completed	NR			
April 25	Completed	Completed	Completed			
July 25	Completed	Completed	NR			
October 24	Completed	Completed	NR			
NR – Monitoring not required						

Groundwater depths were measured using a water level meter to the nearest 0.01 m. Dataloggers were downloaded and verified at the pumping well, on-Site groundwater monitoring wells, private wells, and SW1 during each of the 2024 hydraulic monitoring events.

The monitoring well completion details are provided in Table 4.1 and the groundwater and surface water monitoring locations are presented on Figure 1.1. A summary of the 2024 groundwater elevations is provided in Table 4.2.

SW1 and SW2 sampling was completed as presented above and results are summarized in Section 6.0, below.

Private Wells sampling was conducted by GHD, as required by ECA No. 1293-CF7J3M Condition 7.2, in January and April 2024. The April 2024 private well sampling was the final event as the lined recirculation cell installation was completed on April 10, 2024. Please note that no sample was collected at 127 Darby Rd. in January 2024, at the request of the property owner; a sample was collected during the final event in April 2024.

In addition to the field activities completed by GHD, Dufferin completed the daily flow meter readings during periods of taking (PTTW Condition 4.1) and twice daily Sump Pond water level observation (PTTW Condition 4.2.iv.). Dufferin monitoring results are discussed in Section 5.

4.1 Precipitation

The 2024 daily and monthly precipitation data were obtained from Environment Canada's Barrie-Oro, Ontario station located approximately 30 kilometres (km) southeast of the Site (Climate Station I.D. #6117700). Data prior to June 1, 2023 were obtained from Environment Canada's Collingwood, Ontario station located approximately 35 kilometres west-southwest of the Site (Climate Station I.D. #6111792) prior to discontinuation of data collection at this station. The 2024 precipitation data are presented on Figure 4.1 and are compared to the monthly Environment Canada Climate Normals (1981-2010) prepared by Environment Canada for Station #6115127 located at the Midland Wastewater Treatment Plant. Climate Normals are not available for the Barrie-Oro or Collingwood stations and weather data is no longer presented for the Midland station.

Conditions at the Collingwood and Barrie-Oro stations have been observed to be generally typical of the conditions at the Site. Due to the localized nature of thunderstorm and snowsquall activity in the summer/winter months, some variation in precipitation totals may occur between the weather stations and the Site.

Precipitation totals in 2024 (962.5 millimetres [mm]) were less than the climate normal annual precipitation total from 1981-2010 of 1,040.6 mm. As shown on Figure 4.1, precipitation totals varied significantly month to month compared to historical averages with both wet periods (April to July) and dry periods (January/February and August to December).

4.2 Site Wide Groundwater Elevations

Hydraulic water level monitoring events occurred in 2024 at one pumping well (PW1-09), six on-Site groundwater monitoring wells (MW1, MW4-10, MW5-18, MW6-18, MW6R-18, and MW7R-22), five off-Site groundwater monitoring wells located on adjacent Dufferin property (MW1-09, MW8-18, MW9-18, MW10S-18, and MW10D-18), two private wells (WW9 [#50632] and WW15 [#17709]), and one surface water location within the Sump Pond for elevation (SW1).

Groundwater elevation contours for the January 18, 2024 and October 24, 2024 monitoring events are provided on Figure 4.2 and Figure 4.3, respectively. Conditions on January 18, 2024 represent the Site with no significant water taking from PW1-09 Since November 2023 as well as the Sump Pond dewatered for the construction of the ECA works. Conditions on October 24, 2024 represent the Site following a season of water taking at both PW1-09 and the Sump Pond. The groundwater elevation contours show that groundwater in the Upper Aquifer generally flows to the west, from about 238 to 234 m above mean sea level (AMSL). Localized drawdown in the immediate vicinity of PW1-09 (i.e., up to approximately 0.7 m at MW5-18) is anticipated during routine water takings. Drawdown recovers rapidly following the cessation of pumping at PW1-09.

A hydrograph presenting the historical monitoring well groundwater elevation data (2010 to current) is presented on Figure 4.4. A hydrograph presenting the monitoring well groundwater elevation data for 2024 is presented on Figure 4.5. In addition, individual hydrographs for on-Site monitoring wells/well nests, monitored private wells, and SW1 are presented in Appendix C. The Appendix C hydrographs present both manually-recorded water levels along with datalogger data and daily precipitation for 2024.

Groundwater elevations measured in 2024 were generally within historical ranges for each of the locations (within historical lows and highs). Following dewatering of the Sump Pond, some of the wells screened in the shallow groundwater zone near the Sump Pond (MW1 and MW7R-22) experienced water level declines, as is to be expected, and later rebounded. Groundwater levels in the Upper Aquifer typically vary by approximately 0.3 m due to seasonal climatic conditions. Somewhat larger variations of up to 0.7 m are observed at monitoring well MW5-18 which are attributed to pumping influences from PW1-09, as anticipated. Monitoring well MW5-18 is located approximately 110 m from pumping well PW1-09.

In the shallow groundwater zone, annual variations of approximately 0.5 to 1.5 m can be observed with noticeable response to periods of increased precipitation. As presented on Figure 4.4 and 4.5, the shallow groundwater zone and the Upper Aquifer potentiometric surfaces are typically separated by greater than 15 m due to the presence of the local aquitard in the vicinity of the Sump Pond.

The surface water hydrograph for SW1 in 2024 is presented on Figure 4.5 (datalogger only). Appendix C also presents the historical data at SW1 including manual readings; however, data prior to August 2017 (the start of Dufferin washing operations) was not made available by the previous landowner. The newly constructed Sump Pond is equipped with a float control that ceases the supply of water from PW1-09 at a sump pond elevation of 263.949 m AMSL. The sump pond overflow invert elevation is 264.30 m AMSL; greater than 0.30 m above the float control elevation.

No overflow from the Sump Pond to the unnamed pond was observed in 2024. During construction of the ECA works, water level measurement collection within the sump pond did not occur as the area was maintained in a dewatered

state. Manual water level recommenced in on April 8, 2024 and a datalogger was reinstalled in the Sump Pond on April 24, 2024.

No notable changes to the Upper Aquifer were observed in the datalogger data throughout the Sump Pond dewatering nor during construction of the works.

Groundwater elevations at Private Wells WW9 and WW15 showed routine variability and response to domestic supply demands as presented in Appendix C. A manual water level was recorded on July 14, 2022 at WW9 during apparent heavy domestic use; at that time the groundwater elevation was 184.94m AMSL. The datalogger at WW9 is hung at an elevation of 211 m AMSL. During extended periods of domestic supply well usage, water levels at WW9 may drop below the monitoring interval of the datalogger but water levels generally recover to within the monitoring interval within a couple hours after the domestic usage ceases. The four-hour transducer monitoring frequency may not capture the full extent of drawdown to 211m AMSL due to the rapid response to domestic use.

It is noted that beginning in November 2024 an observed reduction in water elevations at WW9 can be observed. This information was collected during monitoring in January 2025 and CRH will investigate the observed results in 2025. No other corresponding drawdown is observed at other Site monitoring locations, and it is anticipated that the observed drawdown may be related to well-specific performance decline. No significant water taking or aggregate washing occurred from PW1-09 during this period as discussed in Section 5.0. This property/private well is owned by CRH.

5. Water Taking

PTTW No. 6258-BRDJ2M allows for the water taking from PW1-09 with takings up to 24 hours per day and up to 210 days per year. Routine water takings are permitted up to 950 litres per minute (L/min) (maximum of 1,368,000 litres per day [L/day]). PTTW No. 6258-BRDJ2M also allows for water taking from the Sump Pond with takings up to 12 hours per day and up to 210 days per year. Water taking is permitted up to 7,274 L/min (maximum of 5,237,280 L/day). It is noted that, beginning in 2024, the Sump Pond has been constructed to not received water directly from the aggregate washing operations except in the event of recirculated cell overflow. The recirculation cell includes water supplied from PW1-09, recirculated wash water, direct precipitation, and adjacent runoff.

The water taking data under PTTW No. 6258-BRDJ2M for 2024 are presented in Table 5.1 along with the twice daily sump pond (SW1) water levels collected by Dufferin. Please note that the manual measurement collected by Dufferin generally track the datalogger data, as presented in Appendix C – Figure C-13.

Water takings from PW1-09, for the purposes of Recirculation Cell and Sump Pond top-up, occurred between March 4, 2024 and September 29, 2024; with limited taking through December 13, 2024 for operational uses (filling office water supply, equipment washing, etc). PW1-09 water stored within the Sump Pond was taken for Site operations on 12 occasions in 2024 as presented in Table 5.1. Aggregate washing operations occurred between April 11 and October 10, 2024. There were no exceedances of the permitted water taking quantities, rates or hours in 2024 from either PW1-09 or the Sump Pond.

In total, 40,736,953 L of groundwater were taken from PW1-09 in 2024 for on-Site uses; approximately 8% of the permitted water taking. Of the total taking, approximately 14,500,000 L of water from PW1-09 was supplied to the newly constructed ECA works between March 4 and April 10, 2024 for filling of the new cells (36% of the 2024 taking). In total, 3,332,507 L of water was supplied from the Sump Pond to operations in 2024.

5.1 Construction Dewatering

Construction dewatering, completed under PTTW No. P-300-1196295834, occurred between November 22, 2023 and March 6, 2024. Water Takings under PTTW No. P-300-1196295834 in 2024 are presented in Table 5.2.

In 2023, 24,487,473 L of water was taken from the Sump Pond and discharged to the lowest mined bench and allowed to infiltrate. Water was discharged approximately 200 m southwest of the Sump Pond and away from the localized silt/clay aquitard underlying the settling system. In 2024, an additional 6,156,500 L of dewatering occurred. No off-Site overland discharged occurred as a result of construction dewatering under PTTW No. P-300-1196295834 and no significant ponding was noted within the discharge location (i.e., all discharge rapidly infiltrated).

Constructed dewatering / water taking under PTTW No. P-300-1196295834 completed on March 6, 2024 and the PTTW expired on May 31, 2024.

6. Analytical Results

Water quality sampling was complete throughout 2024. Four surface water samples were collected at SW1 and SW2 and quarterly groundwater sampling (January/April only) was completed at select Private Water Supply Wells; consistent with the approved ECA monitoring program. Surface water samples were collected on April 5 (before commencement of the operating season on April 11, 2024), April 25, July 25, and October 24, 2024. Private water well sampling events were completed on January 18, 2024 as well as during the same mobilization/day as the April 25 surface water sampling event, after which the private well sampling program ceased.

6.1 Surface Water Quality

For the purposes of this AMR, SW1 is the monitoring location designation for the Sump Pond and SW2 is the monitoring location designation for the unnamed pond adjacent to the Sump Pond.

SW1 and SW2 water quality samples were each collected near the overflow structure to the unnamed pond (see Figure 1.1); SW1 is near the inlet and SW2 is near the outlet. No flow through the Sump Pond overflow was observed during the sampling events. For each location, grab samples were collected from open water portions of the respective feature.

Surface water quality samples were collected and submitted to ALS Laboratories in Waterloo, Ontario. The surface water samples were collected in laboratory-supplied analyte-specific sample containers, preserved according to laboratory requirements, and delivered in coolers, on ice, under chain-of-custody procedures. All surface water samples were analyzed for the following parameters: total and dissolved (field filtered) metals, anions, turbidity and TSS. Laboratory results were reviewed and validated by a GHD chemist to confirm acceptability of the laboratory results; all 2024 results were considered accepted for use with noted qualifiers, where applicable.

The 2024 validated analytical results are provided in Table 6.1 and are screened against Ontario Provincial Water Quality Objectives (PWQOs) to provide context.

In general water quality at both SW1 and SW2 are within the PWQO with the following exceptions:

- Total Aluminum at SW1 was detected above the PWQO in April 2024 samples at concentrations ranging from 0.185 to 0.636 milligram per litre (mg/L). The PWQO for aluminum (0.075 mg/L) is based on clay-free samples. Elevated aluminum is to be expected given the presence of the clay within the aggregate wash water. All field-filtered dissolved aluminum results were below the PWQO and demonstrate that the total aluminum is likely the result of suspended clays within the wash water at SW1. Total aluminum was also observed slightly above the PWQO at SW2 in the duplicate results in October 2024; the parent sample was below the PWQO, and dissolved results were not present above 0.001 mg/L (the laboratory detection limit).
- Total iron at SW1 was detected above the PWQO of 0.30 mg/L in two of six samples (April 5, 2024 both parent and duplicate sample) at concentrations of 0.558/0.626 mg/L. Elevated iron is likely attributable to the suspension of sediments within the water column; sump pond filling, following construction, was occurring during the sampling event. Dissolved Iron was below the PWQO in all samples in 2024.

- Total iron at SW2 was also detected above the PWQO during all sampling events at concentrations ranging from 0.332 to 1.48 mg/L. It is noted the iron floc is routinely observed around the perimeter of the unnamed pond and concentrations of iron are likely the result of venting of shallow perched groundwater from iron rich soils near SW2. Dissolved Iron concentrations were below the PWQO in all samples except April 5, 2024 which was detected at a concentration of 0.344 mg/L.
- Total phosphorous at SW2 was detected above the PWQO of 0.01 mg/L in October 2024 at a concentration of 0.054 mg/L. The remaining total and dissolved phosphorous results were below the laboratory detection limit of 0.05 mg/L including the duplicate result collected in October 2024. Elevated phosphorous is likely attributable to the suspension of pond sediments disturbed during sampling.

The surface water chemistry of both the sump pond (SW1) and the unnamed pond (SW2) is predominantly characteristic of the minerology of the local sand and gravel deposits combined with precipitation and stormwater runoff. As anticipated, based on the intent of the updated sump pond (i.e., only receiving overflow from the Recirculation Cells), total metals concentrations in 2024 are lower that observed in previous years but generally still typically below PWQOs. The dissolved metals concentrations demonstrate that any suspended sediment would be removed by natural filtering through the depositional liner of the sump pond and/or the local aquitard underlaying the Sump Pond. The SW2 results remain consistent with historical results and demonstrate that operation of the previous sump pond was not having an observable impact in water quality within the unnamed pond and the clays and silts in suspension within the Sump Pond do not pass through the approximately 20 m of soil separating the two pond water surfaces. The lined recirculation cell constructed under permitted ECA No. 1293-CF7J3M provide additional separation been the aggregate wash water and the unnamed pond.

6.2 Private Water Well Sampling

Quarterly private well sampling was completed in January and April at six private wells. In January 2024, one of six samples was not collected at the request of the property owner.

In 2024, untreated water samples were collected from six private supply wells and submitted to ALS Laboratories in Waterloo, Ontario under Chain of Custody procedures. All samples were analyzed for: total and dissolved (lab filtered) metals, anions, turbidity, and TSS.

Due to the confidential nature of the private water well sample results, those results are not presented here. However, all results were promptly provided to the respective landowners, along with observations of the results compared to Ontario Drinking Water Quality Standards (ODWQS), following receipt of the results from the laboratory.

Private well sampling ceased after the April 2024 sampling event (i.e., following construction of the lined recirculation cell) as approved by ECA Condition 7.0.

7. Response to Public Inquiries

Condition 5.1 of the PTTW and Condition 7.5 of ECA 1293-CF7J3M stipulate that the Permit Holder shall immediately notify the local District Office of any well water complaint arising from the water taking / ECA operations.

No complaints relating to the water taking / ECA works were received by Dufferin Aggregates for the Teedon Pit in 2024 and no complaints were reported to Dufferin by the MECP in 2024.

Furthermore, on February 1, 2021 (within 30 days of the issuance of the Permit), Dufferin distributed its Dufferin Aggregates Teedon Pit – Well Complaint Response Procedure described in item 4 of Schedule A of PTTW No. 6258-BRDJ2M to the Teedon Pit Community Liaison Committee (CLC), the Corporation of the Township of Tay (PTTW Condition 4.5).

8. Conclusions and Recommendations

Based on the results of the 2024 monitoring program, the following conclusions are provided:

- On each day water was taken, the volume and rate of taking was recorded and takings were submitted to Water Taking Reporting System (WTRS) prior to March 31, 2024 (PTTW Condition 4.1).
- 2) Dataloggers were in place at all on- and off-Site monitoring locations throughout 2024.
- 3) No new monitoring locations were installed in 2024 beyond reinstallation of the staff gauge within the Sump Pond.
- 4) Water levels were recorded at WWR 7150632 and WWR 5717709 throughout 2024 (PTTW Condition 4.2 iii.).
- 5) Water level observations were recorded twice per day in the Sump Pond and elevation data was supplemented with a datalogger during 2024 (PTTW Condition 4.2 iv.).
- 6) Routine surface water quality sampling was completed at SW1 and SW2 in 2024 (ECA Condition 6.2).
- No discharge from the Sump Pond occurred in 2024 and therefore no discharge samples were collected (ECA Condition 6.2).
- 8) Routine private well groundwater quality sampling was completed January and April 2024 (ECA Condition 7.2) and results were provided directly to the respective landowners.
- There are no indications of water quantity or water quality impacts to water resources arising from the water taking activities.
- 10) Dufferin implemented operation and maintenance procedures for the ECA works (ECA Condition 5.11 and 5.12) as well as a spill contingency and pollution prevention plan in 2024 (ECA Condition 8.0).
- 11) No water supply complaints relating to the water taking were received for the Teedon Pit in 2024.

Based on the results of the 2024 monitoring program, the following recommendations are provided:

- 1) The monitoring program required by PTTW No. 6258-BRDJ2M should be continued in 2025.
- 2) The monitoring program required by ECA No. 1293-CF7J3M should be continued in 2025.
- As required by PTTW Condition 4.7, this report should be posted to the Dufferin Aggregates website prior to May 31, 2025.
- 4) Data presented herein should be provided electronically to MECP (PTTW Condition 4.3 iii.) under separate cover.

9. References

- Environment Canada, 2023. 1981 to 2010 Canadian Climate Normals Midland Water Pollution Control Plant (ID 6115127). Accessed on March 20, 2023.
- GHD, 2024. 2023 Annual Monitoring Report, Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario. Dated April 30, 2024.
- GHD, 2023. 2022 Annual Monitoring Report, Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario. Dated April 28, 2023.
- GHD, 2022. OWRA S53 Environmental Compliance Approval (ECA) Supporting Information. Teedon Pit, Dufferin Aggregates. Dated June 7, 2022.
- GHD, 2022. 2021 Annual Monitoring Report, Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario. Dated April 29, 2022.
- Ontario Geological Survey (OSG), 2003. Surficial Geology of Southern Ontario: OGS: Data 128.
- OGS, 2006. 1:250,000 Scale Bedrock Geology of Ontario: OGS: Data 126-revised.
- Singer, S.N., T. Cheng, and M.G. Scafe, 2003. The Hydrogeology of Southern Ontario, Second Edition. Toronto: Ministry of the Environment.
- Singer, S., T. Cheng, M. Scafe, et al., 1999. The Groundwater Resources of The Severn Sound Remedial Action Plan Area. Prepared in Cooperation with the Severn Sound Remedial Action Plan and the Ministry of the Environment.
- US EPA, 2016. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, USEPA 540/R-94-013, September 2016.

All of Which is Respectfully Submitted,

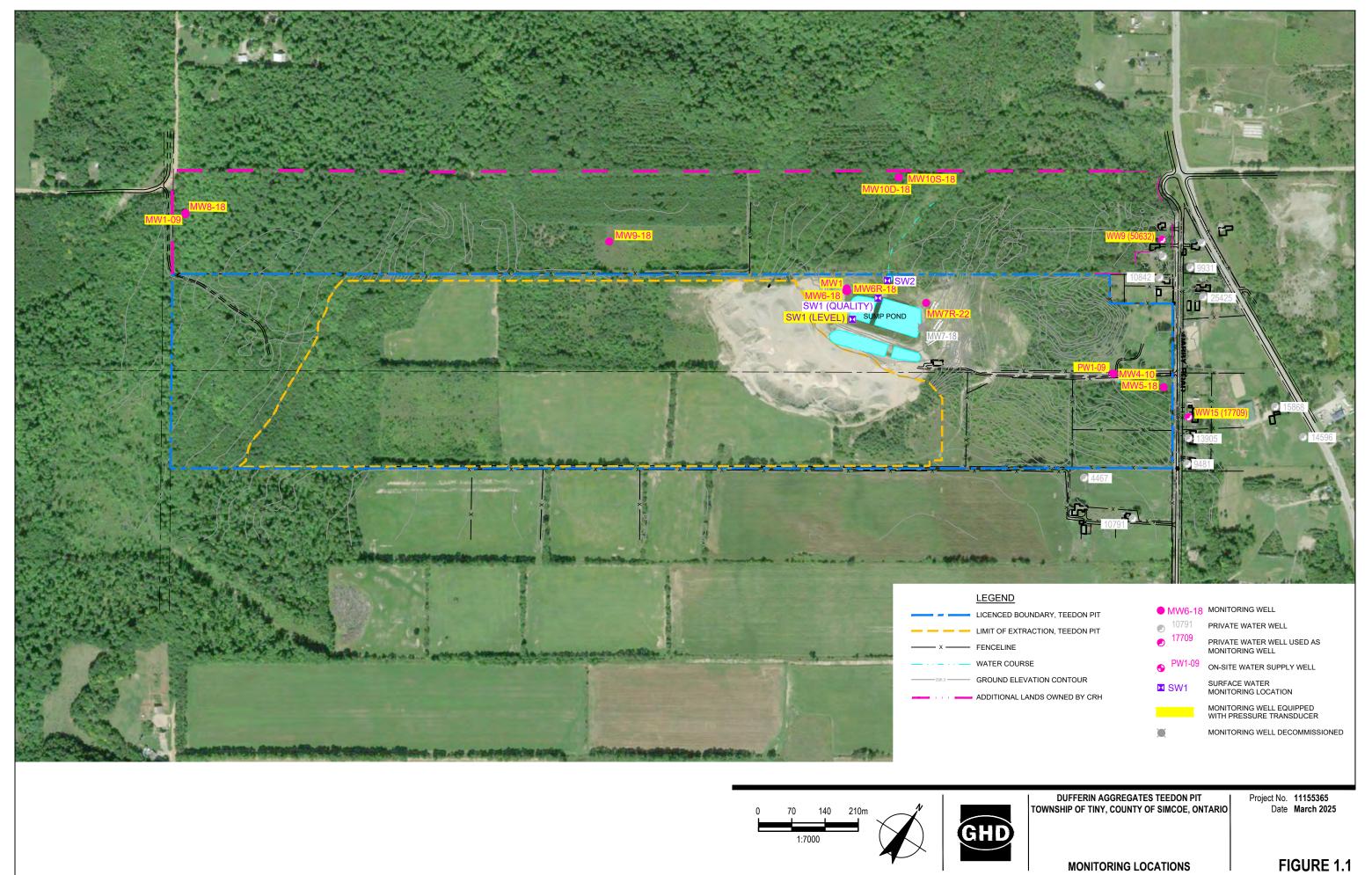


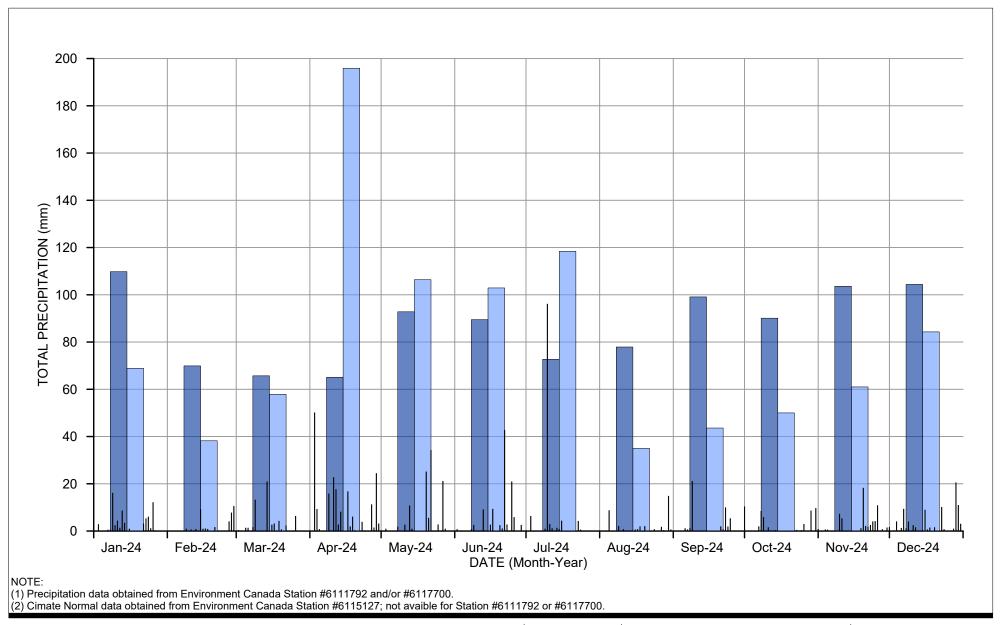
Richard Chatfield, P. Eng.

Dan Puddephatt, P. Geo (Limited)

J. Richard Murphy, M.A.Sc., P. Eng.

Figures







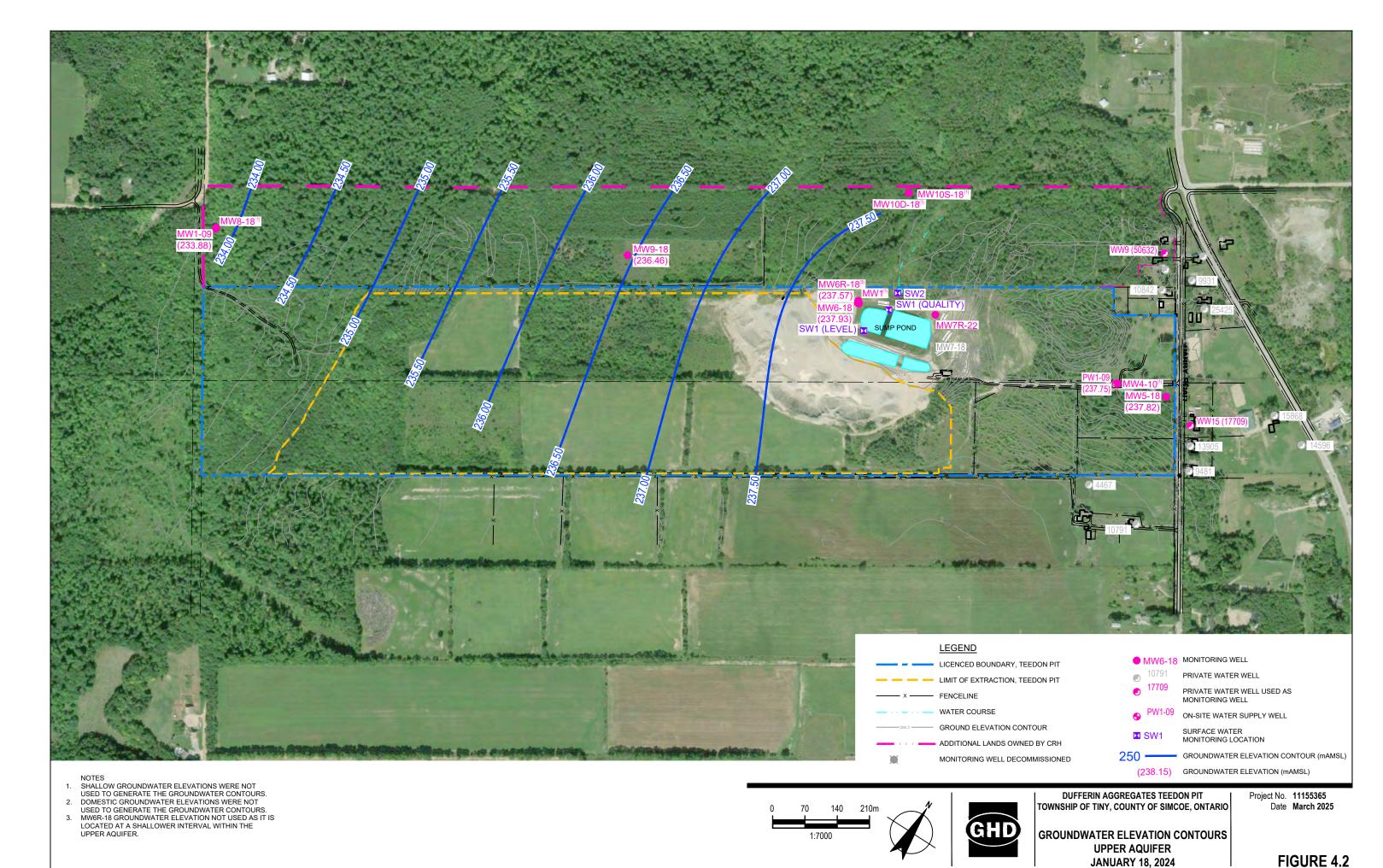
GHD

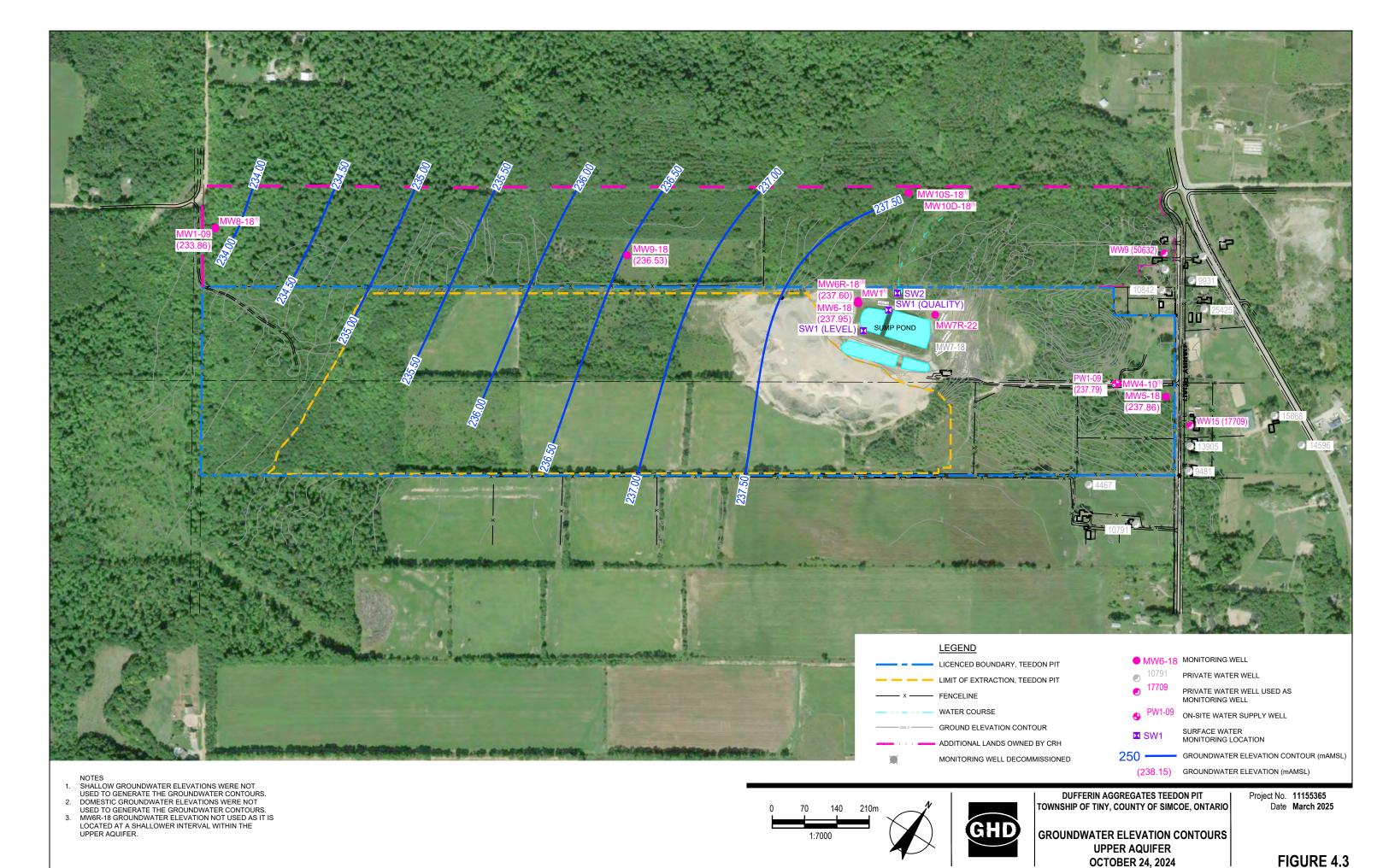
DUFFERIN AGGREGATES TEEDON PIT TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO Project No. 11155365

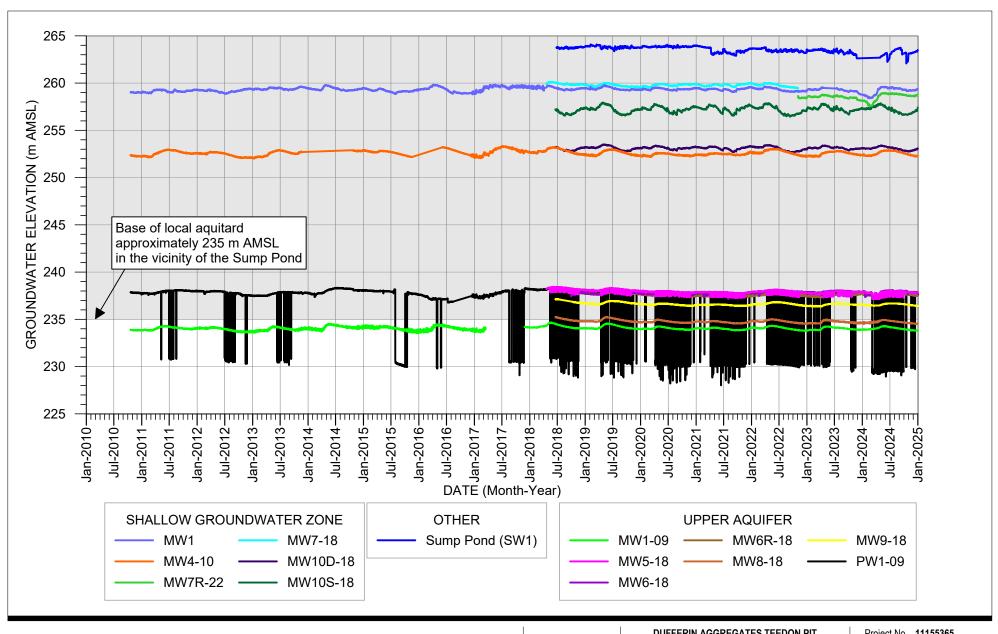
Date March 24, 2025

2024 PRECIPITATION SUMMARY

FIGURE 4.1







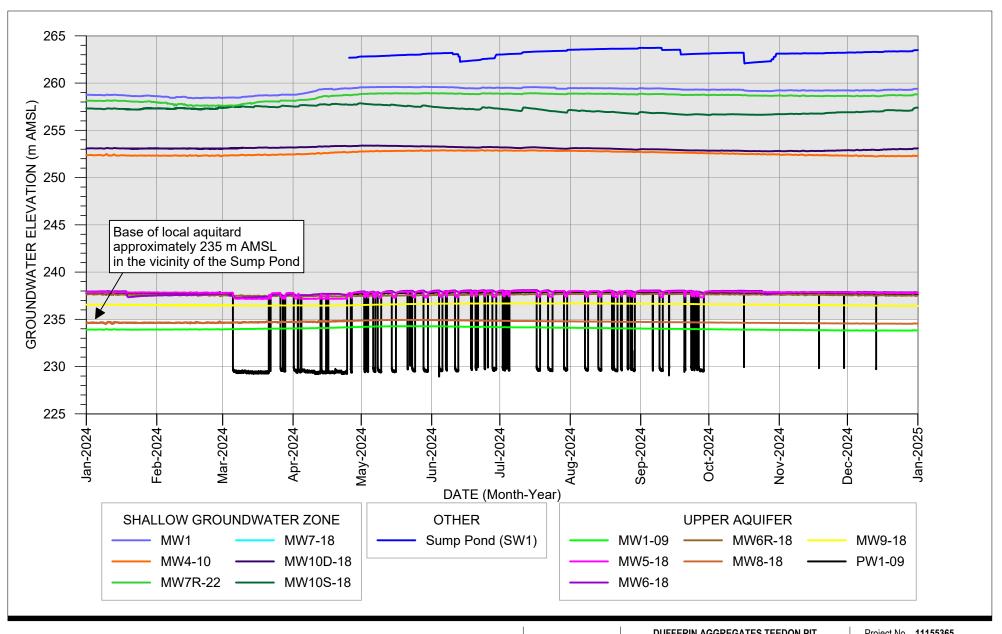


DUFFERIN AGGREGATES TEEDON PIT TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO 2024 ANNUAL MONITORING REPORT

HYDROGRAPH - HISTORICAL GROUNDWATER ELEVATIONS

Project No. 11155365 Date March 24, 2025

FIGURE 4.4





DUFFERIN AGGREGATES TEEDON PIT TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO 2024 ANNUAL MONITORING REPORT

HYDROGRAPH 2024 GROUNDWATER ELEVATIONS Project No. 11155365 Date March 24, 2025

FIGURE 4.5

Tables

Table 4.1

Monitoring Well Completion Details 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

Monitoring Well	MECP Well ID	Completion Date	Easting	Northing	Ground Elevation (m AMSL)	Reference Elevation (m AMSL)	Well Bottom Elevation (m AMSL)	Well Depth (m bgs)
PW1-09 ⁽²⁾	7124734	4/29/2009	592343.75	4945072.04	260.72	261.32	191.4	69.3
MW1 ⁽²⁾	7054134	11/8/2007	591776.70	4944920.92	267.45	267.64	245.0	18.3
MW1-09 ⁽⁵⁾	7124729	6/2/2009	590519.95	4944300.96	245.45	246.04	180.4	65.1
MW4-10 ⁽²⁾	7150631	8/5/2010	592346.97	4945073.66	260.60	261.31	242.3	17.7
MW5-18 ⁽³⁾	A241648	4/5/2018	592450.79	4945106.20	256.39	257.19	186.6	69.2
MW6-18 ⁽³⁾	A241641	3/29/2018	591778.54	4944916.15	267.60	268.43	197.5	70.1
MW6R-18 ⁽⁶⁾	A241645	10/2/2018	591780.60	4944916.96	267.57	268.20	218.8	48.8
MW7-18 ⁽⁸⁾	A215946	4/9/2018	591953.92	4944937.13	266.83	267.56	242.8	24.1
MW7R-22 ⁽⁷⁾	A211723	11/3/2022	591933.69	4944985.63	267.35	268.23	243.6	23.8
MW8-18 ⁽⁵⁾	A242552	6/11/2018	590518.91	4944303.17	245.35	245.88	224.6	20.7
MW9-18 ⁽⁴⁾	A242553	6/6/2018	591302.29	4944734.10	291.58	292.50	230.9	60.7
MW10S-18 ⁽⁴⁾	A242554	6/6/2018	591743.06	4945177.24	259.44	260.42	248.8	10.7
MW10D-18 ⁽⁴⁾	A242555	6/6/2018	591741.82	4945176.99	259.55	260.52	233.6	25.9
WW9 - #50632 ⁽⁵⁾	7150632	8/4/2010	592280.17	4945366.28	260.48	261.12	181.3	79.2
WW15 - #17709 ⁽⁵⁾	5717709	9/23/1981	592521.69	4945085.40	256.73	257.27	198.0	57.9
#16440 ⁽¹⁾	5716440	11/8/1979	591461.00	4944573.00	293.00	293.00	252.3	42.7

Notes:

/4\				
/11	Inctalled ac a feet well and	l wae decommissioned sh	iortiv atter conetri iction:	survey details from Site Plans.
(1)	IIIStalieu as a test well alit	i was uccommissioned si	ioruv aner construction.	Survey details from Site Fians.

⁽²⁾ Northing, eastings, ground elevation and reference elevation measured on March 15, 2018.

(8) MW7-18 abandoned on November 3, 2022 and replace with MW7R-22.

m AMSL Metres above mean sea level.
m bgs Metres below ground surface.
NA Information not available.

⁽³⁾ Northing, eastings, ground elevation and reference elevation measured on April 18, 2018.

⁽⁴⁾ Northing, eastings, ground elevation and reference elevation measured on June 13, 2018.

⁽⁵⁾ Northing, eastings, ground elevation and reference elevation measured on July 19, 2018.

⁽⁶⁾ Northing, eastings, ground elevation and reference elevation measured on October 11, 2018.

⁽⁷⁾ Northing, eastings, ground elevation and reference elevation measured on November 29, 2022.

Table 4.2

Summary of 2024 Groundwater Elevations 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

Well Location	January 18, 2024 Groundwater Elevation (m AMSL)	April 25, 2024 Groundwater Elevation (m AMSL)	July 25, 2024 Groundwater Elevation (m AMSL)	October 24, 2024 Groundwater Elevation (m AMSL)
PW1-09	237.75	237.70	237.89	237.79
MW1	258.67	259.44	259.53	259.16
MW1-09	233.88	234.13	234.10	233.86
MW4-10	252.34	252.70	252.83	252.45
MW5-18	237.82	237.76	237.97	237.86
MW6-18	237.93	237.66	238.01	237.95
MW6R-18	237.57	237.44	237.65	237.60
MW7R-22	258.12	258.76	258.68	258.68
MW8-18	234.64	234.85	234.81	234.61
MW9-18	236.46	236.47	236.65	236.53
MW10S-18	257.24	257.71	257.01	256.64
MW10D-18	253.08	253.33	253.10	252.77
WW9 - #50632	231.72	231.01	230.56	235.37
WW15 - #17709	237.82	237.67	238.00	237.83

Notes:

m AMSL Metres above mean sea level
-- No measurement recorded

	P۱	N1-09			Sum	p Pond		
Date	Rate of	Amount of	Hours	Rate of	Amount of	Start of Day	End of Day	Comments
	Taking	Taking	of	Taking	Taking	SW1 Elevation	SW1 Elevation	
	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference								
								_

Weekends shown in gray for reference								
	,	NO V	VATER TA	KING IN J	ANUARY (OR FEBRUARY 202	4	
Friday March 01 2024	-	-	-	-	-	-	-	-
Saturday March 02 2024	-	-	-	-	-	-	-	-
Sunday March 03 2024	-	-	-	-	-	-	-	-
Monday March 04 2024	297.9	203,746	-	-	-	Dewatered	-	-
Tuesday March 05 2024	297.9	428,343	-	-	-	Dewatered	-	-
Wednesday March 06 2024	297.9	428,343	-	-	-	Dewatered	-	-
Thursday March 07 2024	297.9	428,343	-	-	-	Dewatered	-	-
Friday March 08 2024	297.9	428,343	-	-	-	Dewatered	-	-
Saturday March 09 2024	297.9	428,343	-	-	-	-	-	-
Sunday March 10 2024	364.9	524,730	-	-	-	-	-	-
Monday March 11 2024	364.9	524,730	-	-	-	Dewatered	-	-
Tuesday March 12 2024	240.3	345,588	-	-	-	Dewatered	-	-
Wednesday March 13 2024	240.3	345,588	-	-	-	Dewatered	-	-
Thursday March 14 2024	566.0	813,961	-	-	-	Dewatered	-	-
Friday March 15 2024	364.9	524,730	-	-	-	Dewatered	-	-
Saturday March 16 2024	339.7	488,517	-	-	-	-	-	-
Sunday March 17 2024	339.7	488,517	-	-	-	-	-	-
Monday March 18 2024	339.7	488,517	-	-	-	Dewatered	-	-
Tuesday March 19 2024	339.7	488,517	-	-	-	Dewatered	-	-
Wednesday March 20 2024	566.0	813,961	-	-	-	Dewatered	-	-
Thursday March 21 2024	319.4	357,824	-	-	-	Dewatered	-	-
Friday March 22 2024	340.5	11,576	-	-	-	Dewatered	-	-
Saturday March 23 2024	-	-	-	-	-	-	-	-
Sunday March 24 2024	-	-	-	-	-	-	-	-
Monday March 25 2024	-	-	-	-	-	-	-	-
Tuesday March 26 2024	339.7	267,020	-	-	-	Dewatered	-	-
Wednesday March 27 2024	607.8	674,030	-	-	-	Dewatered	-	-
Thursday March 28 2024	360.1	151,608	-	-	-	Dewatered	-	-
Friday March 29 2024	-	-	-	-	-	Dewatered	-	-
Saturday March 30 2024	-	-	-	-	-	-	-	-
Sunday March 31 2024	-	-	-	-	-	-	-	-
Monday April 01 2024	370.5	368,674	-	-	-	Dewatered	-	-
Tuesday April 02 2024	370.5	532,818	-	-	-	Dewatered	-	-
Wednesday April 03 2024	370.5	532,818	-	-	-	Dewatered	-	-
Thursday April 04 2024	370.5	532,818	-	-	-	Dewatered	-	-
Friday April 05 2024	370.5	532,818	-	-	-	Dewatered	-	-

	PV	V1-09			Sum	p Pond		
Date		Amount of	Hours	Rate of	Amount of	•	End of Day	Comments
	Taking	Taking	of	Taking	Taking		SW1 Elevation	
	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference								
Catumday Applied OC 2024	270 E	E22 040	1					
Saturday April 06 2024	370.5 370.5	532,818 532,818	-	-	-	-	-	-
Sunday April 07 2024		,	-	-	-			-
Monday April 08 2024	370.5 240.3	532,818 345,588	-	-	-	261.99 262.37	262.13 262.56	-
Tuesday April 09 2024		,	-	-	-	262.37 262.78		-
Wednesday April 10 2024	240.3 368.3	345,588 529,601	-	-	-	262.76 262.74	262.80 262.74	-
Thursday April 11 2024	526.1	,	-	-	-	262.74 262.74	262.74 262.74	-
Friday April 12 2024	374.7	756,599	-	-	-	262.74	262.74	-
Saturday April 13 2024	_	257,074	-	-	-			-
Sunday April 14 2024	374.7	397,978	-	1 077 0	-	262.74	262.72	- Source Pond Water Sent to Silt Pond
Monday April 15 2024	368.3	407,697	9.3	1,077.2	600,000	262.72	262.71	
Tuesday April 16 2024	368.3	529,601	7.1	1,176.5	500,000	262.70	262.69	Source Pond Water Sent to Silt Pond
Wednesday April 17 2024	368.3	529,601	5.5	1,135.4	375,810	262.68	261.88	Source Pond Water Sent to Silt Pond
Thursday April 18 2024	440.0	632,759	7.2	1,098.6	474,590	261.89	260.56	Source Pond Water Sent to Silt Pond
Friday April 19 2024	368.3	529,601	-	-	-	260.56	260.64	-
Saturday April 20 2024	368.3	529,601	-	-	-	-	-	-
Sunday April 21 2024	368.3	529,601	-	4 507 7	-	-	-	- Octobre Board Water Count to Boards Board
Monday April 22 2024	368.3	529,601	1.9	1,567.7	180,280	262.62	262.70	Source Pond Water Sent to Recirc Pond
Tuesday April 23 2024	368.3	529,601	-	-	-	262.70	262.69	-
Wednesday April 24 2024	473.2	556,968	-	-	-	262.68	262.68	-
Thursday April 25 2024	-	-	-	-	-	262.69	262.70	-
Friday April 26 2024	340.4	245,066	-	-	-	262.70	262.70	-
Saturday April 27 2024	-	-	-	-	-	-	-	-
Sunday April 28 2024	-	-	-	-	-			-
Monday April 29 2024	-	-	-	-	-	262.79	262.80	-
Tuesday April 30 2024	-	-	-	-	-	262.83	262.83	-
Wednesday May 01 2024	-	-	-	-	-	262.84	262.84	-
Thursday May 02 2024	350.9	252,635	-	-	-	262.84	262.84	-
Friday May 03 2024	347.3	204,574	-	-	-	262.85	262.85	-
Saturday May 04 2024	696.0	48,025	-	-	-	-	-	-
Sunday May 05 2024	-	-	-	-	-	-		<u>-</u>
Monday May 06 2024	303.0	322,409	-	-	-	262.86	262.86	-
Tuesday May 07 2024	194.9	213,034	-	-	-	262.86	262.87	-
Wednesday May 08 2024	738.2	770,649	-	-	-	262.88	262.88	-
Thursday May 09 2024	43.5	48,961	-	-	-	262.89	262.89	-
Friday May 10 2024	-	-	-	-	-	262.90	262.90	-
Saturday May 11 2024	-	-	-	-	-	-	-	•
Sunday May 12 2024	-	-	-	-	-	-	-	-

	l PV	V1-09			Sumi	p Pond		1
Date	Rate of	Amount of	Hours	Rate of	Amount of	Start of Day	End of Day	Comments
	Taking	Taking	of	Taking	Taking	SW1 Elevation	SW1 Elevation	
	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference								
Monday May 13 2024	-	-	-	-	-	262.93	262.94	-
Tuesday May 14 2024	334.9	269,265	-	-	-	262.95	262.95	-
Wednesday May 15 2024	324.5	466,656	-	-	-	262.96	262.96	-
Thursday May 16 2024	592.6	241,766	-	-	-	262.97	262.98	-
Friday May 17 2024	-	-	-	-	-	262.98	262.98	-
Saturday May 18 2024	-	-	-	-	-	-	-	-
Sunday May 19 2024	-	-	-	-	-	-	-	-
Monday May 20 2024	-	-	-	-	-	-	-	-
Tuesday May 21 2024	448.2	85,603	-	-	-	263.02	263.02	-
Wednesday May 22 2024	349.7	9,092	-	-	-	263.03	263.03	-
Thursday May 23 2024	377.5	318,226	-	-	-	263.03	263.03	-
Friday May 24 2024	452.9	470,538	-	-	-	263.03	263.03	-
Saturday May 25 2024	-	-	-	-	-	-	-	-
Sunday May 26 2024	-	-	-	-	-	-	-	-
Monday May 27 2024	-	-	-	-	-	263.09	263.09	-
Tuesday May 28 2024	378.4	322,772	-	-	-	263.11	263.11	-
Wednesday May 29 2024	379.4	545,531	-	-	-	263.13	263.13	-
Thursday May 30 2024	342.2	178,311	-	-	-	263.15	263.15	-
Friday May 31 2024	-	-	-	-	-	263.16	263.16	-
Saturday June 01 2024	-	-	-	-	-	-	-	-
Sunday June 02 2024	-	-	-	-	-	-	-	-
Monday June 03 2024	-	-	-	-	-	263.18	263.18	-
Tuesday June 04 2024	399.7	340,957	-	-	-	263.18	263.18	-
Wednesday June 05 2024	423.1	448,445	-	-	-	263.19	263.20	-
Thursday June 06 2024	-	-	-	-	-	263.21	263.21	-
Friday June 07 2024	344.0	247,676	-	-	-	263.21	263.21	-
Saturday June 08 2024	-	-	-	-	-	-	-	-
Sunday June 09 2024	-	-	-	-	-	-	-	-
Monday June 10 2024	-	-	0.7	1,646.9	64,229	263.23	263.08	Source Pond Water Sent to Recirc Pond
Tuesday June 11 2024	520.2	533,720	-	-	-	263.08	263.08	-
Wednesday June 12 2024	240.9	249,285	1.3	1,502.0	115,653	263.11	262.77	Source Pond Water Sent to Recirc Pond
Thursday June 13 2024	-	-	2.4	1,496.1	216,938	262.84	262.29	Source Pond Water Sent to Recirc Pond
Friday June 14 2024	-	-	-	-	-	262.32	262.33	-
Saturday June 15 2024	-	-	-	-	-	-	-	-
Sunday June 16 2024	-	-	-	-	-	-	-	-
Monday June 17 2024	-	-	-	-	-	262.38	262.39	-
Tuesday June 18 2024	319.2	248,944	-	-	-	262.41	262.41	-

	PV	V1-09			Sum	p Pond	1	
Date	Rate of	Amount of	Hours	Rate of	Amount of		End of Day	Comments
	Taking	Taking	of	Taking	Taking	SW1 Elevation	SW1 Elevation	
	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference								
								_
Wednesday June 19 2024	-	-	-	-	-	262.43	262.43	-
Thursday June 20 2024	342.5	249,994	-	-	-	262.44	262.44	-
Friday June 21 2024	370.7	14,457	-	-	-	262.46	262.46	-
Saturday June 22 2024	-	-	-	-	-	-	-	-
Sunday June 23 2024	-	-	-	-	-	-	-	-
Monday June 24 2024	235.9	169,833	-	-	-	262.60	262.60	-
Tuesday June 25 2024	321.1	35,323	-	-	-	262.61	262.61	-
Wednesday June 26 2024	-	-	-	-	-	262.62	262.63	-
Thursday June 27 2024	323.1	127,291	-	-	-	262.63	262.63	-
Friday June 28 2024	391.7	563,311	-	-	-	262.73	262.75	-
Saturday June 29 2024	372.0	227,305	-	-	-	-	-	-
Sunday June 30 2024	-	-	-	-	-	263.03	-	-
Monday July 01 2024	-	-	-	-	-	-	-	-
Tuesday July 02 2024	653.5	446,312	-	-	-	263.07	263.06	-
Wednesday July 03 2024	157.8	71,151	-	-	-	263.07	263.08	-
Thursday July 04 2024	181.8	83,103	-	-	-	263.09	263.09	-
Friday July 05 2024	783.0	259,159	-	-	-	263.10	263.10	-
Saturday July 06 2024	-	-	-	-	-	-	-	-
Sunday July 07 2024	-	-	-	-	-	-	-	-
Monday July 08 2024	-	-	-	-	-	263.13	263.13	-
Tuesday July 09 2024	-	-	-	-	-	263.14	263.14	-
Wednesday July 10 2024	-	-	-	-	-	263.15	263.15	-
Thursday July 11 2024	-	-	-	-	-	263.30	263.30	-
Friday July 12 2024	-	-	-	-	-	263.31	263.31	-
Saturday July 13 2024	-	-	-	-	-	-	-	
Sunday July 14 2024	-	-	-	-	-	-	-	-
Monday July 15 2024	-	-	-	-	-	263.35	263.35	-
Tuesday July 16 2024	-	-	-	-	-	263.36	263.37	-
Wednesday July 17 2024	372.8	418,240	-	-	-	263.37	263.41	-
Thursday July 18 2024	387.4	405,593	-	-	-	263.42	263.42	-
Friday July 19 2024	-	-	-	-	-	263.43	263.43	-
Saturday July 20 2024	-	-	-	-	-	-	-	-
Sunday July 21 2024	-	-	_	-	_	-	-	-
Monday July 22 2024	230.0	258,100	-	-	-	263.40	263.40	-
Tuesday July 23 2024	454.6	653,728	-	-	-	263.41	263.41	-
Wednesday July 24 2024	545.5	157,113	-	-	-	263.41	263.41	-
Thursday July 25 2024	-	-	-	-	-	263.42	263.42	-

	PV	V1-09			Sum	p Pond		
Date		Amount of	Hours		Amount of	Start of Day	End of Day	Comments
	Taking	Taking	of Takina	Taking	Taking		SW1 Elevation	
Weekends shown in gray for reference	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference								
Friday July 26 2024	-	-	-	-	-	263.43	263.43	-
Saturday July 27 2024	-	-	-	-	-	-	-	-
Sunday July 28 2024	-	-	-	-	-	-	-	-
Monday July 29 2024	798.0	533,052	-	-	-	263.44	263.44	-
Tuesday July 30 2024	387.0	231,028	-	-	-	263.44	263.44	-
Wednesday July 31 2024	-	-	-	-	-	263.55	263.56	-
Thursday August 01 2024	-	-	-	-	-	263.56	263.56	-
Friday August 02 2024	-	-	-	-	-	263.56	263.56	-
Saturday August 03 2024	-	-	-	-	-	-	-	-
Sunday August 04 2024	-	-	-	-	-	-	-	-
Monday August 05 2024	-	-	-	-	-	-	-	-
Tuesday August 06 2024	_	-	_	-	-	263.59	263.59	-
Wednesday August 07 2024	211.8	157,163	_	-	-	263.59	263.59	_
Thursday August 08 2024	281.5	404,784	_	-	_	263.59	263.58	-
Friday August 09 2024	313.1	187,522	_	_	_	263.60	263.60	-
Saturday August 10 2024	-	-	-	-	-	-	-	-
Sunday August 11 2024	_	_	_	-	_	-	_	_
Monday August 12 2024	-	-	-	-	-	263.62	263.62	-
Tuesday August 13 2024	305.9	286,013	_	_	_	263.63	263.63	-
Wednesday August 14 2024	454.6	446,426	_	_	_	263.63	263.63	-
Thursday August 15 2024	-	-	_	_	_	263.63	263.63	-
Friday August 16 2024	_	_	_	_	_	263.64	263.64	-
Saturday August 17 2024	_	-	_	_	-	-		-
Sunday August 18 2024	_	_	_	_	_	_	_	
Monday August 19 2024	349.8	251,822	_	_	_	263.66	263.66	-
Tuesday August 20 2024	303.2	337,506	_	_	_	263.67	263.67	
Wednesday August 20 2024	454.6	521,437			_	263.67	263.67	
Thursday August 22 2024	434.0	521,457	_	_	_	263.67	263.67	
Friday August 23 2024	351.6	253,154	_	_	_	263.67	263.67	
Saturday August 24 2024	-	200,104	_		-	203.07	-	
Sunday August 24 2024 Sunday August 25 2024	_	_			_			
Monday August 26 2024	930.3	421,423	_		-	263.67	263.67	_
Tuesday August 27 2024	923.3	418,240	_	_	_	263.67	263.67	
Wednesday August 28 2024	523.0	236,924		-	-	263.67	263.67	
, ,	323.0	230,824	_	-	-			-
Thursday August 29 2024	-	-	-	-	-	263.67 263.67	263.67 263.67	-
Friday August 30 2024	-	-	-	-	-	263.67		-
Saturday August 31 2024	-	-	-	-	-	-	-	

	PV	V1-09			Sum	Pond		
		Amount of	Hours			Start of Day	End of Day	Comments
	Taking	Taking (L/day)	of Taking	Taking (L/min)	Taking (L/day)	SW1 Elevation (m AMSL)	SW1 Elevation (m AMSL)	
Weekends shown in gray for reference	(L/min)	(L/uay)	Taking	(L/IIIII)	(L/day)	(III AIVISL)	(III AWSL)	
Weekende snewn in gray for reference								
Sunday September 01 2024	-	-	-	-	-	-	-	-
Monday September 02 2024	-	-	-	-	-	263.74	263.74	-
Tuesday September 03 2024	-	-	-	-	-	263.74	263.74	-
Wednesday September 04 2024	-	-	-	-	-	263.74	263.74	-
Thursday September 05 2024	-	_	-	-	-	263.74	263.74	-
Friday September 06 2024	307.4	18,139	-	-	-	263.74	263.74	-
Saturday September 07 2024	-	-	-	-	-	-	-	-
Sunday September 08 2024	-	_	-	-	-	_	-	-
Monday September 09 2024	443.4	458,901	-	-	-	263.76	263.76	-
Tuesday September 10 2024	317.4	336,411	1.3	1,476.0	118,081	263.76	263.52	Source Pond Water Sent to Recirc Pond
Wednesday September 11 2024	-	-	-	· -	-	263.53	263.53	-
Thursday September 12 2024	-	-	-	-	-	263.53	263.53	-
Friday September 13 2024	363.7	41,829	-	-	-	263.54	263.54	-
Saturday September 14 2024	-	-	-	-	-	-	-	-
Sunday September 15 2024	-	_	-	-	-	_	-	-
Monday September 16 2024	-	-	-	-	-	263.54	263.54	-
Tuesday September 17 2024	-	-	-	-	-	263.55	263.55	-
Wednesday September 18 2024	-	-	5.8	670.9	231,453	263.55	263.05	Source Pond Water Sent to Recirc Pond
Thursday September 19 2024	-	-	-	-	-	263.06	263.06	-
Friday September 20 2024	349.0	251,285	-	-	-	263.07	263.07	-
Saturday September 21 2024	-	-	-	-	-	-	-	-
Sunday September 22 2024	-	-	-	-	-	-	-	-
Monday September 23 2024	345.4	248,676	-	-	-	263.10	263.10	-
Tuesday September 24 2024	353.8	252,949	-	-	-	263.11	263.11	-
Wednesday September 25 2024	348.8	251,131	-	-	-	263.11	263.12	-
Thursday September 26 2024	361.4	227,305	-	-	-	263.13	263.13	-
Friday September 27 2024	316.1	454,609	-	-	-	263.13	263.13	-
Saturday September 28 2024	316.1	454,609	-	-	-	-	-	-
Sunday September 29 2024	368.1	87,967	_	_	_	_	_	_
Monday September 30 2024	-	-	-	-	-	263.15	263.15	-
Tuesday October 01 2024	_	_	-	_	_	263.16	263.16	-
Wednesday October 02 2024	_	_	-	_	_	263.18	263.18	_
Thursday October 03 2024	_	_	-	_	-	263.18	263.18	-
Friday October 04 2024	_	_	-	_	_	263.19	263.19	-
Saturday October 05 2024	-	_	-	_	-	-	-	-
Sunday October 06 2024	_	_	_	_	_	_	_	-
Monday October 07 2024	-	-	-	-	-	263.20	263.20	-

	PV	V1-09			Sum	p Pond		
Date	Rate of	Amount of	Hours	Rate of		Start of Day	End of Day	Comments
	Taking	Taking	of	Taking	Taking	SW1 Elevation	•	
	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference	(=:::::)	(=:)		\ =,	(=: -:	(,	(,	
<u> </u>	1							
Tuesday October 08 2024	-	-	-	-	-	263.21	263.21	 -
Wednesday October 09 2024	-	-	-	-	-	263.22	263.22	-
Thursday October 10 2024	-	-	-	-	-	263.22	263.22	-
Friday October 11 2024	-	-	-	-	-	263.23	263.23	-
Saturday October 12 2024	-	-	-	-	-	-	-	-
Sunday October 13 2024	-	-	-	-	-	-	-	-
Monday October 14 2024	-	-	-	-	-	259.63	259.63	-
Tuesday October 15 2024	-	-	-	-	-	263.23	263.23	-
Wednesday October 16 2024	832.2	14,979	5.0	1,501.3	450,404	263.23	262.08	Operations Water Use
Thursday October 17 2024	-	-	-	-	-	262.12	262.14	-
Friday October 18 2024	-	-	-	-	-	262.15	262.15	-
Saturday October 19 2024	-	-	-	-	-	-	-	-
Sunday October 20 2024	-	-	-	-	-	-	-	-
Monday October 21 2024	-	-	-	-	-	262.21	262.22	-
Tuesday October 22 2024	-	-	-	-	-	262.24	262.24	-
Wednesday October 23 2024	-	-	-	-	-	262.26	262.26	-
Thursday October 24 2024	-	-	-	-	-	262.27	262.28	-
Friday October 25 2024	-	-	-	-	-	262.28	262.28	-
Saturday October 26 2024	-	-	-	-	-	-	-	-
Sunday October 27 2024	-	-	-	-	-	-	-	-
Monday October 28 2024	-	-	0.4	211.2	5,069	262.33	262.53	Water truck
Tuesday October 29 2024	-	-	-	-	-	262.53	262.80	-
Wednesday October 30 2024	-	-	-	-	-	262.80	263.13	-
Thursday October 31 2024	362.6	8,701	-	-	-	263.13	263.13	-
Friday November 01 2024	-	-	-	-	-	263.13	263.13	-
Saturday November 02 2024	-	-	-	-	-	-	-	-
Sunday November 03 2024	-	-	-	-	-	-	-	-
Monday November 04 2024	-	-	-	-	-	263.13	263.13	-
Tuesday November 05 2024	-	-	-	-	-	263.14	263.14	-
Wednesday November 06 2024	-	-	-	-	-	263.14	263.14	-
Thursday November 07 2024	-	-	-	-	-	263.14	263.14	-
Friday November 08 2024	-	-	-	-	-	263.14	263.14	-
Saturday November 09 2024	-	-	-	-	-	-	-	-
Sunday November 10 2024	-	-	-	-	-	-	-	-
Monday November 11 2024	-	-	-	-	-	263.15	263.15	-
Tuesday November 12 2024	-	_	-	-	-	263.16	263.16	-
Wednesday November 13 2024	-	-	-	-	-	263.16	263.16	-

	PV	V1-09			Sum	p Pond		
Date	Rate of	Amount of	Hours	Rate of		Start of Day	End of Day	Comments
	Taking	Taking	of	Taking	Taking	SW1 Elevation	SW1 Elevation	
	(L/min)	(L/day)	Taking	(L/min)	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference								
	i		i					1
Thursday November 14 2024	-	-	-	-	-	263.16	263.16	-
Friday November 15 2024	-	-	-	-	-	263.16	263.16	-
Saturday November 16 2024	-	-	-	-	-	-	-	-
Sunday November 17 2024	-	-	-	-	-	-	-	-
Monday November 18 2024	369.1	11,074	-	-	-	263.16	263.16	-
Tuesday November 19 2024	-	-	-	-	-	263.16	263.16	-
Wednesday November 20 2024	-	-	-	-	-	263.17	263.17	-
Thursday November 21 2024	-	-	-	-	-	263.18	263.18	-
Friday November 22 2024	-	-	-	-	-	263.20	263.20	-
Saturday November 23 2024	-	-	-	-	-	-	-	-
Sunday November 24 2024	-	-	-	-	-	-	-	-
Monday November 25 2024	-	-	-	-	-	263.21	263.21	-
Tuesday November 26 2024	-	-	-	-	-	263.22	263.22	-
Wednesday November 27 2024	-	-	-	-	-	263.22	263.22	-
Thursday November 28 2024	-	-	-	-	-	263.22	263.22	-
Friday November 29 2024	341.2	5,460	-	-	-	263.22	263.22	-
Saturday November 30 2024	-	-	-	-	-	-	-	-
Sunday December 01 2024	-	-	-	-	-	-	-	-
Monday December 02 2024	-	-	-	-	-	263.23	263.23	-
Tuesday December 03 2024	-	-	-	-	-	-	-	Pond Frozen
Wednesday December 04 2024	-	-	-	-	-	-	-	Pond Frozen
Thursday December 05 2024	-	-	-	-	-	-	-	Pond Frozen
Friday December 06 2024	-	-	-	-	-	-	-	Pond Frozen
Saturday December 07 2024	-	-	-	-	-	-	-	-
Sunday December 08 2024	-	-	-	-	-	-	-	-
Monday December 09 2024	-	-	-	-	-	-	-	Pond Frozen
Tuesday December 10 2024	-	-	-	-	-	-	-	Pond Frozen
Wednesday December 11 2024	-	-	-	-	-	-	-	Pond Frozen
Thursday December 12 2024	129.1	646	-	-	-	-	-	Pond Frozen
Friday December 13 2024	332.5	13,302	-	-	-	-	-	Pond Frozen
Saturday December 14 2024	-	-	-	-	-	-	-	-
Sunday December 15 2024	-	_	_	-	_	-	_	-
Monday December 16 2024	-	-	-	-	-	-	-	Pond Frozen
Tuesday December 17 2024	-	-	-	-	-	-	-	Pond Frozen
Wednesday December 18 2024	-	-	-	-	-	-	-	Pond Frozen
Thursday December 19 2024	-	_	-	-	-	-	-	Pond Frozen
Friday December 20 2024	-	-	-	-	-	-	-	Pond Frozen

	P\	N1-09			Sum	p Pond		
Date	Rate of Taking	Amount of Taking	Hours of	Rate of Taking	Amount of Taking	- · · · · · · · · ·	End of Day SW1 Elevation	Comments
	(L/min)	(L/day)	Taking	U	(L/day)	(m AMSL)	(m AMSL)	
Weekends shown in gray for reference	(=::::,	(=: ::::)		(=:::::)	(=)	((**************************************	
Saturday December 21 2024	-	-	-	-	-	-	-	-
Sunday December 22 2024	-	-	-	-	-	-	-	-
Monday December 23 2024	-	-	-	-	-	-	-	Pond Frozen
Tuesday December 24 2024	-	-	-	-	-	-	-	Pond Frozen
Wednesday December 25 2024	-	-	-	-	-	-	-	Pond Frozen
Thursday December 26 2024	-	-	-	-	-	-	-	Pond Frozen
Friday December 27 2024	-	-	-	-	-	-	-	Pond Frozen
Saturday December 28 2024	-	-	-	-	-	-	-	-
Sunday December 29 2024	-	-	-	-	-	-	-	-
Monday December 30 2024	-	-	-	-	-	-	-	Pond Frozen
Tuesday December 31 2024	-	-	-	-	-	-	-	Pond Frozen

Water Taking Summary (PTTW No. P-300-1196295834) 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

	l	Sump Pon		
Date	Hours of Taking	Rate of Taking	Amount of Taking	Comments
,	Weekends	(L/min)	(L/day) rey for referer	l
	Wookonac	onown in gi	0 101 1010101	
Monday January 01 2024	-	-	-	-
Tuesday January 02 2024	6.1	2,678.2	972,177	- Start of Construction Dewatering
Wednesday January 03 2024	-	-	-	-
Thursday January 04 2024	-	-	-	-
Friday January 05 2024	-	-	-	-
Saturday January 06 2024	-	-	-	-
Sunday January 07 2024			-	-
Monday January 08 2024	5.1	2,484	755,212	-
Tuesday January 09 2024	-			-
Wednesday January 10 2024	8.3	946	470,935	-
Thursday January 11 2024	6.7	782	312,705	-
Friday January 12 2024	-	-	-	-
Saturday January 13 2024	-	-	-	-
Sunday January 14 2024	-	-	-	-
Monday January 15 2024	-	-	-	-
Tuesday January 16 2024	9.4	1,024	578,547	-
Wednesday January 17 2024	- 0.4	-	- 405.250	-
Thursday January 18 2024	9.4	223	125,350	-
Friday January 19 2024	8.2	130	64,269	-
Saturday January 20 2024	-	-	-	-
Sunday January 21 2024	- 9.4	- 88	49,263	-
Monday January 22 2024 Tuesday January 23 2024	9.4	88.8	50,967	-
Wednesday January 24 2024	7.2	125.1	53,685	-
Thursday January 25 2024	8.4	25.8	13,014	-
Friday January 26 2024	4.5	17.3	4,648	- -
Saturday January 27 2024	-	-	-,0-0	
Sunday January 28 2024	4.5	17.3	4,648	_
Monday January 29 2024	8.8	1.3	712	-
Tuesday January 30 2024	10.0	14.3	8,593	-
Wednesday January 31 2024	-	-	-	-
Thursday February 01 2024	8.7	6.4	3,339	-
Friday February 02 2024	8.8	20.7	10,872	-
Saturday February 03 2024	5.2	113.4	35,484	-
Sunday February 04 2024	-	-	· -	_
Monday February 05 2024	10.2	298.2	182,192	-
Tuesday February 06 2024	9.8	4.0	2,332	-
Wednesday February 07 2024	-	-	-	-
Thursday February 08 2024	-	-	-	-
Friday February 09 2024	10.8	8.0	5,148	-
Saturday February 10 2024	-	-	-	-
Sunday February 11 2024	-	-	-	-
Monday February 12 2024	-	-	-	-
Tuesday February 13 2024	-	-	-	-
Wednesday February 14 2024	-	-	-	-
Thursday February 15 2024	-	-	-	-
Friday February 16 2024	-	-	-	-
Saturday February 17 2024	-	-	-	-
Sunday February 18 2024	-	-	-	-
Monday February 19 2024	-	-	-	-
Tuesday February 20 2024	8.8	176	92,985	 -

Water Taking Summary (PTTW No. P-300-1196295834) 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

		Sump Pon	ıd							
Date	Hours of	Rate of	Amount of	Comments						
Date	Taking	Taking	Taking	Comments						
		(L/min)	(L/day)							
Weekends shown in grey for reference										
	•									
Wednesday February 21 2024	-	-	-	-						
Thursday February 22 2024	-	-	-	-						
Friday February 23 2024	-	-	-	-						
Saturday February 24 2024	-	-	-							
Sunday February 25 2024	-	-	-							
Monday February 26 2024	2.1	3,345	424,806	-						
Tuesday February 27 2024	8.0	2,033	973,872	-						
Wednesday February 28 2024	-	-	-	-						
Thursday February 29 2024	-	-	-	-						
Friday March 01 2024	-	-	-	-						
Saturday March 02 2024	-	-	-	-						
Sunday March 03 2024	6.0	1,270	453,538	-						
Monday March 04 2024	4.2	870	217,434	-						
Tuesday March 05 2024	5.6	233.3	77,926	-						
Wednesday March 06 2024	6.9	511.7	211,847	-						
NO CONS	TUCTION E	EWATERI	NG AFTER M	ARCH 6, 2024						

2024 Water Quality Results - SW1 and SW2 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

 Sample Location:
 SW1
 SW2
 SW2

Sample Date:				4/5/2024	4/5/2024 (Duplicate)	4/25/2024	4/25/2024 (Duplicate)
Parameters	Units	PWQO			(Duplicate)		(Duplicate)
Metals Aluminum		0.075	(4.0)	0.556	0.636	0.186	0.185
Aluminum Aluminum (Dissolved)	mg/L mg/L	0.075	(1,2) (1,2)	0.0124	0.036	0.166	0.0156
Antimony	mg/L	0.073	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Antimony (Dissolved)	mg/L	0.02	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Arsenic	mg/L	0.005		0.00028	0.00028	0.00025	0.00023
Arsenic (Dissolved)	mg/L	0.005		0.00022	0.00019	0.00021	0.00024
Barium	mg/L	-		0.0528	0.0540	0.0500	0.0519
Barium (Dissolved) Beryllium	mg/L	0.011	(2)	0.0441 ND (0.000020)	0.0456 ND (0.000020)	0.0477 ND (0.000020)	0.0483 ND (0.000020)
Beryllium (Dissolved)	mg/L mg/L	0.011	(3) (3)	ND (0.000020)	ND (0.000020)	ND (0.000020)	ND (0.000020)
Bismuth	mg/L	-	(0)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)
Bismuth (Dissolved)	mg/L	-		ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)
Boron	mg/L	0.2	(1)	0.028	0.029	0.018	0.018
Boron (Dissolved)	mg/L	0.2	(1)	0.024	0.024	0.019	0.018
Cadmium	mg/L	0.0002		ND (0.000050)	0.0000059	ND (0.0000050)	ND (0.0000050)
Cadmium (Dissolved)	mg/L	0.0002		ND (0.000050)	ND (0.0000050)	ND (0.0000050)	ND (0.0000050)
Calcium Calcium (Dissolved)	mg/L mg/L	-		50.1 50.6	48.7 49.6	41.8 42.2	39.5 40.8
Chromium Total	mg/L	0.001	(4)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Chromium Total (dissolved)	mg/L	0.001	(4)	0.00072	0.00077	ND (0.00050)	ND (0.00050)
Cobalt	mg/L	0.0009	(- /	0.00028	0.00029	ND (0.00010)	ND (0.00010)
Cobalt (Dissolved)	mg/L	0.0009		ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Copper	mg/L	0.005		0.00121	0.00126	ND (0.00050)	ND (0.00050)
Copper (Dissolved)	mg/L	0.005		0.00027	0.00025	0.00021	ND (0.00020)
Iron	mg/L	0.3		0.558	0.626	0.159	0.168
Iron (Dissolved)	mg/L	0.3	(5)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Lead (Dissolved)	mg/L	0.005 0.005	(5) (5)	0.000259 ND (0.000050)	0.000273 ND (0.000050)	0.000101 ND (0.000050)	0.000084 ND (0.000050)
Lead (Dissolved)	mg/L mg/L	0.005	(5)	0.0015	0.0014	0.00050) 0.0013	0.0011
Lithium (Dissolved)	mg/L	_		ND (0.0010)	ND (0.0010)	0.0017	0.0015
Magnesium	mg/L	_		12.0	12.1	11.9	11.6
Magnesium (Dissolved)	mg/L	-		11.6	11.2	12.1	11.8
Manganese	mg/L	-		0.0564	0.0568	0.0424	0.0418
Manganese (Dissolved)	mg/L	-		0.0378	0.0372	0.0199	0.0192
Molybdenum	mg/L	0.04	(1)	0.00126	0.00130	0.00130	0.00132
Molybdenum (Dissolved)	mg/L	0.04	(1)	0.00116 0.00057	0.00114 0.00067	0.00128 ND (0.00050)	0.00128 ND (0.00050)
Nickel Nickel (Dissolved)	mg/L mg/L	0.025		0.00057	ND (0.00050)	ND (0.00050) ND (0.00050)	ND (0.00050) ND (0.00050)
Phosphorous	mg/L	0.025	(1,6)	ND (0.050)	ND (0.0000)	ND (0.0000)	ND (0.0000)
Phosphorous (Dissolved)	mg/L	0.01	(1,6)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
Potassium	mg/L	-	(1,0)	2.09	2.10	1.97	1.94
Potassium (Dissolved)	mg/L	-		2.01	1.98	1.98	1.96
Selenium	mg/L	0.1		0.000082	0.000076	ND (0.000050)	ND (0.000050)
Selenium (Dissolved)	mg/L	0.1		0.000095	0.000065	ND (0.000050)	ND (0.000050)
Silicon	mg/L	-		6.00	6.04	6.73	6.64
Silicon (Dissolved)	mg/L	-		4.88	4.88	6.95	6.89
Silver Silver (Dissolved)	mg/L mg/L	0.0001 0.0001		ND (0.000010) ND (0.000010)	ND (0.000010) ND (0.000010)	ND (0.000010) ND (0.000010)	ND (0.000010) ND (0.000010)
Sodium	mg/L	0.0001		6.72	6.63	6.08	5.98
Sodium (Dissolved)	mg/L	-		6.26	6.26	6.10	6.14
Strontium	mg/L	-		0.365	0.370	0.336	0.343
Strontium (Dissolved)	mg/L	-		0.366	0.350	0.343	0.339
Thallium	mg/L	0.0003	(1)	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.000010)
Thallium (Dissolved)	mg/L	0.0003	(1)	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.000010)
Tin	mg/L	-		0.00014 ND (0.00040)	0.00016 ND (0.00010)	ND (0.00010)	ND (0.00010)
Tin (Dissolved) Titanium	mg/L mg/L	-		ND (0.00010) 0.0263	ND (0.00010) 0.0308	ND (0.00010) 0.00850	ND (0.00010) 0.00786
Titanium (Dissolved)	mg/L	-		ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.00030)
Tungsten	mg/L	0.03	(1)	ND (0.00000)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Tungsten (Dissolved)	mg/L	0.03	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Uranium	mg/L	0.005	(1)	0.000535	0.000519	0.000552	0.000536
Uranium (Dissolved)	mg/L	0.005	(1)	0.000464	0.000472	0.000531	0.000521
Vanadium	mg/L	0.006	(1)	0.00115	0.00122	ND (0.00050)	ND (0.00050)
Vanadium (Dissolved) Zinc	mg/L	0.006	(1)	ND (0.00050) ND (0.0030)	ND (0.00050) ND (0.0030)	ND (0.00050) ND (0.0030)	ND (0.0050) ND (0.0030)
Zinc Zinc (Dissolved)	mg/L mg/L	0.03		ND (0.0030) ND (0.0010)	ND (0.0030) ND (0.0010)	ND (0.0030) ND (0.0010)	ND (0.0030) ND (0.0010)
Zirc (Dissolved) Zirconium	mg/L	0.03	(1)	ND (0.0010) ND (0.00020)	ND (0.0010) ND (0.00020)	ND (0.0010) ND (0.00020)	ND (0.0010) ND (0.00020)
Zirconium (Dissolved)	mg/L	0.004	(1)	ND (0.00020)	ND (0.00020)	ND (0.00030)	ND (0.00020)
General Chemistry							
Chloride (Dissolved)	mg/L	-		4.42	4.33	0.59	0.61
Nitrate (as N)	mg/L	-		0.172	0.170	ND (0.020)	ND (0.020)
Nitrite (as N)	mg/L	-		ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Orthophosphate (dissolved) Sulphate (Dissolved)	mg/L	-		0.0019 18.5	ND (0.0010) 18.7	ND (0.0010) 11.4	ND (0.0010) 11.4
Total Suspended Solids (TSS)	mg/L mg/L	-		18.5 13.4	18.7 12.6	11.4 ND (3.0)	11.4 ND (3.0)
Turbidity	NTU	-		17.0	17.2	3.24	3.24
	5					U.L.	U.L.

Notes:

ND (#)	Not present at or above the associated value Estimated concentration based on GHD Data Verification
PWQO	Provincial Water Quality Objectives, February 1999
(1)	Interim PWQO
(2)	At pH >6.5 to 9.0, based on clay-free samples
(3)	Assume hardness as CaCO3 <75 mg/L
(4)	PWQO for trivalent chromium (Cr III) is 8.9 µg/L
(5)	Alkalinity as CaCO3 >80 mg/L
(6)	Prevent excessive plant growth in rivers and streams
	Detected above PWQO.

2024 Water Quality Results - SW1 and SW2 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

SW1

Sample Location:

SW1

SW2

SW2

Sample Location:				SW1	SW1	SW2	SW2
Sample ID:						3 SW-11155365-040524-RC-003	
Sample Date:				7/25/2024	10/24/2024	4/5/2024	4/25/2024
Parameters	Units	PWQO					
Metals							
Aluminum	mg/L	0.075	(1,2)	0.0333	0.0510	0.0172	0.0219
Aluminum (Dissolved)	mg/L	0.075	(1,2)	0.0211	0.0166	0.0048	0.0023
Antimony	mg/L	0.02	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Antimony (Dissolved) Arsenic	mg/L mg/L	0.02 0.005	(1)	ND (0.00010) 0.00030	ND (0.00010) 0.00028	ND (0.00010) 0.00024	ND (0.00010) 0.00021
Arsenic (Dissolved)	mg/L	0.005		0.00033	0.00026	0.00024	0.00021
Barium `	mg/L	-		0.0537	0.0506	0.0242	0.0166
Barium (Dissolved)	mg/L			0.0538	0.0516	0.0230	0.0162
Beryllium Beryllium (Dissolved)	mg/L	0.011 0.011	(3)	ND (0.000020)	ND (0.000020)	ND (0.000020)	ND (0.000020)
Bismuth	mg/L mg/L	0.011	(3)	ND (0.000020) ND (0.000050)	ND (0.000020) ND (0.000050)	ND (0.000020) ND (0.000050)	ND (0.000020) ND (0.000050)
Bismuth (Dissolved)	mg/L	-		ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)
Boron	mg/L	0.2	(1)	0.045	0.042	0.017	0.015
Boron (Dissolved)	mg/L	0.2	(1)	0.045	0.036	0.014	0.016
Cadmium Cadmium (Dissolved)	mg/L mg/L	0.0002 0.0002		ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)
Calcium	mg/L	-		45.4	42.6	57.7	63.2
Calcium (Dissolved)	mg/L	-		45.6	40.2	59.4	63.7
Chromium Total	mg/L	0.001	(4)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Chromium Total (dissolved)	mg/L	0.001	(4)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Cobalt (Dissolved)	mg/L mg/L	0.0009 0.0009		ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	0.00019 0.00015	0.00011 ND (0.00010)
Copper Copper	mg/L	0.0009		0.00064	0.00060	ND (0.00050)	ND (0.00010)
Copper (Dissolved)	mg/L	0.005		0.00074	0.00052	ND (0.00020)	ND (0.00020)
Iron	mg/L	0.3		0.018	0.051	1.48	0.550
Iron (Dissolved)	mg/L	0.3	(5)	ND (0.010)	0.015 ND (0.0000E0)	0.344 ND (0.000050)	0.119 ND (0.00050)
Lead Lead (Dissolved)	mg/L mg/L	0.005 0.005	(5) (5)	ND (0.00050) ND (0.00050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)
Lithium	mg/L	-	(3)	ND (0.00030)	ND (0.00030)	ND (0.00050)	ND (0.00030)
Lithium (Dissolved)	mg/L	-		ND (0.0010)	ND (0.0010)	ND (0.0010)	ND (0.0010)
Magnesium	mg/L	-		13.3	13.8	9.49	9.56
Magnesium (Dissolved) Manganese	mg/L	-		13.3	12.8	9.18	9.63
Manganese (Dissolved)	mg/L mg/L			0.00885 J 0.0120 J	0.0432 0.0249	3.18 3.20	0.773 0.865
Molybdenum	mg/L	0.04	(1)	0.00141	0.00122	0.000263	0.000514
Molybdenum (Dissolved)	mg/L	0.04	(1)	0.00139	0.00116	0.000242	0.000505
Nickel	mg/L	0.025		ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Nickel (Dissolved)	mg/L	0.025	(4.0)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Phosphorous (Dissolved)	mg/L mg/L	0.01 0.01	(1,6) (1,6)	ND (0.050) ND (0.050)	ND (0.050) ND (0.050)	ND (0.050) ND (0.050)	ND (0.050) ND (0.050)
Potassium	mg/L	-	(1,0)	3.08	3.20	3.22	3.12
Potassium (Dissolved)	mg/L	-		3.14	3.13	3.23	3.15
Selenium	mg/L	0.1		0.000103	0.000074	ND (0.000050)	ND (0.000050)
Selenium (Dissolved)	mg/L	0.1		0.000096	0.000079	ND (0.000050) 4.40	ND (0.000050) 4.44
Silicon Silicon (Dissolved)	mg/L mg/L			3.34 3.46	0.71 0.587	4.40	4.44
Silver	mg/L	0.0001		ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.00010)
Silver (Dissolved)	mg/L	0.0001		ND (0.000010)	ND (0.000010) J	ND (0.000010)	ND (0.000010)
Sodium	mg/L	-		6.31	6.69	6.68	6.15
Sodium (Dissolved) Strontium	mg/L mg/L	-		6.38 0.718	6.09 0.598	6.29 0.144	6.13 0.158
Strontium (Dissolved)	mg/L			0.710	0.595	0.142	0.158
Thallium	mg/L	0.0003	(1)	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.00010)
Thallium (Dissolved)	mg/L	0.0003	(1)	ND (0.000010)	ND (0.000010)	ND (0.000010)	ND (0.000010)
Tin	mg/L	-		ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Tin (Dissolved) Titanium	mg/L mg/L	-		ND (0.00010) 0.00061	ND (0.00010) 0.00164	ND (0.00010) 0.00070	ND (0.00010) 0.00112
Titanium (Dissolved)	mg/L	_		ND (0.00030)	0.00034	ND (0.00030)	ND (0.00030)
Tungsten	mg/L	0.03	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Tungsten (Dissolved)	mg/L	0.03	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Uranium Uranium (Dissolved)	mg/L mg/L	0.005 0.005	(1) (1)	0.000477 0.000471	0.000442 0.000413	0.000135 0.000124	0.000309 0.000293
Vanadium	mg/L	0.005	(1)	0.000471	ND (0.00050)	ND (0.00050)	ND (0.00050)
Vanadium (Dissolved)	mg/L	0.006	(1)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Zinc	mg/L	0.03		ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)
Zinc (Dissolved)	mg/L	0.03 0.004	(1)	0.0012 ND (0.00030)	ND (0.0010)	ND (0.0010) ND (0.00020)	ND (0.0010) ND (0.00020)
Zirconium Zirconium (Dissolved)	mg/L mg/L	0.004	(1)	ND (0.00020) ND (0.00030)	ND (0.00020) ND (0.00030)	ND (0.00020) ND (0.00030)	ND (0.00020) ND (0.00030)
E. Somuni (Dissolved)	mg/L	0.004	(1)	140 (0.00000)	140 (0.00000)	140 (0.00030)	140 (0.00000)
General Chemistry							
Chloride (Dissolved)	mg/L	_		3.46	5.09	8.56	7.54
Nitrate (as N)	mg/L	-		ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)
Nitrite (as N)	mg/L	-		ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)
Orthophosphate (dissolved) Sulphate (Dissolved)	mg/L	-		ND (0.0010)	0.0024 12.3	ND (0.0010) 2.13	ND (0.0010) 3.88
Total Suspended Solids (TSS)	mg/L mg/L	-		13.6 ND (3.0)	3.0	3.2	3.88
Turbidity	NTU	-		0.63	0.90	15.0	4.50
Notes:							
ND (#) Not present at or above the	ne acconists	d value					
J Estimated concentration b			cation				
PWQO Provincial Water Quality 0							
(1) Interim PWQO							
 (2) At pH >6.5 to 9.0, based of (3) Assume hardness as CaO 							
 (3) Assume hardness as CaC (4) PWQO for trivalent chrom 							
(5) Alkalinity as CaCO3 >80 r	mg/L						
(6) Prevent excessive plant g	rowth in rive	rs and stream	ıs				
Detected above PWQO.							

2024 Water Quality Results - SW1 and SW2 2024 Annual Monitoring Report Dufferin Aggregates Teedon Pit Township of Tiny, County of Simcoe, Ontario

Sample Location: Sample ID: Sample Date:				SW2 SW-11155365-072524-CL-00 7/25/2024	SW2 1 SW-11155365-072524-CL-002 7/25/2024	SW2 SW-11155365-102424-CL-001 10/24/2024	10/24/2024
Parameters	Units	PWQO			(Duplicate)		(Duplicate)
Metals							
Aluminum	mg/L	0.075	(1,2)	0.0216	0.0291	0.0690	0.0794
Aluminum (Dissolved) Antimony	mg/L mg/L	0.075 0.02	(1,2) (1)	0.0166 J ND (0.00010)	0.0020 J ND (0.00010)	ND (0.0010) ND (0.00010)	ND (0.0010) ND (0.00010)
Antimony (Dissolved)	mg/L	0.02	(1)	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Arsenic Arsenic (Dissolved)	mg/L mg/L	0.005 0.005		0.00036 0.00037	0.00036 0.00036	0.00019 0.00017	0.00021 0.00018
Barium	mg/L	-		0.00037	0.0036	0.0017	0.0216
Barium (Dissolved)	mg/L	-	(0)	0.0219	0.0213	0.0205	0.0204
Beryllium Beryllium (Dissolved)	mg/L mg/L	0.011 0.011	(3) (3)	ND (0.000020) ND (0.000020)	ND (0.000020) ND (0.000020)	ND (0.000020) ND (0.000020)	ND (0.000020) ND (0.000020)
Bismuth	mg/L	-	(-)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)
Bismuth (Dissolved) Boron	mg/L mg/L	0.2	(1)	ND (0.000050) 0.058	ND (0.000050) 0.061	ND (0.000050) 0.076	ND (0.000050) 0.078
Boron (Dissolved)	mg/L	0.2	(1)	0.059	0.059	0.067	0.065
Cadmium Cadmium (Dissolved)	mg/L mg/L	0.0002 0.0002		ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)
Calcium (Dissolved)	mg/L	-		75.9	77.3	81.1	81.7
Calcium (Dissolved)	mg/L	-		78.3	78.2	78.0	77.2
Chromium Total Chromium Total (dissolved)	mg/L mg/L	0.001 0.001	(4) (4)	ND (0.00050) ND (0.00050)	ND (0.00050) 0.00064	ND (0.00050) ND (0.00050)	ND (0.00050) ND (0.00050)
Cobalt	mg/L	0.0009	(- /	0.00010	0.00012	0.00013	0.00014
Cobalt (Dissolved) Copper	mg/L mg/L	0.0009 0.005		ND (0.00010) ND (0.00050)	ND (0.00010) ND (0.00050)	ND (0.00010) ND (0.00050)	ND (0.00010) ND (0.00050)
Copper (Dissolved)	mg/L	0.005		0.00049 J	ND (0.00050) ND (0.00020) J	ND (0.00050) ND (0.00020)	ND (0.00050) ND (0.00020)
Iron	mg/L	0.3		0.292	0.332	0.448	0.490
Iron (Dissolved) Lead	mg/L mg/L	0.3 0.005	(5)	0.172 J ND (0.00050)	0.060 J ND (0.000050)	0.027 0.00056	0.024 ND (0.000050)
Lead (Dissolved)	mg/L	0.005	(5)	ND (0.000050)	ND (0.000050)	ND (0.000050)	ND (0.000050)
Lithium Lithium (Dissolved)	mg/L mg/L	-		ND (0.0010) ND (0.0010)	ND (0.0010) ND (0.0010)	ND (0.0010) ND (0.0010)	ND (0.0010) ND (0.0010)
Magnesium	mg/L	-		12.2	12.3	13.4	13.4
Magnesium (Dissolved)	mg/L	-		12.5 2.73	12.4 2.72	12.5 0.565	12.4 0.570
Manganese Manganese (Dissolved)	mg/L mg/L	-		2.73	2.72	0.505	0.570
Molybdenum	mg/L	0.04	(1)	0.000261	0.000266	0.000239	0.000236
Molybdenum (Dissolved) Nickel	mg/L mg/L	0.04 0.025	(1)	0.000265 ND (0.00050)	0.000267 ND (0.00050)	0.000223 ND (0.00050)	0.000216 ND (0.00050)
Nickel (Dissolved)	mg/L	0.025		ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Phosphorous (Dissolved)	mg/L mg/L	0.01 0.01	(1,6) (1,6)	ND (0.050) ND (0.050)	ND (0.050) ND (0.050)	0.054 ND (0.050)	ND (0.050) ND (0.050)
Potassium	mg/L	-	(1,0)	2.94	2.93	2.66	2.71
Potassium (Dissolved)	mg/L	-		3.08	3.05	2.58	2.55
Selenium Selenium (Dissolved)	mg/L mg/L	0.1 0.1		ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)	ND (0.000050) ND (0.000050)
Silicon	mg/L	-		4.60	4.77	5.73	5.68
Silicon (Dissolved) Silver	mg/L mg/L	0.0001		4.83 ND (0.000010)	4.82 ND (0.000010)	5.16 ND (0.000010)	5.08 ND (0.000010)
Silver (Dissolved)	mg/L	0.0001		ND (0.000010)	ND (0.000010)	ND (0.000010) J	ND (0.000010) J
Sodium Sodium (Dissolved)	mg/L mg/L	-		7.73 7.96	7.70 7.90	8.15 7.53	8.18 7.47
Strontium	mg/L			0.201	0.204	0.217	0.215
Strontium (Dissolved) Thallium	mg/L	0.0003	(4)	0.207 ND (0.000010)	0.207 ND (0.000010)	0.215 ND (0.000010)	0.214 ND (0.000010)
Thallium (Dissolved)	mg/L mg/L	0.0003	(1) (1)	ND (0.000010) ND (0.000010)	ND (0.000010) ND (0.000010)	ND (0.000010)	ND (0.000010) ND (0.000010)
Tin	mg/L	-		ND (0.00010)	ND (0.00010)	0.00019	ND (0.00010)
Tin (Dissolved) Titanium	mg/L mg/L	-		ND (0.00010) 0.00094	ND (0.00010) ND (0.00120)	0.00018 0.00325	ND (0.00010) 0.00380
Titanium (Dissolved)	mg/L	-		ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.00030)
Tungsten Tungsten (Dissolved)	mg/L mg/L	0.03	(1) (1)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)	ND (0.00010) ND (0.00010)
Uranium	mg/L	0.005	(1)	0.000108	0.000118	0.000175	0.000173
Uranium (Dissolved) Vanadium	mg/L	0.005 0.006	(1)	0.000103 ND (0.00050)	0.000102 ND (0.00050)	0.000160 ND (0.00050)	0.000161 ND (0.00050)
Vanadium (Dissolved)	mg/L mg/L	0.006	(1) (1)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
Zinc	mg/L	0.03		ND (0.0030) 0.0032 J	ND (0.0030) 0.0016 J	ND (0.0030) ND (0.0010)	ND (0.0030) ND (0.0010)
Zinc (Dissolved) Zirconium	mg/L mg/L	0.03	(1)	ND (0.00020)	ND (0.00020)	ND (0.0010) ND (0.00020)	ND (0.0010) ND (0.00020)
Zirconium (Dissolved)	mg/L	0.004	(1)	ND (0.00030)	ND (0.00030)	ND (0.00030)	ND (0.00030)
General Chemistry							
Chloride (Dissolved)	mg/L	-		6.61	6.80	7.00	7.12
Nitrate (as N)	mg/L	-		ND (0.020)	ND (0.020)	ND (0.020)	ND (0.020)
Nitrite (as N) Orthophosphate (dissolved)	mg/L mg/L	-		ND (0.010) ND (0.0010)	ND (0.010) ND (0.0010)	ND (0.010) 0.0017	ND (0.010) 0.0013
Sulphate (Dissolved)	mg/L	-		3.18	3.31	4.36	5.05
Total Suspended Solids (TSS) Turbidity	mg/L NTU	-		ND (3.0) 1.67	3.7 1.93	14.2 J 3.76	6.0 J 2.53
Notes:							
ND (#) Not present at or above the associated value Estimated concentration based on GHD Data Verification PWQ0 Provincial Water Quality Objectives, February 1999 (1) Interim PWQ0 (2) At pH > 6.5 to 9.0, based on clay-free samples (3) Assume hardness as CaCO3 <75 mg/L (4) PWQ0 for trivalent chromium (Cr III) is 8.9 μg/L (5) Alkalinity as CaCO3 > 80 mg/L Prevent excessive plant growth in rivers and streams Detected above PWQ0.							

Appendices

Appendix A

Permit to Take Water No. 6258 BRDJ2M

Ministry of the Environment, Conservation and Parks

Environmental Assessment and Permissions Division Brownfields and Permit to Take Water Permit To Take Water Unit Floor 1, 135 St Clair Ave W Toronto, ON M4V 1P5 Tel: (416) 326-3766

January 19, 2021

CRH Canada Group Inc. Floor 4 - 2300 Steeles Ave W Concord, Ontario, L4K 5X6 Canada Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des évaluations et des permissions environnementales 1er étage, 135 av St. Clair O Toronto, ON M4V 1P5 Tél:(416) 326-3766



Attn: Kevin Mitchell

RE: Amendment to Permit To Take Water Number 6258-BRDJ2M 90 Darby Rd Lots 79 and 80 Concession 1 Original Township of Tiny Tiny, County of Simcoe Reference Number 0363-AV9PXK

In an email dated January 15, 2021 to Ms. Erinn Lee (MECP) from Kevin Mitchell of CRH Canada Group Inc., an error was identified in Permit To Take Water number 6258-BRDJ2M, issued on January 14, 2021. Specifically, the submission deadline for an annual report was identified as April 31, rather than April 30 of each year following the issuance of the Permit To Take Water.

As Director under section 34.1 of the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended ("OWRA"), and pursuant to my authority under subsection 34.1(2) of the OWRA, I am exercising my discretion to amend Permit to Take Water 6258-BRDJ2M by amending Condition 4.3 as follows:

- 4.3 The Permit Holder shall submit an Annual Monitoring Report to the District Office and the Director by April 30th of each year following the issuance of the Permit to Take Water. The report shall include:
 - i. All of the monitoring data collected for the preceding calendar year for the locations listed under 4.1 and 4.2.
 - ii. All other relevant groundwater or surface water monitoring data collected by the Permit Holder for the preceding calendar year from any on site and off-site monitoring wells/ locations, including on the adjacent property where the proposed Teedon Pit extension is located and identified by the land registry

system's PIN 583870135.

iii. An electronic version of all of the monitoring data reported.

Please note that all other terms and conditions of Permit to Take Water 5684-BRCSS4 shall remain in force, including the maximum water taking rates and volumes listed in Table A.

This notice, as of January 19, 2021, forms part of the Permit and is to remain attached to the Permit at all times.

Any change in circumstances related to this permit should be reported promptly to a Director.

Yours truly,

Gregory Meek

Supervisor (Acting), Permit To Take Water

Director, Section 34.1, Ontario Water Resources Act, R.S.O. 1990

Environmental Assessment and Permissions Branch

File Storage Number: SI-SI-TI-C1-220



PERMIT TO TAKE WATER

Surface and Ground Water NUMBER 6258-BRDJ2M

Pursuant to Section 34.1 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990 this Permit To Take Water is hereby issued to:

CRH Canada Group Inc. Floor 4 - 2300 Steeles Ave W Concord, Ontario, L4K 5X6 Canada

For the water PW1-09 (WWR # 7124734), Source Pond

taking from:

Located at: 90 Darby Rd Lots 79 and 80 Concession 1 Original Township of Tiny

Tiny, County of Simcoe

For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:

DEFINITIONS

- (a) "Director" means any person appointed in writing as a Director pursuant to section 5 of the OWRA for the purposes of section 34.1, OWRA.
- (b) "Provincial Officer" means any person designated in writing by the Minister as a Provincial Officer pursuant to section 5 of the OWRA.
- (c) "Ministry" means Ontario Ministry of the Environment, Conservation and Parks.
- (d) "District Office" means the Barrie District Office.
- (e) "Permit" means this Permit to Take Water No. 6258-BRDJ2M including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA.
- (f) "Permit Holder" means CRH Canada Group Inc..
- (g) "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O. 40, as amended.

You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. Compliance with Permit

- 1.1 Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, dated January 17, 2018 and signed by Nicolle Bellissimo, and all Schedules included in this Permit.
- 1.2 The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3 Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4 This Permit is not transferable to another person.
- 1.5 This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6 The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7 The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change. A change in ownership in the property shall cause this Permit to be cancelled.

2. General Conditions and Interpretation

2.1 Inspections

The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the *Environmental Protection Act*, R.S.O. 1990, the *Pesticides Act*, R.S.O. 1990, or the *Safe Drinking Water Act*, S.O. 2002.

2.2 Other Approvals

The issuance of, and compliance with this Permit, does not:

(a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the *Ontario Water Resources Act*, and

the Environmental Protection Act, and any regulations made thereunder; or

(b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

2.3 Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

- (a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or
- (b) acceptance by the Ministry of the information's completeness or accuracy.

2.4 Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

2.5 Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

2.6 Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

3. Water Takings Authorized by This Permit

3.1 Expiry

This Permit expires on **January 13, 2031**. No water shall be taken under authority of this Permit after the expiry date.

3.2 Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

Table A

	Source Name / Description:	Source: Type:	Taking Specific Purpose:	Taking Major Category:	Max. Taken per Minute (litres):	Max. Num. of Hrs Taken per Day:		Max. Num. of Days Taken per Year:	Zone/ Easting/ Northing:
1	PW1-09 (WWR # 7124734)	Well Drilled	Aggregate Washing	Industrial	950	24	1,368,000	210	17 592343 4945072
2	Source Pond	Pond Dugout	Aggregate Washing	Industrial	7,274	12	5,237,280	210	17 591900 4944960
						Total Taking:	6,605,280		

3.3 In addition to aggregate washing, the water taken under this Permit may also be used for other onsite uses including dust suppression.

4. Monitoring

4.1 Under section 9 of O. Reg. 387/04 as amended from time to time, the Permit Holder shall, on each day water is taken under the authorization of this Permit, record the date, the volume of water taken on that date and the rate at which it was taken. The daily volume of water taken shall be measured by a flow meter or calculated in accordance with the method described in the application for this Permit, or as otherwise accepted by the Director.

The Permit Holder shall keep all records required by this condition current and available at or near the site of the taking and shall produce the records immediately for inspection by a Provincial Officer upon his or her request. The Permit Holder, unless otherwise required by the Director, shall submit, on or before March 31st in every year, the records required by this condition to the ministry's Water Taking Reporting System.

- 4.2 The Permit Holder shall implement the following groundwater and pond water level monitoring program:
 - i. Install and maintain dataloggers at the on-site and off-site monitoring wells listed in Schedule B and monitor groundwater levels at a minimum frequency of once every four hours. This monitoring shall occur, at a minimum, between February 15 and December 15 of every year for which the Permit is valid.
 - ii. Should any other on-site monitoring well be installed, then groundwater levels shall be monitored as per item (i) above and the data included in the Annual Monitoring Report.
 - iii. Measure water levels in private water wells WWR 7150632 and WWR 5717709, if permission is granted by the well owners. Should the permission of either of these the domestic water well owners be withdrawn, then the Permit Holder shall replace the well for which permission has been denied with a well in the same aquifer either on or

off site.

- iv. measure the water level elevation in the Source Pond between February 15 and December 15 when the pond is not frozen at a minimum frequency of twice per day, once in the early morning and once in the late afternoon or evening.
- 4.3 The Permit Holder shall submit an Annual Monitoring Report to the District Office and the Director by April 31st of each year following the issuance of the Permit to Take Water. The report shall include:
 - i. All of the monitoring data collected for the preceding calendar year for the locations listed under 4.1 and 4.2.
 - ii. All other relevant groundwater or surface water monitoring data collected by the Permit Holder for the preceding calendar year from any on site and off-site monitoring wells/ locations, including on the adjacent property where the proposed Teedon Pit extension is located and identified by the land registry system's PIN 583870135.
 - iii. An electronic version of all of the monitoring data reported.
- 4.4 The Permit Holder may replace damaged or inoperable monitoring wells without amendment of the PTTW. The changes shall maintain or expand the intended scope of the monitoring program, be approved at the time of the change by a responsible qualified professional, and be documented in the Annual Monitoring Report along with the justification for the changes.
- 4.5 Within 30 days of the issuance of the Permit, the Permit Holder shall distribute its Dufferin Aggregates Teedon Pit – Well Complaint Response described in Item 4 of Schedule A of this Permit to the Teedon Pit Community Liaison Committee (CLC), the Corporation of the Township of Tiny and the Corporation of the Township of Tay.
- 4.6 Any request for an amendment or renewal of this Permit shall be accompanied by a report prepared by a Qualified Person (P.Geo. or equivalent) assessing all data collected under the Conditions 4.1 to 4.4 of this Permit. The report shall also document all reported well interference complaints and how they were addressed. The report shall include an electronic version of the monitoring data collected. This Condition does not apply to administrative amendments.
- 4.7 The Permit Holder shall make the Annual Monitoring Report required by Condition 4.3 available publicly by posting it on the Company's website by May 31st of each year following the issuance of the Permit to Take Water.

5. Impacts of the Water Taking

5.1 Notification

The Permit Holder shall immediately notify the local District Office of any complaint arising

from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

5.2 For Surface-Water Takings

The taking of water (including the taking of water into storage and the subsequent or simultaneous withdrawal from storage) shall be carried out in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream.

For Groundwater Takings

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

6. Director May Amend Permit

The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the *Ontario Water Resources Act*, Section 100 (4).

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

- 1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
- 2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
- 3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to

safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

In accordance with Section 100 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, you may by written notice served upon me, the Environmental Review Tribunal and 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 101 of the <u>Ontario Water Resources Act</u>, as amended provides that the Notice requiring a hearing shall state:

- 1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

In addition to these legal requirements, the Notice should also include:

AND

- a. The name of the appellant;
- b. The address of the appellant;
- c. The Permit to Take Water number;
- d. The date of the Permit to Take Water;
- e. The name of the Director:
- f. The municipality within which the works are located;

This notice must be served upon:

The Secretary
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto ON
M5G 1E5
Fax: (416) 326-5370
Email:
ERTTribunalsecretary@ontario.ca

The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7J 2J3 The Director, Section 34.1, Ministry of the Environment, Conservation and Parks Client Services and Permissions Branch 1st Floor 135 St Clair Ave W Toronto ON M4V 1P5 Fax: (416) 314-8452

AND

Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal:

by Telephone at by Fax at by e-mail at (416) 212-6349 (416) 326-5370 www.ert.gov.on.ca

Toll Free 1(866) 448-2248 Toll Free 1(844) 213-3474

This instrument is subject to Section 38 of the **Environmental Bill of Rights** that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek to appeal for 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry, you can determine when the leave to appeal period ends.

This Permit cancels and replaces Permit Number 5003-APFH26, issued on 2017/08/14.

Dated at Toronto this 14th day of January, 2021.

Adam Leus

Director, Section 34.1

Ontario Water Resources Act , R.S.O. 1990

Schedule A

This Schedule "A" forms part of Permit To Take Water 6258-BRDJ2M, dated January 14, 2021.

- 1. GHD. 2018. Category 1 Permit-To-Take-Water Renewal Application Supporting Hydrologic and Hydrogeologic Study Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario; Project: 11155365, Report No 1, Signed and stamped by Gary Lagos, P.Geo. and signed by J. Richard Murphy, P. Eng. January 18, 2018.
- 2. GHD. 2018. Items Completed At The Request of MOECC Associated with the PTTW Renewal, Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario letter to Mr. Vincent Bulman, MOECC, Central Region, Water Unit signed and stamped by Gary I. Lagos of GHD; April 20, 2018 Reference No. 11155365.
- 3. GHD. April 26, 2018. Re: 2018 Domestic Well Survey Dufferin Teedon Pit, Township of Tiny, County of Simcoe letter addressed to V. Bulman, Ministry of the Environment and Climate Change Ontario; April 26, 2018; signed and stamped by Gary I. Lagos, P. Geo. of GHD. Reference No. 11155365.
- 4. Dufferin. 2018. Dufferin Aggregates Teedon Pit Well Interference Protocol, addressed to the Ministry of the Environment, Conservation and Parks, signed by Maria Tapalovic of Dufferin Aggregates, a division of CRH Canada Group Inc. dated August 2, 2018.

Schedule B

This Schedule B forms part of Permit to Take Water 6258-BRDJ2M, dated January 13, 2021

<u>Teedon Pit Production and Monitoring Wells</u> <u>Dufferin Teedon Pit, Township of Tiny, County of Simcoe, Ontario</u>

Location	MOECC Well ID	Well Tag Number	Completion Date	Easting	Northing
PW1-09 (1)(5)	7124734	A082190	4/29/2009	592343.75	4945072.04
MW1-09 (3)(5)	7124729	A082184	6/2/2009	590513.00	4944298.00
MW1 (1)(5)	7054134	A062215	11/8/2007	591776.70	4944920.92
MW4-10 (1)(5)	7150631	A105968	8/5/2010	592346.97	4945073.66
MW5-18 (4)(5)	7310101	A241648	4/5/2018	592450.79	4945106.20
MW6-18 (4)(5)	7310100	A241641	3/29/2018	591778.54	4944916.15
MW7-18 (4)(5)	7310099	A215946	4/9/2018	591953.92	4944937.13
MW8-18	7314361	A242552	6/11/2018	590518.91	4944303.17
#50632 (5)	7150632		8/4/2010	592282.00	4945366.00
#17709 (5)	5717709		9/23/1981	592539.00	4945093.00
# 16440 (3)	5716440	_	11/8/1979	591461.00	4944573.00

Notes:

- (1) Northing, eastings, measured on March 15, 2018.
- (2) Northing, eastings, measured on April 18, 2018.
- (3) Northing, eastings, from the approved Site Plans.
- (4) These monitoring wells include Tag Numbers.
- (5) Pressure transducers are installed at these locations.

Appendix B

Environmental Compliance Approval No. 1293-CF7J3M



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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1293-CF7J3M Issue Date: December 6, 2022

CRH Canada Group Inc.

2300 Steeles Avenue West, 4th floor

Concord, Ontario

L4K 5X6

Site Location: Dufferin Aggregates - Teedon Pit

40 Darby Road

the north half of Lot 79 and the south half of Lot 80,

Concession 1

Township of Tiny, County of Simcoe

L0K 2E1

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:

upgrades to the existing Works for the collection, transmission, treatment and reuse of wash water from existing aggregate washing operations located at the existing Teedon Pit located in the Township of Tiny, County of Simcoe, consisting of the following:

- one (1) upgraded two-cell sump (source)/recirculation pond divided by a new engineered berm located along the eastern boundary of the sump (source) pond cell, located in the north of the eastern half of the site and constructed above the groundwater table with the bottom of the pond constructed into naturally occurring silt/clayey silt deposit, complete with a sustained water level a minimum 1.0 m below the berm crest around the edges of the pond, having a total footprint size of approximately 10,000 m² and a total capacity of approximately 43,000 m³, consisting of the following:
 - one (1) upgraded sump (source) pond cell located in the western part of the sump (source)/recirculation pond, receiving water from the existing supply well (PW1-09), having a footprint size of approximately 4,500 m² and a capacity of approximately 16,000 m³, complete with a minimum 200 mm diameter emergency overflow pipe designed to convey any overflow to the existing unnamed downstream pond, one (1) automatic high-level float control, installed and maintained at least 0.3 metres below the elevation of the 200 mm diameter emergency overflow pipe, that stops the supply of water from the existing supply well (PW1-09) and one (1) or two (2) appropriately sized pumping arrangement(s) supplying clarified water to the existing wash plant;

- one (1) new recirculation pond cell lined with a synthetic liner (HDPE, or another material of equivalent or lower permeability), located in the eastern part of the sump (source)/recirculation pond, receiving water from the existing supply well (PW1-09) and effluent from the last cell of the upgraded silt pond and the upgraded sump (source) pond cell, having a maximum water depth of 8.0 m, a maximum area of 5,500 m² and a maximum capacity of 27,000 m³, complete with an emergency overflow pipe designed to convey the 100-year return storm to the upgraded sump (source) pond cell and one (1) appropriately sized pumping arrangement supplying clarified water to the existing wash plant;
- one (1) upgraded multiple-cell in series silt pond located south of the upgraded two-cell sump (source)/ recirculation pond, constructed above the groundwater table with the bottom of the pond constructed into naturally occurring clay or silt deposits and complete with a sustained water level a minimum 1.0 m below the berm crest around the edges of the pond, having a maximum depth of 6 m and a maximum footprint size of approximately 8,500 m², each cell separated from the next one by a berm complete with an interconnected pipe, the first cell complete with a maximum 450 mm diameter inlet pipe discharging wash water from the existing wash plant to the first cell and the last cell discharging via an outlet structure to the new recirculation pond cell;
- all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned Works;

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

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

"Approval" means this entire document and any schedules attached to it, and the application;

"District Manager" means the District Manager of the Barrie District Office of the Ministry;

"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;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"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

"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;

"Owner" means CRH Canada Group Inc. and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended; and

"Works" means the sewage works described in the Owner's applications, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.

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 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.

2. EXPIRY OF APPROVAL

The approval issued by 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.

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;
 - d. change of name of the corporation and a copy of the most current information filed under the

Corporations Informations 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 the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.
- 3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

4. CONSTRUCTION OF WORKS/RECORD DRAWINGS

- 1. Upon completion of construction of the Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval.
- 2. Within one (1) year of completion of construction of the 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. OPERATION AND MAINTENANCE

- 1. The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained. The Owner shall also ensure that all monitoring programs and maintenance schedules for the Works are complied with.
- 2. The Owner shall ensure that the automatic high-level float control installed in the sump (source) pond cell is installed and maintained at least 0.3 metres below the elevation of the sump (source) pond cell emergency overflow pipe.
- 3. The Owner shall, upon identification of any spill, bypass or loss of any product, by-product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance into the environment, take immediate action to prevent the further occurrence of such loss and prevent the substance from entering the upgraded silt pond and the upgraded sump (source)/recirculation pond.
- 4. In furtherance of, but without limiting the generality of, the obligation imposed by subsection 1, the Owner shall ensure that equipment and material for the containment, clean up and disposal of any spill, bypass or loss of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance are kept on hand and in good repair for immediate use in the event of:
 - a. any spill, bypass or loss of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance;

- b. a spill within the meaning of Part X of the EPA; or
- c. the identification of an abnormal amount of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance in any part of the Works.
- 5. The Owner shall ensure that the design minimum liquid retention volumes of the Works are maintained at all times.
- 6. The Owner shall undertake weekly (once a week) during the operating season and monthly (once a month) during the non-operating season assessments of the condition of the upgraded sump (source)/ recirculation pond perimeter containment berms. When appropriate, an assessment shall be conducted by a qualified Licensed Engineering Practitioner.
- 7. The Owner shall undertake weekly (once a week) during the operating season and monthly (once a month) during the non-operating season visual inspections of the Works for potential spills, structural integrity of the perimeter containment berms and accumulation of sediment in the Works and undertake corrective measures, if necessary, to ensure continued suspended solids removal performance of the Works, with results recorded in a log book.
- 8. The Owner shall periodically measure or otherwise assess the amount of sediment accumulating in the upgraded silt pond and the upgraded sump (source)/recirculation pond and remove the sediment, if necessary, to ensure continued suspended solids removal performance of the upgraded silt pond and the upgraded sump (source)/recirculation pond, with results recorded in a log book. No sediment shall be used on site for rehabilitation without complying with all applicable laws in place at the time of reuse.
- 9. 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 site. The logbook shall include the following:
 - a. any spill, bypass or loss of any product, by product, intermediate product, oil, fuel, solvent, waste material or any other polluting substance;
 - b. the name of the Works;
 - c. the name of the inspector who conducted each inspection;
 - d. the date and results of each inspection, description of maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the Works; and
 - e. the date measurement of sediment was undertaken, the amount of sediment measured, if sediment removal was undertaken and where any removed sediment was placed.
- 10. The log book shall be retained at the site and be made available for Ministry inspection upon request.
- 11. The Owner shall prepare an operations manual prior to the introduction of wash water to the

Works, that includes, but not necessarily limited to, the following information:

- a. operating 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 spill, bypasses and any other abnormal situations and for notifying the District Manager; and
- e. complaint procedures for receiving and responding to public complaints.
- 12. The operations manual shall include a maintenance plan and associated figures describing:
 - a. the bottom elevation of the upgraded silt pond and the upgraded sump (source)/recirculation pond;
 - b. maintenance tasks and methods for cleaning out (dredging) the ponds;
 - c. steps to ensure the liner integrity during dredging activities;
 - d. the thickness or other measurement of sediment that will trigger dredging activities;
 - e. estimated volume of sediment to be removed annually as well as storage location of sediment;
 - f. sediment stockpile dewatering method; and
 - g. the proposed use of sediment for site restoration.
- 13. The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.
- 14. 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.

6. SURFACE WATER QUALITY MONITORING AND RECORDING

The Owner shall, upon issuance of this Approval, carry out the following monitoring program:

1. 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 and analyzed at the following sampling locations, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 1 - Surface Water Monitoring			
Sampling Locations	1) The upgraded sump (source) pond cell (SW1); and		
	2) The unnamed downstream pond (SW2)		
Sampling Frequency	1) before commencement of the operating season;		
	2) in April/May;3) in July/August; and4) in October/November		
Sampling Type	Grab		
Sampling Parameters	Total Suspended Solids (TSS), Metals, Anions, Turbidity		

Table 2 - Surface Water Monitoring			
Sampling Location	Water discharged from the upgraded sump (source) pond cell emergency overflow pipe discharging to the unnamed downstream pond		
Sampling Frequency	During an emergency overflow event from the upgraded sump (source) pond cell emergency overflow pipe discharging to the unnamed downstream pond		
Sampling Type	Grab		
Sampling Parameters	Total Suspended Solids (TSS), Metals, Anions, Turbidity		

- 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; and
 - 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.
- 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.

7. GROUNDWATER QUALITY MONITORING AND RECORDING

Subject to continued permission of the well owner, the Owner shall, upon issuance of this Approval, carry out the following groundwater quality monitoring program until the installation of the lined recirculation cell has been completed:

- 1. 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. Subject to landowner permission, samples of groundwater shall be collected at the location and frequency specified below, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table	Table 3 - Groundwater Quality Monitoring				
Sampling Locations	Sampling Locations Private water wells at the following addresses:				
	1) 127 Darby Road, Tay, Ontario;				
	2) 6970 Highway 93, Tiny, Ontario;				
	3) 7062 Highway 93, Tiny, Ontario;				
	4)1189 Marshall Road, Tiny, Ontario; and				
	5) 1190 Marshall Road, Tiny, Ontario				
Sampling Frequency	Quarterly (once every three months)				
Sampling Type	Grab				
Sampling Parameters	Total Suspended Solids (TSS), Metals, Anions, Turbidity				

- 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; and
 - 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.
- 4. The Owner shall ensure that the results of the groundwater monitoring sampling shall be provided to the respective owner of the drinking water well forthwith after the result of the sampling have been received from a laboratory.
- 5. The Owner shall forthwith notify the District Manager after a well water complaint is received. Furthermore, the Owner shall forthwith test the complainant's well water, as directed by the District

- Manager, for Total Suspended Solids (TSS), Metals, Anions, Turbidity and any other sampling parameters as directed by the District Manager.
- 6. 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.

8. SPILL CONTINGENCY AND POLLUTION PREVENTION PLAN

- 1. Within three (3) months of the construction of the Works, the Owner shall implement a Spill Contingency and Pollution Prevention Plan that includes, but is not necessarily limited to, the following information:
 - 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 and Pollution Prevention Plan;
 - c. a site plan drawn to scale showing the facility, nearby buildings, streets, drainage patterns, any receiving body(ies) of water that could potentially be significantly impacted 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 MOE Spills Action Centre 1-800-268-6060;
 - f. Materials Safety Data Sheets (MSDS) 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 and Pollution Prevention Plan is activated and a description of the Trigger Mechanism(s);
 - h. a description of the spill response and pollution prevention 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 and Pollution Prevention Plan, location and, date of maintenance/replacement if warranted; and
 - j. the date on which the Spill Contingency and Pollution Prevention Plan was prepared and subsequently, amended.
- 2. The Spill Contingency and Pollution Prevention Plan shall be kept in a conspicuous, readily accessible

location on-site.

3. The Spill Contingency and Pollution Prevention Plan shall be amended from time to time as required by changes in the existing aggregate washing operations.

9. REPORTING

- 1. Each operating season, 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 forthwith orally report to the District Manager or designate, of an emergency overflow event from the upgraded sump (source) pond cell (discharge from the upgraded sump (source) pond cell emergency overflow pipe discharging to the unnamed downstream pond).
- 3. The Owner shall, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- 4. 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.
- 5. The Owner shall prepare an annual performance report by May 31st of the following year. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The report shall contain, but shall not be limited to, the following information:
 - a. a summary and interpretation of all monitoring data, including an overview of the success and adequacy of the 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;
 - d. a complete record of water well complaints received (whether directly or through the Ministry);
 - e. a record of the upgraded sump (source)/recirculation pond perimeter containment berms inspections;
 - f. a record of visual inspections of the Works;
 - g. a summary of any by-pass, spill or abnormal discharge events; and

- h. any other information the District Manager requires from time to time.
- 6. The Owner shall make the annual performance report publicly available by posting it on the Owner's website by May 31st of each year following the issuance of the Approval. The annual performance report shall be combined with Permit To Take Water annual report.

10. SPECIAL CONDITION - PUBLIC ACCESSIBILITY TO REPORT

The Owner shall make the annual performance report required by condition 9 available to the community advisory panel and public by posting it on the Owner's website at the time specified in condition 9.

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 to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. 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 operations 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 Work. Condition 5 is also included to ensure that the Works will be operated and maintained in a manner enabling compliance with the terms and conditions of this Approval, such that the environment is protected and deterioration, loss, injury or damage to any person or property is minimised and/or prevented. Furthermore, Condition 5 is included to ensure that accumulated sediment in the upgraded silt pond and the upgraded sump (source)/recirculation pond is removed to maintain the intended sediment removal performance of the Works.
- 6. Conditions 6 and 7 are included to enable the Owner to evaluate and demonstrate the performance of the

Works, on a continual basis, and to demonstrate that the Works are properly operated and maintained and do not cause any impairment to the environment.

- 7. Condition 8 is included to ensure that the Owner will implement the Spill Contingency and Pollution Prevention Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.
- 8. Conditions 9 and 10 are included to provide a performance record for future references, to ensure that the Ministry as well as the general public 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.

Schedule A forms part of this Approval and contains a list of supporting documentation/information received, reviewed and relied upon in the issuance of this Approval.

SCHEDULE A

- 1. Environmental Compliance Approval Application submitted by Gary I. Lagos, M.Sc., P.Geo., GHD Limited, dated February 16, 2021 and received on February 16, 2021.
- 2. The design report titled "OWRA S53 Environmental Compliance Approval (ECA) Supporting Information Teedon Pit Dufferin Aggregates, a division of CRH Canada Group Inc." dated June 7, 2022 and prepared by GHD Limited.
- 3. All other information and documentation provided by GHD Limited.

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 Notice") 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.

and

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 and Toronto, Ontario M7A 2J3 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 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 6th day of December, 2022

Fariha Parnu.

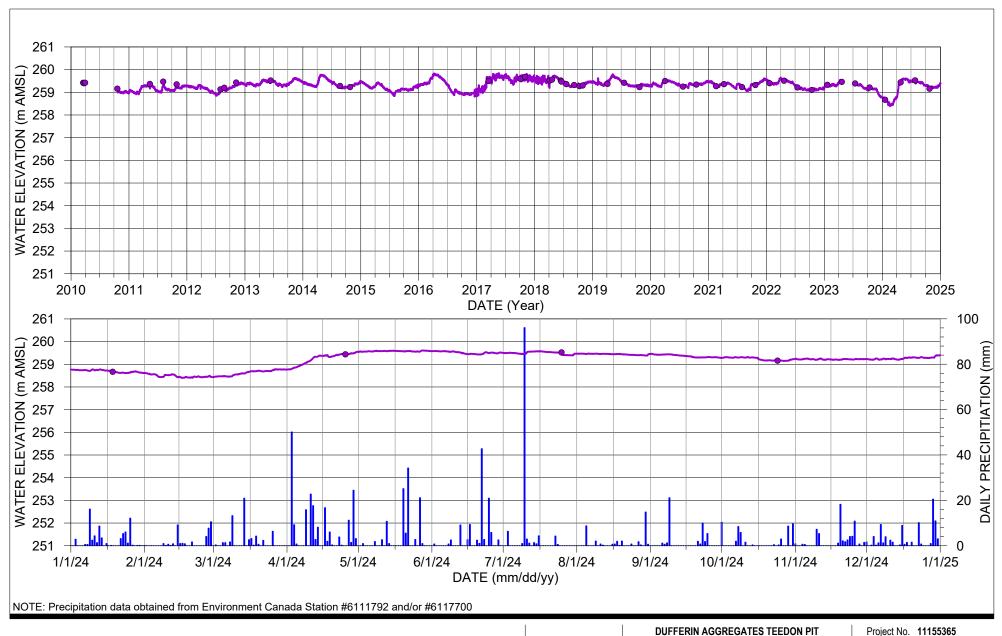
Fariha Pannu, P.Eng. Director

appointed for the purposes of Part II.1 of the *Environmental Protection Act*

KC/

c: District Manager, MECP Barrie District Office Richard Chatfield, P.Eng., GHD Limited

Appendix C Hydrographs



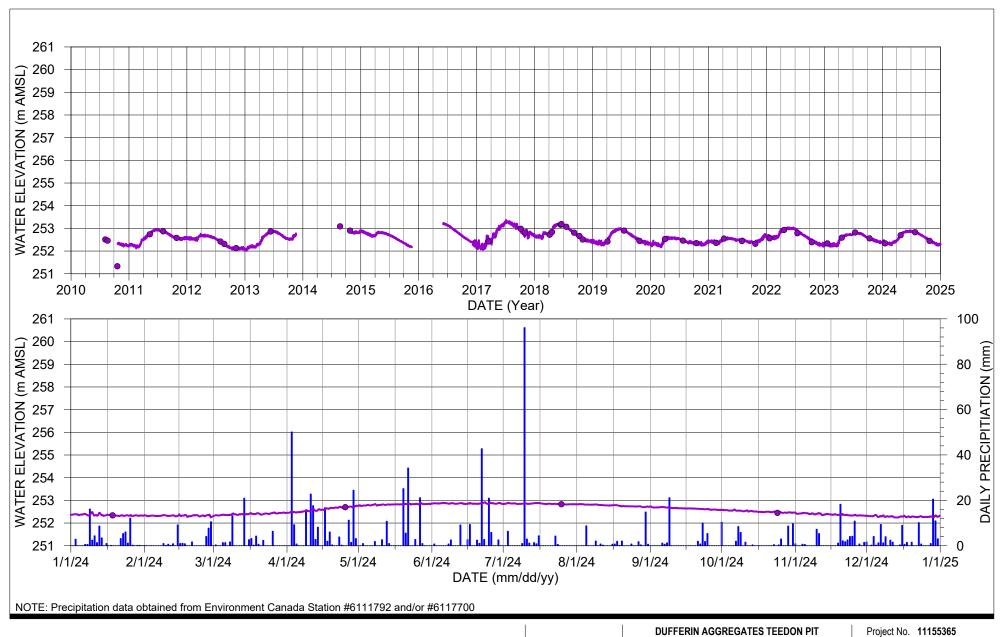




DUFFERIN AGGREGATES TEEDON PIT TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO

HYDROGRAPH SHALLOW GROUNDWATER ZONE MW1 Project No. 11155365 Date March 24, 2025

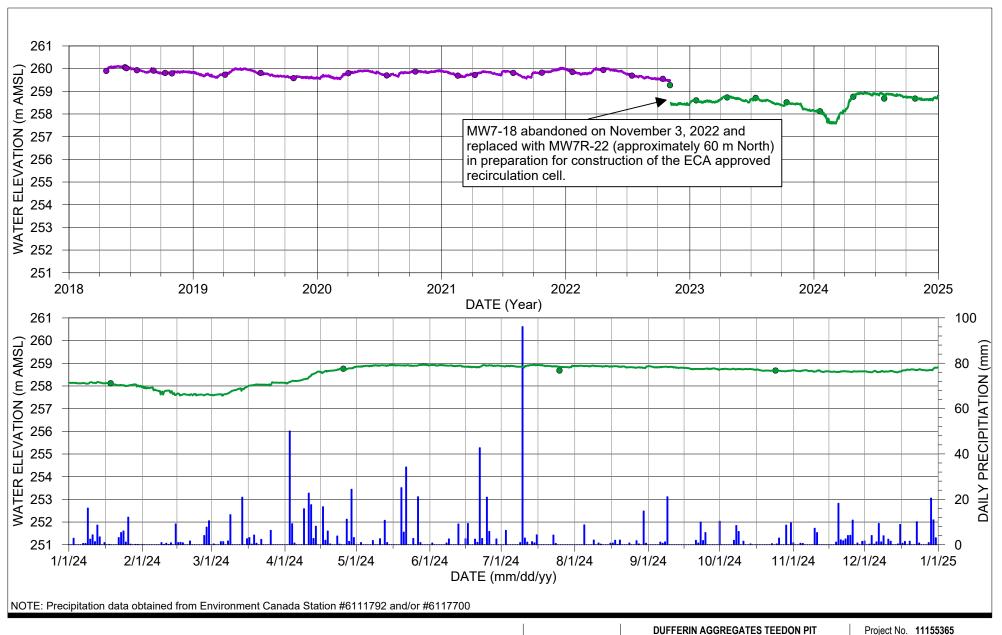
FIGURE C-1







HYDROGRAPH SHALLOW GROUNDWATER ZONE MW4-10 Project No. 11155365 Date March 24, 2025



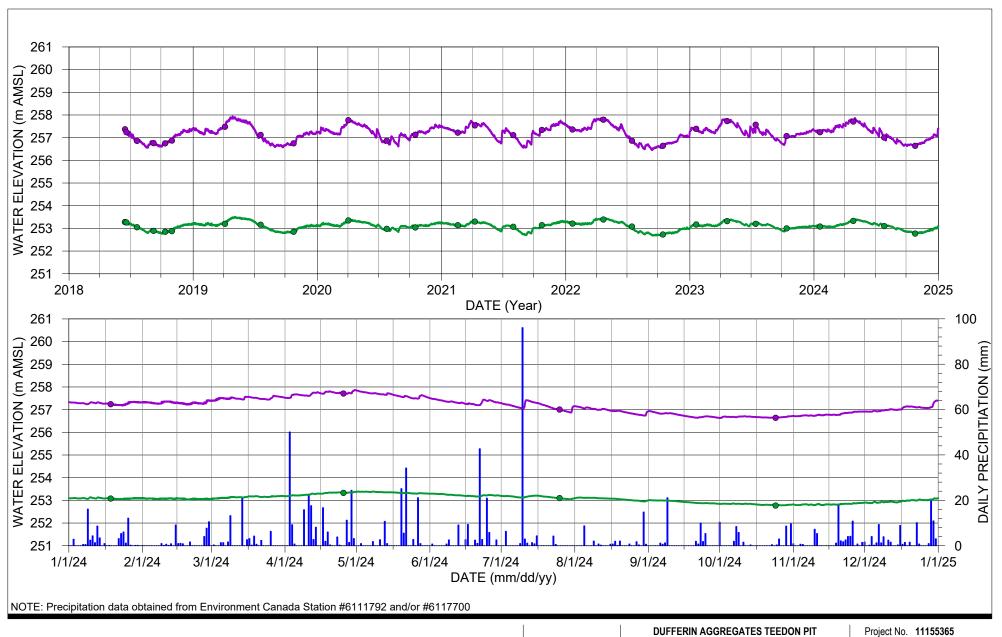




TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO

HYDROGRAPH SHALLOW GROUNDWATER ZONE MW7R-22

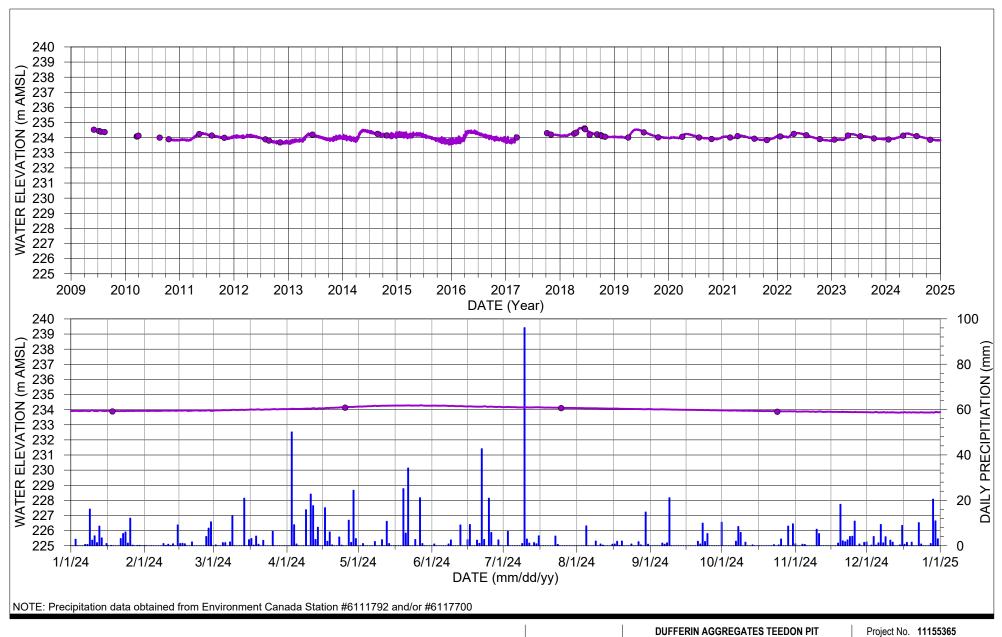
Project No. 11155365 Date March 24, 2025







HYDROGRAPH SHALLOW GROUNDWATER ZONE MW10-18 Project No. 11155365 Date March 24, 2025

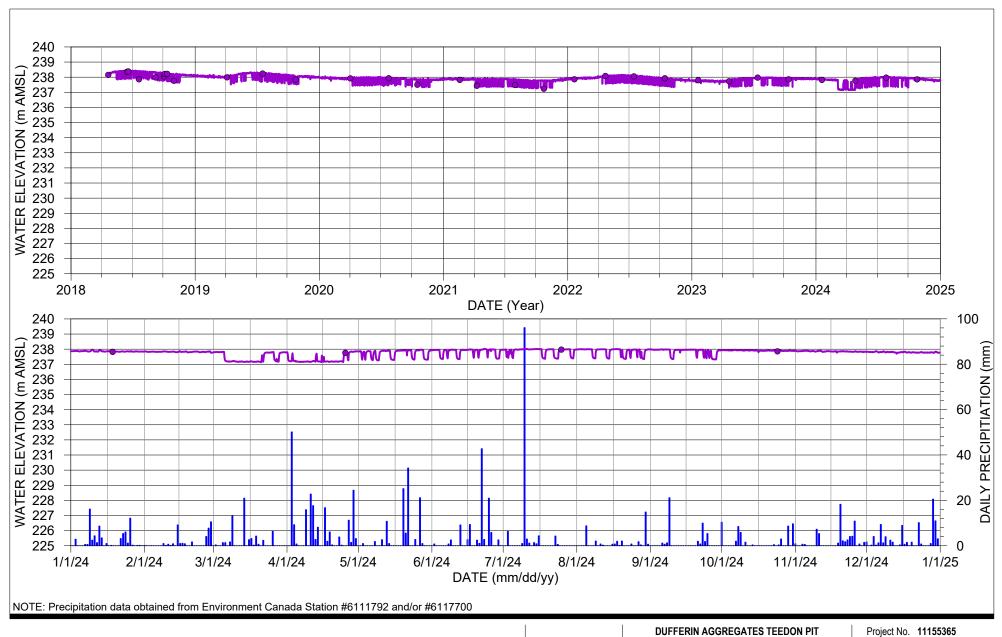






> HYDROGRAPH UPPER AQUIFER MW1-09

Project No. 11155365 Date March 24, 2025

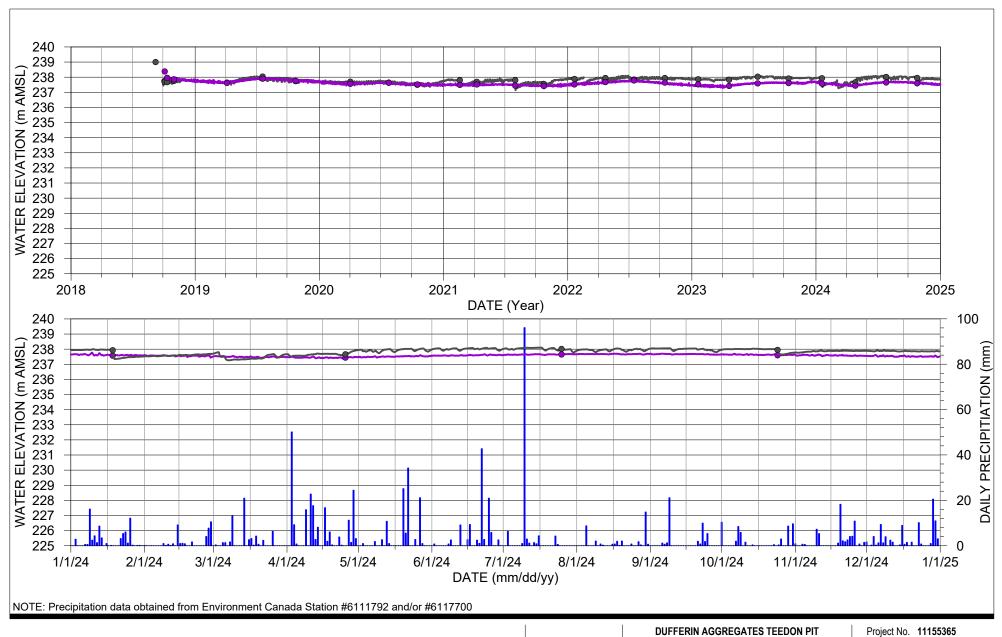






> HYDROGRAPH UPPER AQUIFER MW5-18

Project No. 11155365 Date March 24, 2025

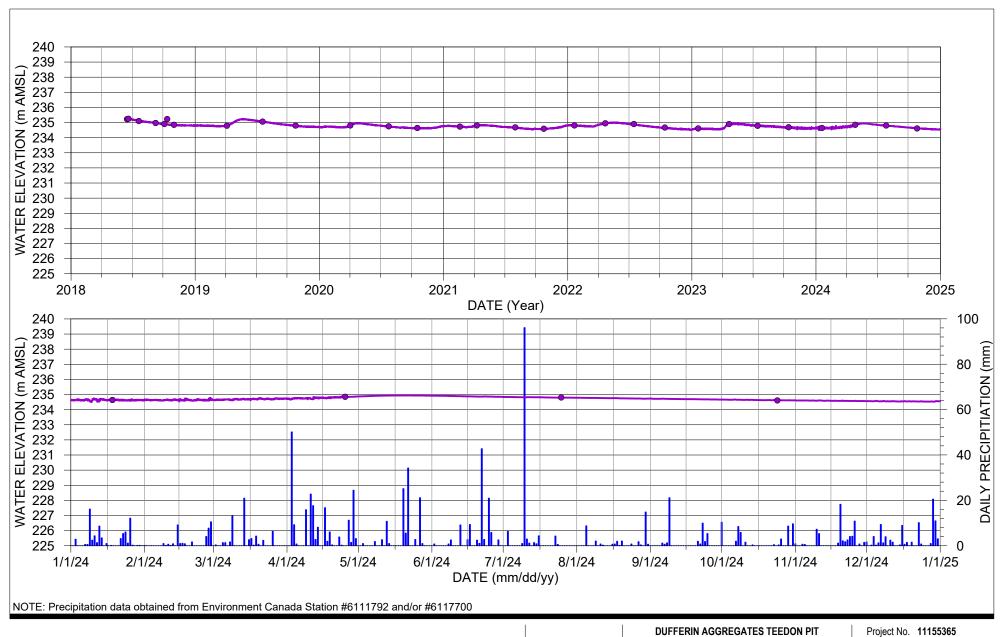






> HYDROGRAPH UPPER AQUIFER MW6-18

Project No. 11155365 Date March 24, 2025

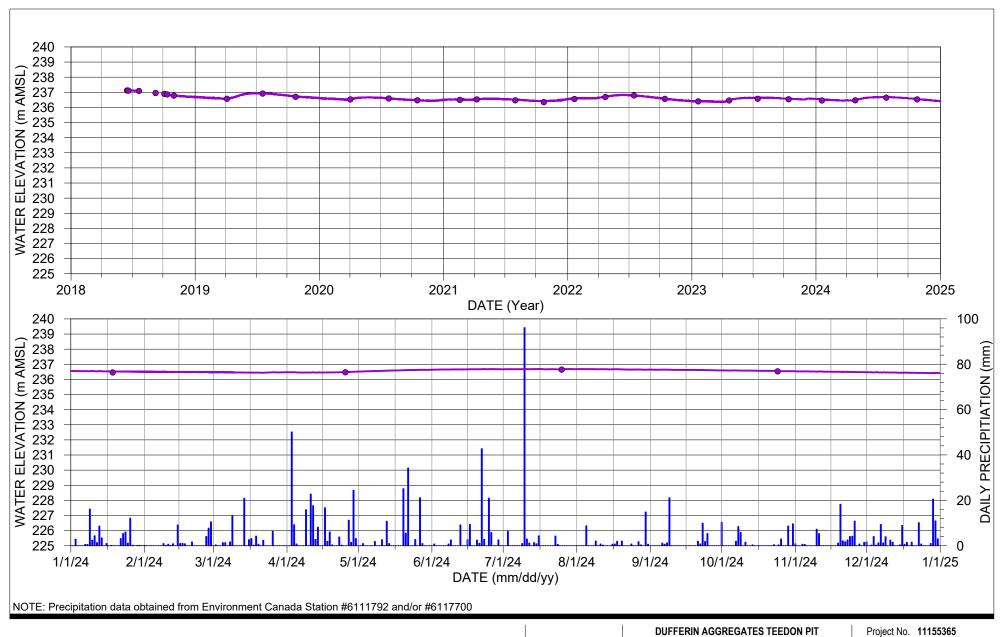






> HYDROGRAPH UPPER AQUIFER MW8-18

Project No. 11155365 Date March 24, 2025

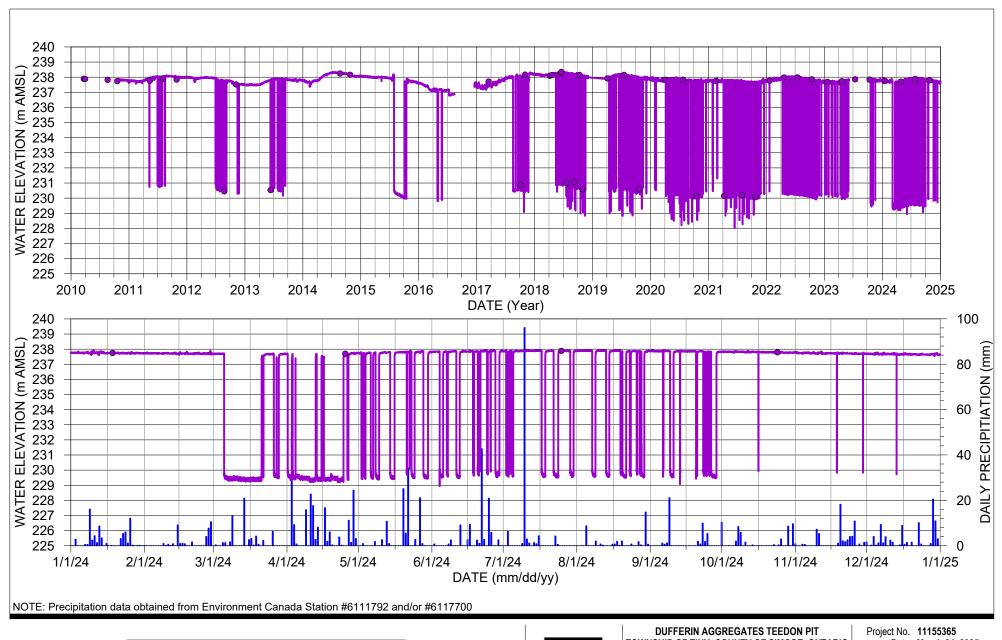






> HYDROGRAPH UPPER AQUIFER MW9-18

Project No. 11155365 Date March 24, 2025



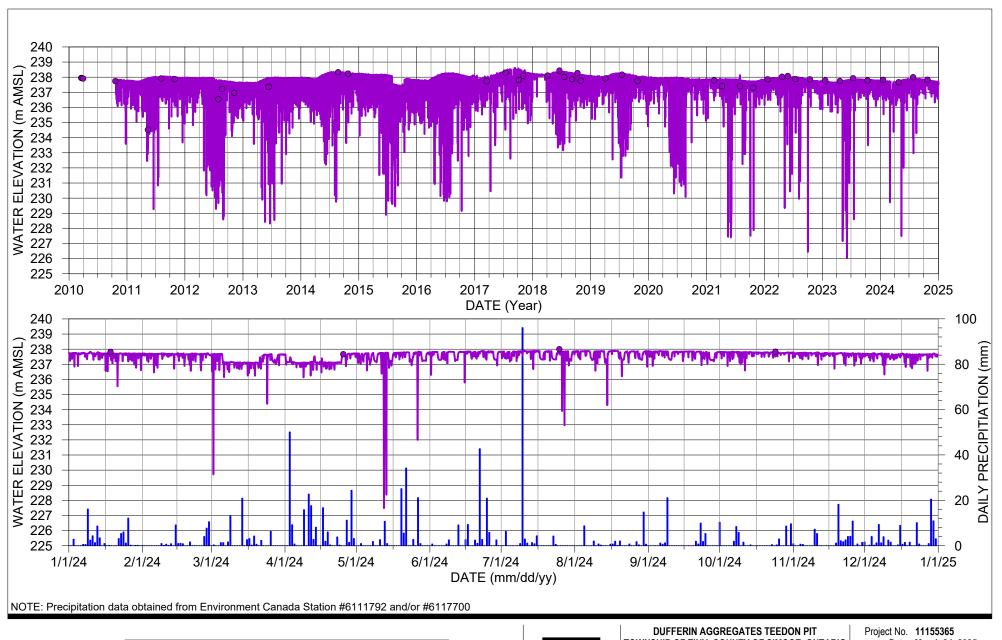


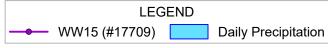


TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO

HYDROGRAPH UPPER AQUIFER PW1-09

Date March 24, 2025

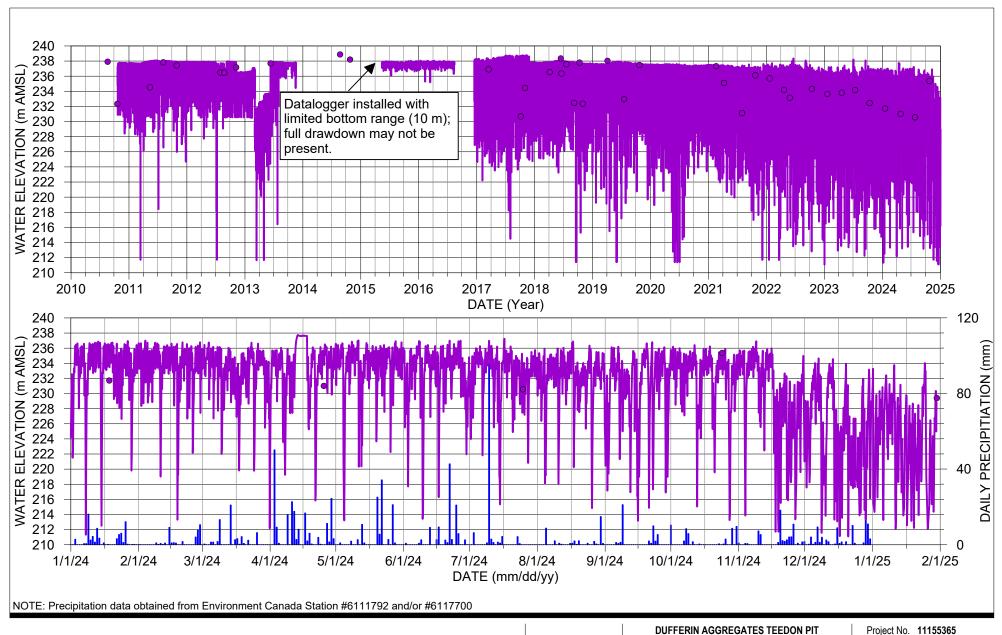






TOWNSHIP OF TINY, COUNTY OF SIMCOE, ONTARIO

HYDROGRAPH PRIVATE WELL WW15 (#17709) Date March 24, 2025





Date **March 24, 2025**

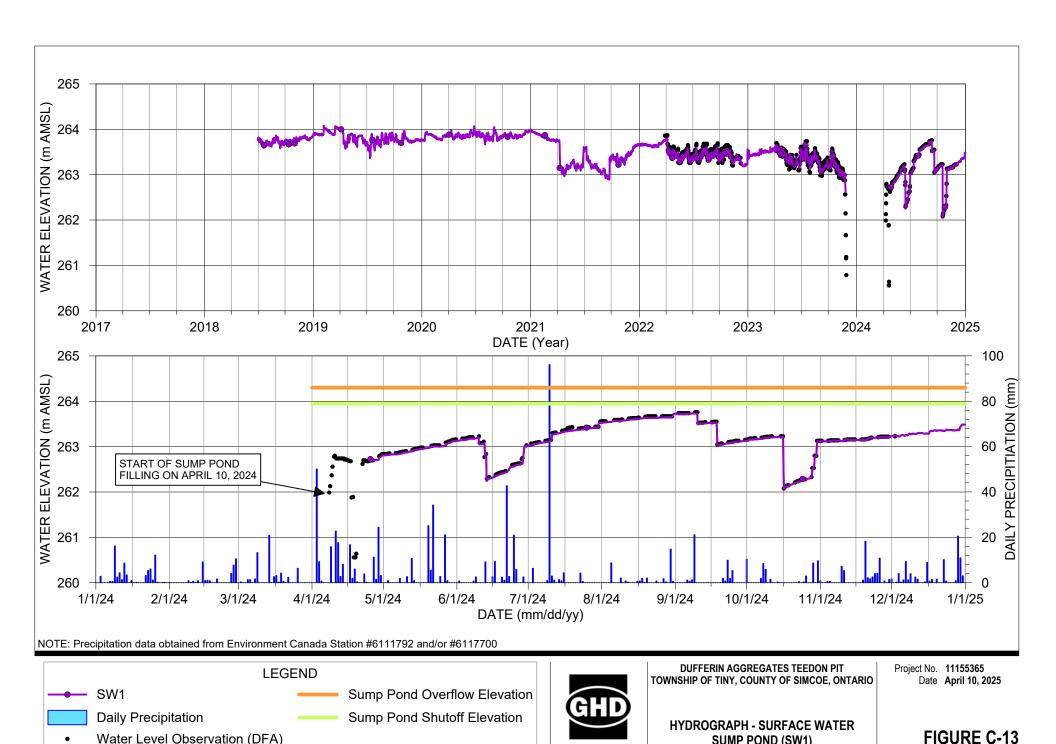
HYDROGRAPH PRIVATE WELL WW9 (#50632)

FIGURE C-12

WW9 (#50632)

LEGEND

Daily Precipitation



SUMP POND (SW1)

Water Level Observation (DFA)

Appendix D

Permit to Take Water

Appendix D.1 Permit to Take Water No. P-300-1196295834 Version 1



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

PERMIT TO TAKE WATER

Surface Water & Groundwater NUMBER P-300-1196295834

Version: 1.0

Effective Date: January 6, 2023 Expiry Date: December 31, 2023

Pursuant to Section 34.1 of the Ontario Water Resources Act, Revised Statutes of Ontario (R.S.O.) 1990 this Permit To Take Water is hereby issued to:

GROUPE CRH CANADA INC./CRH CANADA GROUP INC.

435 JEAN NEVEU Rue LONGUEUIL QUEBEC Canada I4G2P9

For the water taking from

Source Pond

Located at:

40 Darby Road, Tiny Township, TINY, ONTARIO, CANADA, LOK 2E1

DEFINITIONS

For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:

- a. "Director" means any person appointed in writing as a director pursuant to section 5 of the OWRA for the purposes of section 34.1 of the OWRA.
- b. "Provincial Officer" means any person designated in writing by the Minister as a provincial officer pursuant to section 5 of the OWRA.
- c. "Ministry" means the ministry of the government of Ontario responsible for the administration of the OWRA, currently named the Ministry of the Environment, Conservation and Parks.
- d. "District Office" means the Barrie District Office of the Ministry.
- e. "Permit" or "PTTW" means this Permit to Take Water No. P-300-1196295834 including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA, as may amended.
- f. "Permit Holder" means GROUPE CRH CANADA INC./CRH CANADA GROUP INC..
- g. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O. 40.

TERMS AND CONDITIONS

You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:

1. Compliance with Permit

- 1.1. Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, attested to by Richard Chatfield, on November 23, 2022, and all Schedules included in this Permit.
- 1.2. The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3. Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4. This Permit is not transferable to another person without the Director's written consent.
- 1.5. This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6. The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7. The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change.

2. General Conditions and Interpretation

2.1. Inspections

The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the Environmental Protection Act, R.S.O. 1990, the Pesticides Act, R.S.O. 1990, or the Safe Drinking Water Act, S. O. 2002.

2.2. Other Approvals

The issuance of, and compliance with this Permit, does not:

- (a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the Ontario Water Resources Act, and the Environmental Protection Act, and any regulations made thereunder; or
- (b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

2.3. Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

- (a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or
- (b) acceptance by the Ministry of the information's completeness or accuracy.

2.4. Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

2.5. Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

2.6. Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

3. Water Takings Authorized by This Permit

3.1. Expiry

This Permit expires on December 31, 2023. No water shall be taken under authority of this Permit after the expiry date.

3.2. Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

Table A (litres)

	Source Name / Description		Purpose Category	Specific Purpose		Maximum Taken per minute	Maximum Number of Hours Taken per day	Maximum volume per Day	Maximum days in a year	Zone / Easting / Northing
1	Source Pond (Source Pond)	Pond	Construction	Construction	Dewatering	7274	12	5237280	150	17 / 591900 / 4944960
	Total Taking							5237280		

4. Monitoring

- 4.1. The Permit Holder shall maintain a record of all water takings. The daily volume of water taken shall be measured by a flow meter or calculated in accordance with the method described in the application for this Permit, or as otherwise accepted by the Director. This record shall include the dates and times of water takings, the rates of pumping, and an estimated calculation of the total amounts of water pumped per day for each day that water is taken under the authorization of this Permit. A separate record shall be maintained for each source. The Permit Holder shall keep all required records up to date and available at or near the site of the taking and shall produce the records immediately for inspection by a Provincial Officer upon request. The Permit Holder, unless otherwise required by the Director, shall submit, on or before March 31st in every year, the records required by this condition to the Ministry's Regulatory Self Reporting System.
- 4.2. The water takings shall be included in the Annual Monitoring Report required by Condition 4.3 of Permit to Take Water No. 6258-BRDJ2M.

5. Impacts of the Water Taking

5.1. Notification

The Permit Holder shall immediately notify the local District Office of any complaint arising from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

5.2. Impacts for Water Situation Type

For Surface-Water Takings

The taking of water (including the taking of water into storage and the subsequent or simultaneous withdrawal from storage) shall be carried out in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream.

For Groundwater Takings

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent

restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

6. Director May Amend Permit

6.1. The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the Ontario Water Resources Act, Section 100 (4).

REASONS

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

- 1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
- 2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
- 3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

APPEAL PROVISIONS

In accordance with Section 100 of the *Ontario Water Resources Act, R.S.O. 1990*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 101 of the *Ontario Water Resources Act, R.S.O. 1990*, as amended, provides that the notice requiring the hearing ("the Notice") shall state:

- 1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

In addition to these legal requirements, the Notice should also include:

- a. The name of the appellant;
- b. The address of the appellant;
- c. The permit to take water number;
- d. The date of the permit to take water;
- e. The name of the Director;
- f. The municipality within which the works are located;

This Notice must be served upon:

Registrar* The Director, Section 34.1,

Ontario Land Tribunal Ministry of the Environment, Conservation and Parks

655 Bay Street, Suite 1500 and 5775 Yonge Street, 8th Floor

Toronto ON Toronto, ON M5G 1E5 M2M 4I1

OLT.Registrar@ontario.ca Fax: (416) 325-6347

Dated at Toronto this 6th day of January, 2023

Gregory Meek

Director, Section 34.1

Ontario Water Resources Act, R.S.O. 1990

c: Richard Chatfield, GHD Limited

^{*} 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

SCHEDULE 1

This Schedule "A" forms part of Permit To Take Water P-300-1196295834 Version Number 1.0, dated January 6, 2023.

- 1. Permit To Take Water Application New Permit Reference Number: 1000196294, for GROUPE CRH CANADA INC./CRH CANADA GROUP INC., at Dufferin Aggregates Teedon Pit 40 Darby Road, Tiny Township; ON LOK 2E1; contact person Jennah Pettenuzzo, for temporary construction dewatering from an existing off-line dug PTTW Source (PTTW No. 6558- BRDJ2M -Source Pond) to facilitate the temporary construction of MECP ECA ISW works consistent with ECA reference number No. 3828-BYBFQD. Application signed by Richard Chatfield, P. Eng. Of GHD Ltd. 2022/11/23.
- 2. GHD. 2022. Category 2 Permit to Take Water Application Supporting Information Dufferin Aggregates Teedon Pit, signed and stamped by Richard Chatfield, P. Eng. and signed by Dan Puddephatt of GHD, Ref: 11155365-LTR-18, 23 November 2022.

Appendix D.2
Permit to Take Water No. P-200-1196295348
Version 2



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

PERMIT TO TAKE WATER

Surface Water & Groundwater NUMBER P-300-1196295834

Version: 2.0

Effective Date: December 21, 2023

Expiry Date: May 31, 2024

Pursuant to Section 34.1 of the Ontario Water Resources Act, Revised Statutes of Ontario (R.S.O.) 1990 this Permit To Take Water is hereby issued to:

GROUPE CRH CANADA INC./CRH CANADA GROUP INC.

435 JEAN NEVEU Rue LONGUEUIL QUEBEC Canada I4G2P9

For the water taking from

Source Pond

Located at:

40 Darby Road, Tiny Township, TINY, ONTARIO, CANADA, LOK 2E1

This Permit cancels and replaces Permit Number P-300-1196295834 Version 1.0, issued on January 6, 2023.

DEFINITIONS

For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:

- a. "Director" means any person appointed in writing as a director pursuant to section 5 of the OWRA for the purposes of section 34.1 of the OWRA.
- b. "Provincial Officer" means any person designated in writing by the Minister as a provincial officer pursuant to section 5 of the OWRA.
- c. "Ministry" means the ministry of the government of Ontario responsible for the administration of the OWRA, currently named the Ministry of the Environment, Conservation and Parks.
- d. "District Office" means the Barrie District Office of the Ministry.
- e. "Permit" or "PTTW" means this Permit to Take Water No. P-300-1196295834 including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA, as may amended.
- f. "Permit Holder" means GROUPE CRH CANADA INC./CRH CANADA GROUP INC..
- g. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O. 40.

TERMS AND CONDITIONS

You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:

1. Compliance with Permit

- 1.1. Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, attested to by Jennah Pettenuzzo, on September 20, 2023, and all Schedules included in this Permit.
- 1.2. The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3. Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4. This Permit is not transferable to another person without the Director's written consent.
- 1.5. This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6. The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7. The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change.

2. General Conditions and Interpretation

2.1. Inspections

The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the Environmental Protection Act, R.S.O. 1990, the Pesticides Act, R.S.O. 1990, or the Safe Drinking Water Act, S. O. 2002.

2.2. Other Approvals

The issuance of, and compliance with this Permit, does not:

- (a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the Ontario Water Resources Act, and the Environmental Protection Act, and any regulations made thereunder; or
- (b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

2.3. Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

- (a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or
- (b) acceptance by the Ministry of the information's completeness or accuracy.

2.4. Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

2.5. Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

2.6. Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

3. Water Takings Authorized by This Permit

3.1. Expiry

This Permit expires on May 31, 2024. No water shall be taken under authority of this Permit after the expiry date.

3.2. Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

Table A (litres)

	Source Name / Description		Purpose Category	Specific Purpose		Maximum Taken per minute	Maximum Number of Hours Taken per day	Maximum volume per Day	Maximum days in a year	Zone / Easting / Northing
,	Source Pond (Source Pond)	Pond	Construction	Construction	Dewatering	7274	12	5237280	150	17 / 591900 / 4944960
	Total Taking						5237280			

3.3. This Permit does not authorize the Permit Holder to discharge pumped water into the natural environment. It is the Permit Holder's responsibility to obtain all necessary approvals from the appropriate authority prior to discharging into the natural environment.

4. Monitoring

- 4.1. The Permit Holder shall maintain a record of all water takings. The daily volume of water taken shall be measured by a flow meter or calculated in accordance with the method described in the application for this Permit, or as otherwise accepted by the Director. This record shall include the dates and times of water takings, the rates of pumping, and an estimated calculation of the total amounts of water pumped per day for each day that water is taken under the authorization of this Permit. A separate record shall be maintained for each source. The Permit Holder shall keep all required records up to date and available at or near the site of the taking and shall produce the records immediately for inspection by a Provincial Officer upon request. The Permit Holder, unless otherwise required by the Director, shall submit, on or before March 31st in every year, the records required by this condition to the Ministry's Regulatory Self Reporting System.
- 4.2. The water takings shall be included in the Annual Monitoring Report required by Condition 4.3 of Permit to Take Water No. 6258-BRDJ2M, or as amended.

5. Impacts of the Water Taking

5.1. Notification

The Permit Holder shall immediately notify the local District Office of any complaint arising from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

5.2. Impacts for Water Situation Type For Surface-Water Takings

The taking of water (including the taking of water into storage and the subsequent or simultaneous withdrawal from storage) shall be carried out in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream.

For Groundwater Takings

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

6. Director May Amend Permit

6.1. The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the Ontario Water Resources Act, Section 100 (4).

REASONS

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

- 1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
- 2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
- 3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

APPEAL PROVISIONS

In accordance with Section 100 of the *Ontario Water Resources Act, R.S.O. 1990*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 101 of the *Ontario Water Resources Act, R.S.O. 1990*, as amended, provides that the notice requiring the hearing ("the Notice") shall state:

- 1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

In addition to these legal requirements, the Notice should also include:

- a. The name of the appellant;
- b. The address of the appellant;
- c. The permit to take water number;
- d. The date of the permit to take water;
- e. The name of the Director;
- f. The municipality within which the works are located;

This Notice must be served upon:

Registrar* The Director, Section 34.1,

Ontario Land Tribunal Ministry of the Environment, Conservation and Parks

655 Bay Street, Suite 1500 and 5775 Yonge Street, 8th Floor

Toronto ON Toronto, ON M5G 1E5 M2M 4I1

OLT.Registrar@ontario.ca Fax: (416) 325-6347

* 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

Dated at Toronto this 20th day of December, 2023

Archana Uprety

Director, Section 34.1

Ontario Water Resources Act, R.S.O. 1990

c: Jennah Pettenuzzo, York Rapidlink Constructors Richard Chatfield. GHD Limited

SCHEDULE 1

This Schedule1 forms part of Permit To Take Water P-300-1196295834 Version Number 2.0, dated December 20, 2023.

- 1. Permit To Take Water Application New Permit Reference Number: 1000196294, for GROUPE CRH CANADA INC./CRH CANADA GROUP INC., at Dufferin Aggregates Teedon Pit 40 Darby Road, Tiny Township; ON LOK 2E1; contact person Jennah Pettenuzzo, for temporary construction dewatering from an existing off-line dug PTTW Source (PTTW No. 6558- BRDJ2M -Source Pond) to facilitate the temporary construction of MECP ECA ISW works consistent with ECA reference number No. 3828-BYBFQD. Application signed by Richard Chatfield, P. Eng. Of GHD Ltd. 2022/11/23.
- 2. GHD. 2022. Category 2 Permit to Take Water Application Supporting Information Dufferin Aggregates Teedon Pit, signed and stamped by Richard Chatfield, P. Eng. and signed by Dan Puddephatt of GHD, Ref: 11155365-LTR-18, 23 November 2022.
- 3. Permit to Take Water Application signed by Richard Chatfield and dated September 20, 2023.



→ The Power of Commitment