

FUNCTIONAL SERVICING REPORT AND STORMWATER MANAGEMENT BRIEF REVIEWED BY:
QUANTUM ENGINEERING PREPARED BY:
DAVID WALTER

SEPTEMBER 1, 2025

Midland Golf and Country Club Proposed Clubhouse

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1. Introduction and Background

The Midland Golf and Country Club (MGCC) is proposing to construct a new clubhouse at 9536 County Road 93, Midland, Ontario. The existing clubhouse will be demolished and the new one constructed in the same location based on the plans prepared by Royal Homes Ltd. (dated, Feb. 1, 2024) and ABC Consultants (2025).

The existing clubhouse has 70 seats in the dining room, 52 seats on the deck and 24 seats at the lounge bar.

This report has been prepared to support the site plan application required for the proposed clubhouse. The development requirements are based on the Record of Consultation, dated June 18, 2024.

The MGCC lands comprise an area of approximately 71 hectares, the location is noted on the Site Plan (prepared by MHBC Planning) included in **Appendix A** and are referred to as the "site" in this report.

The MGCC was founded in 1919 and consists of a two-storey clubhouse, 18-hole golf course, pro shop, administration building, halfway house, event tent and various maintenance buildings.

The proposed clubhouse is comprised of two stories.

The lower level includes an outdoor patio, lower lounge, bar area, boardroom, offices, kitchen, locker rooms and washrooms. The lower level floor area is 711.12 m².

The main level floor includes a covered deck, upper lounge, bar area, cooler, kitchen, storage, offices and washrooms. The main level floor area is 620.0 m².

The proposed clubhouse has a total of 160 restaurant seats and 20 staff. Based on the Site Plan prepared by MHBC, the project planner, there are 112 parking spaces plus two barrier free spaces. Based on information provided by the project planner it is understood that 97 parking spaces are required. It is noted that a loading space is not required.

The analysis and design content in this report has been prepared in accordance with the following:

- i) The Town of Midland Engineering Design Standards (April, 2024).
- ii) Ministry of Environment Stormwater Management Practises Planning and Design Manual (2003).
- iii) Low Impact Development Stormwater Management Planning and Design Guide Version 1.0, CVCA & TRCA (2010).
- iv) Ontario Building Code (Sept. 14, 2012 and current addendums).

The existing and proposed clubhouse locations are shown on the Site Plan prepared by MHBC Planning in **Appendix A**.

2. Water Servicing

Existing

Water supply for the MGCC lands is provided by two private water wells. Private Well#1 (PW1) is located approximately 300m southeast of the clubhouse. Private Well#2 (PW2) is located approximately 360m north of the clubhouse. Refer to Figure 5 and 6 in **Appendix C**.

Both wells are primarily irrigation wells that are operated under PTTW 4740-AXZGGA dated April 27, 2018 and issued by the Ministry of Environment and Climate Change.

The PTTW Supplemental Reports, dated April 23, 2023 and March 12, 2024, prepared by International Water Consultants Ltd. is included in **Appendix D**. A copy of PTTW 4740-AXZGGA is included in the appendix of the reports, which summarizes the details of each well and water takings for the year.

Based on field investigations and discussions with MGCC it is understood that the existing 300mmØ irrigation service from PW1 services the southern portion of the golf course. The existing 25mmØ domestic water supply for the clubhouse area is connected directly to PW1. There are three services connected to the 25mmØ service as follows: one 19mmØ service to the administration building, one 25mmØ to the clubhouse and one 19mmØ service to the halfway house.

Please refer to the Site Servicing and Grading Plan in **Appendix B**.

It is noted that PW1 provides domestic water supply to the existing clubhouse and currently does not include treatment. The owner has confirmed that a review of the system in accordance with O. Reg. 319/08 is currently in progress. It is also noted that **Appendix E** includes copies of water test reports issued by Aquatic & Environmental Laboratory Inc. The Certificate of Analysis reports for testing in 2023 and 2024 generally indicate zero total coliform and zero E. coli with two results in 2024 indicating background bacteria. Testing was completed under O. Reg. 319/08.

Proposed

The proposed clubhouse will be serviced by installing a new 50mmØ service. The installation of the proposed 50mmØ service will be complete with tees to connect existing service laterals to the administration building and halfway house. Please refer to Water Service Design calculations in **Appendix F** and the Site Servicing and Grading Plan in **Appendix B**.

The water service will be complete with frost protection, meter and will be installed in accordance with the OBC (current edition).

3. Wastewater Servicing

Existing

There are two private septic systems on the MGCC lands.

Existing System A is located just west of the clubhouse and along the north side of the parking area. The system services the clubhouse and the halfway house, and is comprised of a conventional septic tank and shallow buried trench style bed. This septic system will be abandoned and de-commissioned under the appropriate permit.

Existing System B is located at the west end of the parking area near the maintenance and storage buildings. The system services the storage building and is comprised of a conventional septic tank and shallow buried trench style bed.

Permits for each system are included in **Appendix G**.

Proposed

The proposed septic system is an Eljen Bed System (Class IV), the design of the system and detailed drawing preparation have been completed by Valiant Engineering. The components of the system are to be provided by Waterloo Biofilter and are detailed on Drawing SS-1 (dated Nov. 28, 2024) in **Appendix H**.

Drawing SS-1 notes that the Daily Design Sewage Flow is 21,745 L/day. The flow is based on 160 restaurant seats, 20 full time employees and 49m² of retail area. Based on the design flow an Environmental Compliance Approval from the MECP is required because the flows are in excess of 10,000 L/day. The ECA permit will be obtained by Valiant Engineering as part of the septic system design process while municipal site plan approval is obtained.

The proposed 150mmØ sanitary sewer system has been designed to collect flows from the proposed clubhouse, the existing administration building and the halfway house and convey them to the proposed septic system. Please refer to the Sanitary Sewer Design Sheet in **Appendix I** and the Site Servicing and Grading Plan (SSGP) in **Appendix B**.

4. Site Grading

The proposed grading of the clubhouse area and the parking lot extension will adhere to the requirements of the Site Plan and stormwater drainage strategy. The details are provided Site Servicing and Grading Plan (SSGP) included in **Appendix B** and will generally match the existing grading where possible.

The design will provide safe conveyance of stormwater away from the proposed clubhouse and direct drainage to the infiltration areas. Earthworks activities will be completed safely with the appropriate erosion and sediment control measures in place.

The maximum proposed slopes in landscape areas is 5:1. Slopes adjacent to all buildings will be a minimum of 2.0% to a maximum of 5.0%.

The proposed widening of the existing parking area will be comprised of:

- 50mm HL3
- 150mm Granular A
- 300mm Granular B

5. Stormwater Management Brief

Pre-Development Conditions and Background

The MGCC lands are approximately 71.45ha in area and the vegetation consists of grassed fairways, mature hardwood forest and various buildings noted above. The lands are bordered by Golf Link Road and estate residential to the north, County Road 93 to the east, vacant mature hardwood forest lands to the south, County Road 93 to the east and hardwood forest to the west.

Topographical mapping for the MGCC lands and the surrounding area is derived from the Simcoe County GIS database. In addition, a number of site visits were conducted prior to preparing this report to confirm drainage and soil type.

Drainage generally flows overland from a southwest to northeast direction on the site towards the intersection of County Road 93 and Golf Link Road. From there runoff is conveyed through the large swamp lands to the northeast, ultimately towards Georgian Bay.

Based on the Simcoe County, Ontario, Soil Survey prepared by the Department of Soils, Ontario Agricultural College (Guelph) and the Department of Agriculture the underlying soils for the MGCC lands are predominantly Tioga Loamy Sand is categorized as Hydrologic Soil Group 'A' (in accordance with the Ontario Ministry of Transportation (MTO) Soil Classification System).

The Tioga Loamy Sand is classed as a good draining soil. This is characterized in a practical way in that rainfall after significant storm events infiltrates within a short period of time and long-term ponding rarely occurs. The Tioga Loamy Sand commonly has a percolation rate (T-time) in the range of 10 to 12 mins/cm.

Post-Development Conditions

The proposed stormwater management strategy for the clubhouse project is based on the general principles of the Ministry of Environment, Planning and Design Manual (March, 2003) and the Low Impact Design Stormwater Management Planning & Design Guide (LID,

authored by the Credit Valley Conservation and the Toronto and Region Conservation Authority (2010).

Given the area of the property (71.54ha), stormwater management has been considered in this brief for the immediate clubhouse area and west parking lot only. In addition, as part of the pre-consultation process the Town of Midland Engineering Department reviewed and agreed to a proposal to provide a "best efforts" approach to stormwater management for the new clubhouse. This approach is based on the very minor increase in impervious area as noted below.

It should also be noted that there are no improvements for the remainder of the property.

In terms of comparison of pre-development to post-development impervious levels there are two areas where an increase is proposed as noted below.

The proposed clubhouse will be situated on the same footprint as the existing clubhouse and is approximately the same area. In addition, the proposed asphalt widening is comprised of a narrow strip along the northern edge of the existing parking lot (1.5m wide x 88m long). Table 1.0, below summarizes the pre and post-development areas.

Table 1.0

Pre-Development			
	Asphalt	7,979	m²
	Buildings	1,745	m²
	Total	9,724	m²
Post-Development			
	Asphalt	8,082	m ²
	Buildings	1,733	m ²
_	Total	9,815	m ²

The above summary of impervious areas represents an increase of 0.9% for the proposed clubhouse and asphalt widening. An increase of this magnitude is considered nominal.

Based on the above it is proposed that the stormwater management controls be provided on a "best efforts" basis. Therefore, it is proposed that infiltration facilities be installed adjacent to the parking lot widening and at each corner of the proposed clubhouse.

The "best efforts" stormwater control will be provided by installing an Infiltration Trench 1.5m wide x 1.5m deep x 88m long (Refer to Drawing SSGP in **Appendix B**). The storage volume provided is approximately 79m³. The supporting calculation for the Infiltration Trench can be found in **Appendix J**.

The building area infiltration will be achieved by installing four infiltration pits around the building that will each be $2mW \times 2mL \times 2mD$ (Refer to Drawing SSGP in Appendix B). The total storage volume provided is $12.8m^3$. The supporting calculation for the Infiltration Pits can be found in **Appendix J**.

Quality control of runoff will be provided in the infiltration trench. The trench will include a pre-treatment filter strip that will capture sediment from the first flush of rainfall events. This will prevent the main body of the infiltration area from clogging with sediment over time. The design includes operation and maintenance requirements for cleaning and replacement when it eventually fills with sediment.

It is noted that there is a 75m long existing grassed swale located approximately 150m north of the clubhouse area (Refer to Drawing SSGP in **Appendix B**). The swale and the large grassed areas of overland drainage provide conveyance of flows for the clubhouse area and provides phosphorus removal. The existing swale is essentially an enhanced grass swale.

These type of stormwater management features are identified and recognized in the Low Impact Development Stormwater Management Manual (LIDSMM). The manual provides information for municipalities, developers, consultants, agencies and others on the benefits of managing rain where it falls and where snow melts, including performance guidance on controlling runoff volume.

The median mass removal rate for the enhanced grass swale is approximately 55% of phosphorus.

The above noted infiltration areas are proposed to provide quality control of post-development flows prior to discharging to the downstream overland outlet at County Road 93 and Vindin Street.

6. Erosion and Sediment Control

Topsoil removal will be limited to the construction areas only. Exposed or new soil will be seeded or sodded as soon as reasonable after construction has been completed. All topsoil stockpiles shall be kept at a low level to facilitate weed cutting and maintenance.

During the construction period of the clubhouse project Light Duty Silt Fence, as per OPSD 219.110, will be installed and maintained until new vegetation has been established per the recommendations of the Engineer on the downstream side of all excavations. The silt fence shall be inspected periodically and repaired as needed per the recommendations of the owner's agents/consultants (all in accordance with municipal and MECP guidelines).

Mud tracking onto County Road 93 will be controlled via a mud mat to be constructed on site. The mat shall be constructed of clear stone and replaced as required by the owner's agents/consultants (all in accordance with municipal and MECP guidelines).

The owner's agents/consultant shall complete periodic inspections during the construction period and after significant rainfall events and provide direction to the owner/contractor to carry out repairs and or replacement as required.

7. Utilities

The MGCC property is currently serviced by Newmarket-Tay Hydro (hydro), Bell (telephone) and propane for building heat (on site storage tanks). The proposed clubhouse will be serviced by the above existing services. Connection of these existing services to the proposed clubhouse will be coordinated by MGCC and the appropriate contractor/agency. Any required upgrades to the hydro service will be coordinated by MGCC with Newmarket-Tay Hydro.

It is noted that MGCC is currently in discussions with Enbridge to eventually extend the existing gasmain from the intersection of County Road 93 and Vindin Street to the MGCC entrance complete with a service lateral to the clubhouse.

8. Traffic Statement

It is noted that the anticipated traffic volume in the post-development condition will be similar to the pre-development condition. At the time of report preparation there were no known problem areas on the MGCC lands in terms of parking and vehicle turning movements.

9. Conclusions

The Functional Servicing Report and Stormwater Management Brief has been prepared to support the Site Plan Approval application. The report demonstrates that the site and project can be serviced in accordance with the Town of Midland Engineering Development Design Standards and SSEA guidelines. The following site servicing specifics are noted:

- 1. The proposed clubhouse can be serviced by the existing private wells on the site. The existing 25mmØ water service to the existing clubhouse will be upgraded to a new 50mmØ service.
- 2. The proposed on site wastewater system, manufactured by Waterloo Biofilter, will adequately service the proposed clubhouse.
- 3. The parking area widening, the proposed wastewater treatment area and the clubhouse surroundings can be safely and adequately graded to service the project.
- 4. A "best efforts" approach to stormwater management will provide quality control given the size and nature of the site.

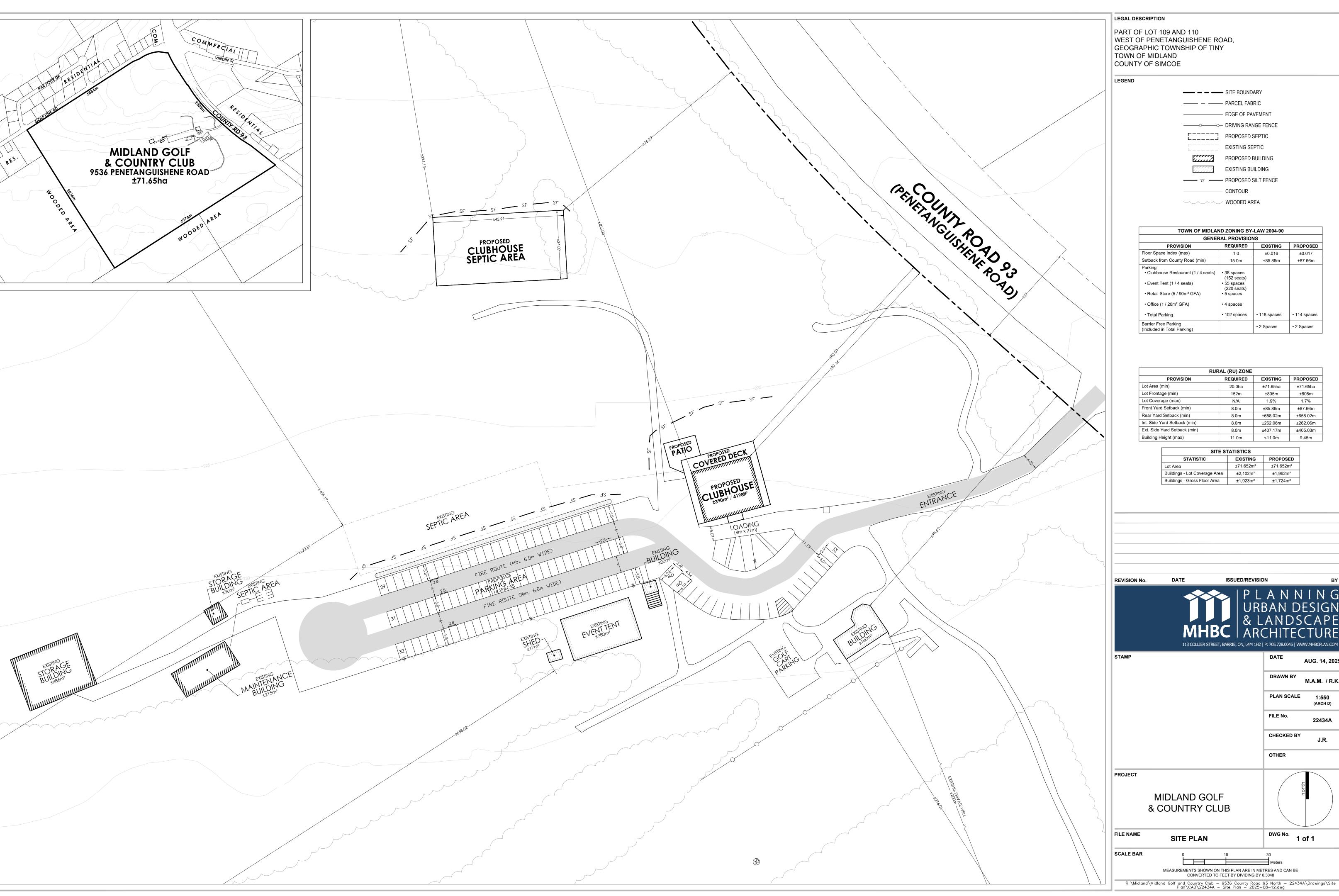
- 5. The appropriate erosion and sediment controls will be installed during the construction period and inspected by the owner's agent/consultant in order to provide adequate controls as per MECP and the Town of Midland.
- 6. The existing utilities currently servicing the existing clubhouse will be disconnected and re-connected to the new clubhouse. The MGCC are in discussions with Enbridge to provide a new service via extension of the existing gas main to the site.

The above report is respectfully submitted to the Town of Midland in support of planning level approvals.

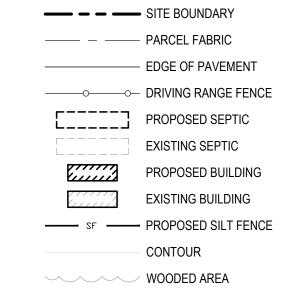
D. W. LALONDE 2025/09/02

Quantum Engineering

David Walter



PART OF LOT 109 AND 110 WEST OF PENETANGUISHENE ROAD, GEOGRAPHIC TOWNSHIP OF TINY TOWN OF MIDLAND



GENERAL PROVISIONS								
PROVISION REQUIRED EXISTING PROPOSED								
Floor Space Index (max)	1.0	±0.016	±0.017					
Setback from County Road (min)	15.0m	±85.86m	±87.66m					
Parking Clubhouse Restaurant (1 / 4 seats) Event Tent (1 / 4 seats)	• 38 spaces (152 seats) • 55 spaces (220 seats)							
• Retail Store (5 / 90m² GFA)	• 5 spaces							
Office (1 / 20m² GFA)	• 4 spaces							
Total Parking	• 102 spaces	• 118 spaces	• 114 spaces					
Barrier Free Parking (Included in Total Parking)		• 2 Spaces	• 2 Spaces					

RURAL (RU) ZONE							
PROVISION	REQUIRED	EXISTING	PROPOSED				
Lot Area (min)	20.0ha	±71.65ha	±71.65ha				
Lot Frontage (min)	152m	±805m	±805m				
Lot Coverage (max)	N/A	1.9%	1.7%				
Front Yard Setback (min)	8.0m	±85.86m	±87.66m				
Rear Yard Setback (min)	8.0m	±658.02m	±658.02m				
Int. Side Yard Setback (min)	8.0m	±262.06m	±262.06m				
Ext. Side Yard Setback (min)	8.0m	±407.17m	±405.03m				
Building Height (max)	11.0m	<11.0m	9.45m				

SITE STATISTICS							
STATISTIC	PROPOSED						
Lot Area	±71,652m²	±71,652m²					
Buildings - Lot Coverage Area	±2,102m²	±1,962m²					
Buildings - Gross Floor Area	±1,923m²	±1,724m²					

DATE ISSUED/REVISION

> AUG. 14, 2025 **DRAWN BY** M.A.M. / R.K. **PLAN SCALE** (ARCH D) FILE No. 22434A CHECKED BY OTHER

MIDLAND GOLF & COUNTRY CLUB

SITE PLAN

DWG No. 1 of 1 MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048



<u>Drawing Title</u>

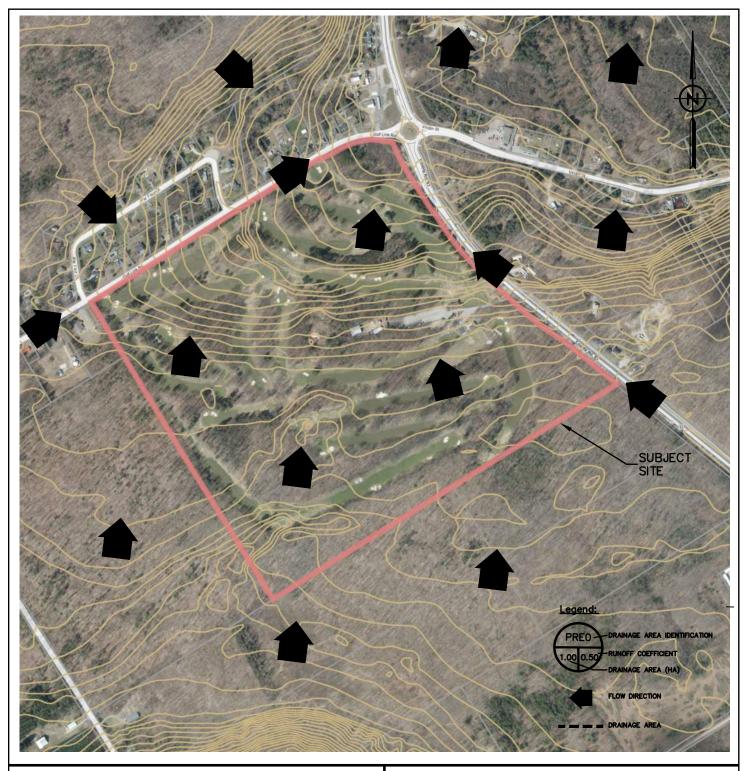
SITE LOCATION PLAN

D. Walter 771 Dominion Avenue Midland, ON L4R 1S4

Project Title

PROPOSED CLUBHOUSE MIDLAND GOLF AND COUNTRY CLUB

Drawn B	•	Checked By	Figure No.
	LW	DW	
Scale		Project	l FIG1
	N.T.S.	MGCC	



<u>Drawing Title</u>

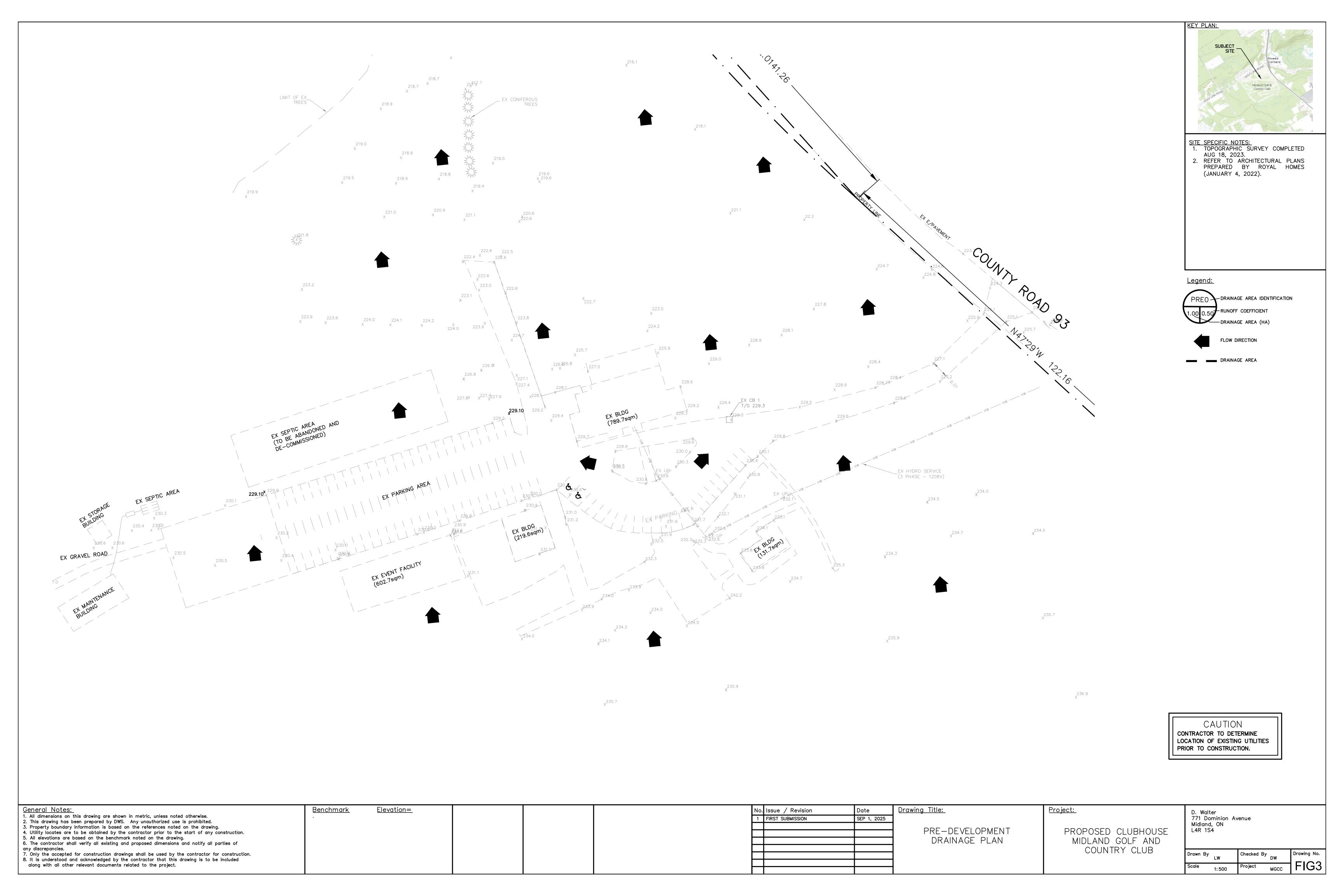
EXTERNAL DRAINAGE PLAN

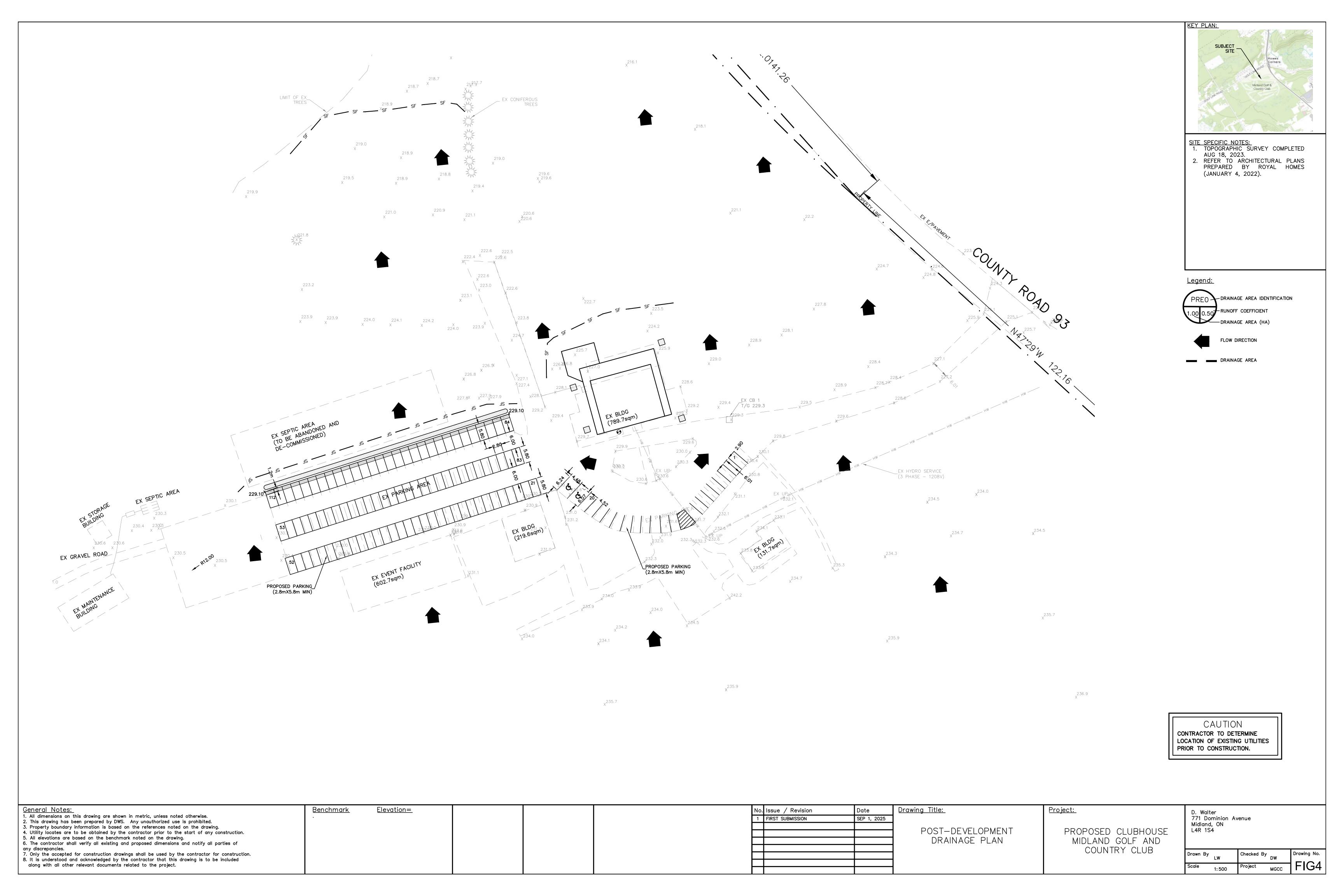
D. Walter 771 Dominion Avenue Midland, ON L4R 1S4

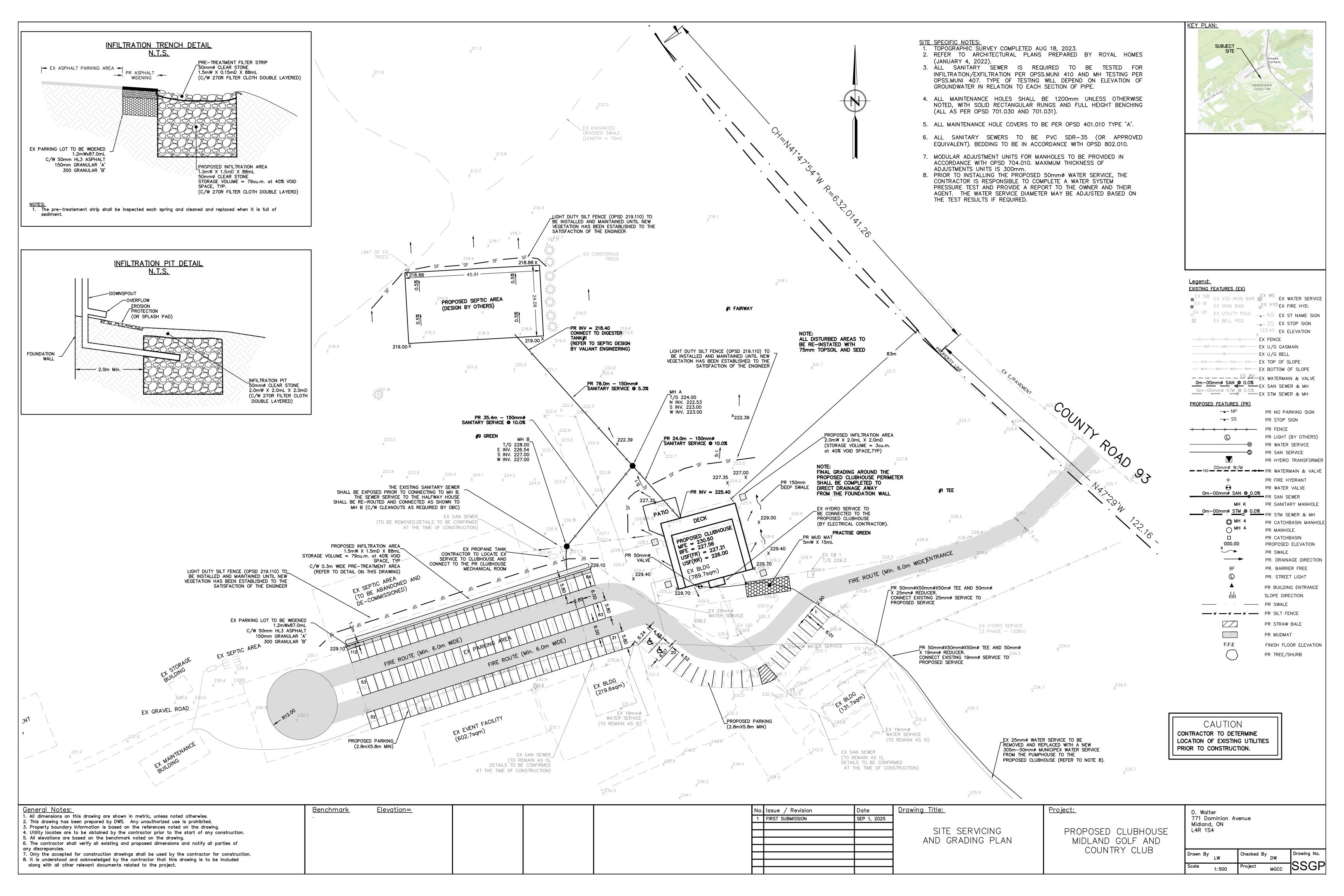
Project Title

PROPOSED CLUBHOUSE MIDLAND GOLF AND COUNTRY CLUB

Drawn By		Checked By	Figure No.
	LW	DW	
Scale	N.T.S.	Project MGCC	FIG2











MIDLAND GOLD AND COUNTRY CLUB

PERMIT TO TAKE WATER NUMBER 4740-AXZGGA SUPPLEMENTAL REPORT

by

INTERNATIONAL WATER CONSULTANTS LTD.

April, 2023

INTRODUCTION

International Water Consultants Ltd. was requested by Midland Golf and County Club to undertake the reporting of groundwater withdrawals and water level information to fulfil the conditions of the Permit to Take Water Number 4740-AXZGGA.

BACKGROUND

These PTTW conditions include maintaining a continuous water level recorder, in well PW2 (MECP ID 5704503), or another monitoring well of comparable depth in this area. A Solinst Levelogger with associated Barologger was installed in 2014 in the "Old Well" approximately 9.85m south of PW2. The Levelogger is programmed at hourly recording intervals. The current dataset begins in April 2020, just prior to the Golf Club's 2020 irrigation season. The water level in PW2 and the Old Well are measured manually with a water level indicator. Historically, manual water level measurements at PW 1 (MECP ID 5704502), were not possible due to the dual pumping arrangement, power cables, and the approximate 44m water level. This was improved in August 2020, when a Well Contractor installed stilling tubes to depth 85m, during pumping equipment upgrades.

Midland Golf and Country Club maintains in-line flow meters at Wells PW1 and PW2 and collects and records daily volumes and flow rates. This water taking data and water levels from the Old Well are presented in the following graphs and Tables.

PW1 is approximately 650 metres south of PW 2. PW1 is 1,100 metres north-west of The Town of Midland Well No. 9, and PW 2 is approximately 1,500 metres east of The Town of Midland Vindin Street Wellfield. Previous reports indicate that potentially 0.2m of interference from these wells is seen in the water level trends from the Midland Golf Old Well.

PRODUCTION

The following tables summarize the Total Annual Withdrawal, Average Daily Withdrawal, and Maximum Daily Withdrawal, in cubic meters. To clarify, this average is calculated using the sum of the total well withdrawals divided by the number of days that the well was operated during the year.

Table 1 - Summary of Withdrawals from PW 1

Well PW 1	# of Days Production	Total Annual Withdrawal (m³)	Average Daily Withdrawal (m³)	Maximum Daily Withdrawal (m³) PTTW = 1,090(m³)
2020	91	50,366.25	553.48	1,068.58
2021	132	65,204.44	493.97	1,087.90
2022	86	40,840.60	474.89	853.07

Table 2 - Summary of Withdrawals from PW 2

Well PW 2	# of Days Production	Total Annual Withdrawal (m³)	Average Daily Withdrawal (m³)	Maximum Daily Withdrawal (m³) PTTW = 817.2 (m³)
2020	158	39,989.40	253.10	621.23
2021	166	34,541.14	208.08	642.01
2022	144	34,582.34	240.16	681.98

Table 3 - Summary of Combined Withdrawals from PW1 and PW 2

Year	Well PW 1 Annual Withdrawal (m³)	Well PW 2 Annual Withdrawal (m³)	Combined 24 Hr Max Withdrawal (m³)*	Combined Annual Withdrawal (m³)
2020	50,366.25	39,989.40	1,582.0	90355.65
2021	65,204.44	34,541.14	1,573.9	99745.58
2022	40,840.60	34,582.34	1,393.0	75422.94

^{*} on one individual day each year

Typical irrigation seasons average from May to October. Between 2020 and 2022, PW 1 was in operation an average of 103 days per year and PW 2 an average of 156 days per year, over this three year period. It is noted that PW 1 was out of service for 64 days during the 2020 irrigation season for pump repair.

WATER LEVELS

Hourly water levels are recorded using a Solinst Levelogger that is installed in the Old Well, 9.85m south of PW2. The data has been barometrically compensated to remove the barometric pressure fluctuations from the submerged Levelogger recordings with hourly recordings from the on-site Barologger.

Water levels in the Old Well appear to have approximately one meter of interference from the operation of PW2. The water level response at the Old Well from production at PW1, some 620 metres away, appears to be marginal.

As previously mentioned, the water level trend has a "saw-tooth" pattern during times of non-production. It is presumed that this water level variation of approximately 0.15 to 0.2 m is from the usage of the nearby Town of Midland Municipal Wells.

In general, for the three years of data that was processed, the water levels at the Old Well maintained around the 194.2mASL range during irrigation events, with a static water level elevation in the 195.2mASL range.

Following well and pump maintenance at PW1 in August 2020, a stilling tube was installed to facilitate manual collection of water levels. It is suggested that a weekly non-pumping and pumping water levels be measured and recorded at this well site. This would assist in tracking the well performance, water level and potential deterioration of the well.

Conclusions and Recommendations

- Midland Golf and Country Club water use for irrigation was within the permitted withdrawals.
- Water level monitoring is completed automatically in an old production well near PW2. These data indicated about 1 meter of interference from the pumping of PW2.
- It is suggested that weekly water level measurements and the ON/OFF status be recorded at PW1, now that a stilling tube had been installed to facilitate this.



• No adverse effects of the withdrawals have been reported, however, some apparent measurable water level fluctuation is seen which is thought to be from the Midland Town Wells. This fluctuation is negligible in the order of 0.15 to 0.2m.

Please do not hesitate to contact us if you have any questions or concerns.

Yours truly,

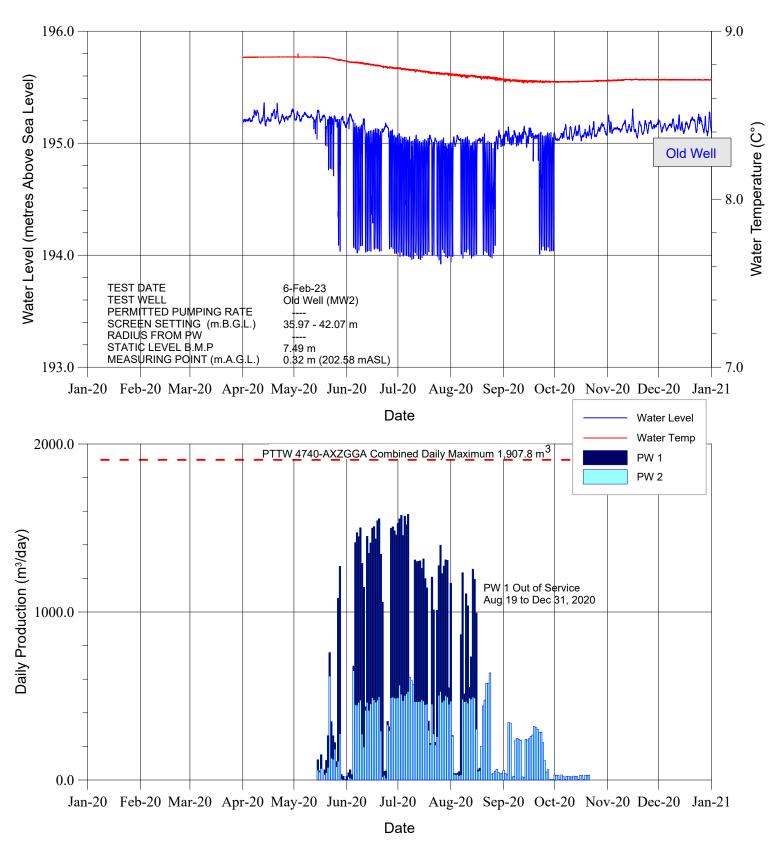
International Water Consultants Ltd.

Terry Brown, C. Tech

DRAWINGS



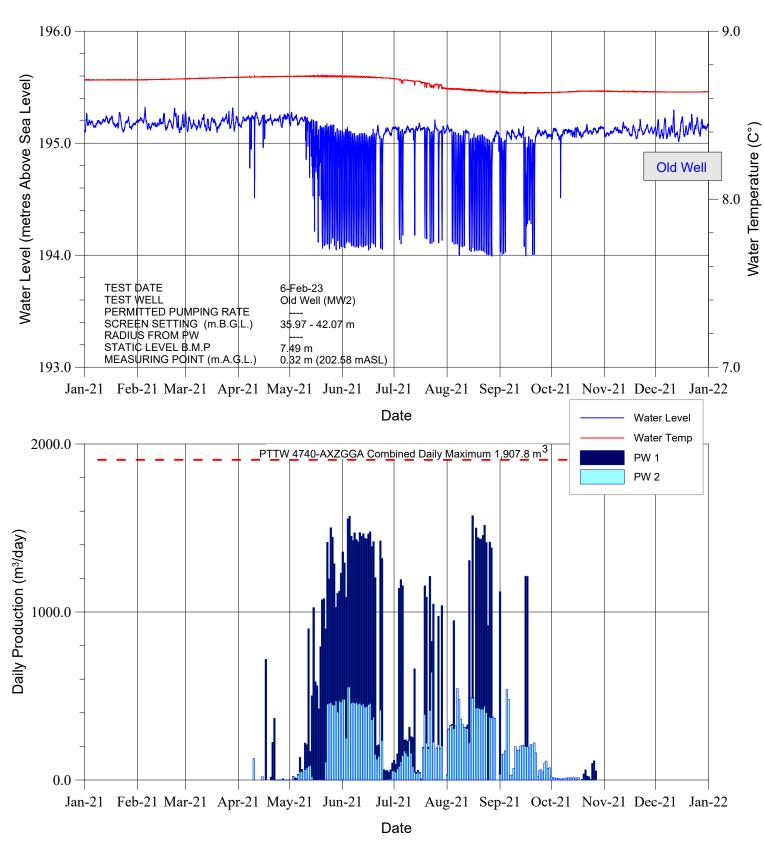
International Water Consultants Ltd.



MIDLAND GOLF AND COUNTRY CLUB
"OLD WELL" WATER LEVEL HYDROGRAPH WITH
PW 1 and PW2 2020 COMBINED DAILY PRODUCTION
Dwg. No. A23047



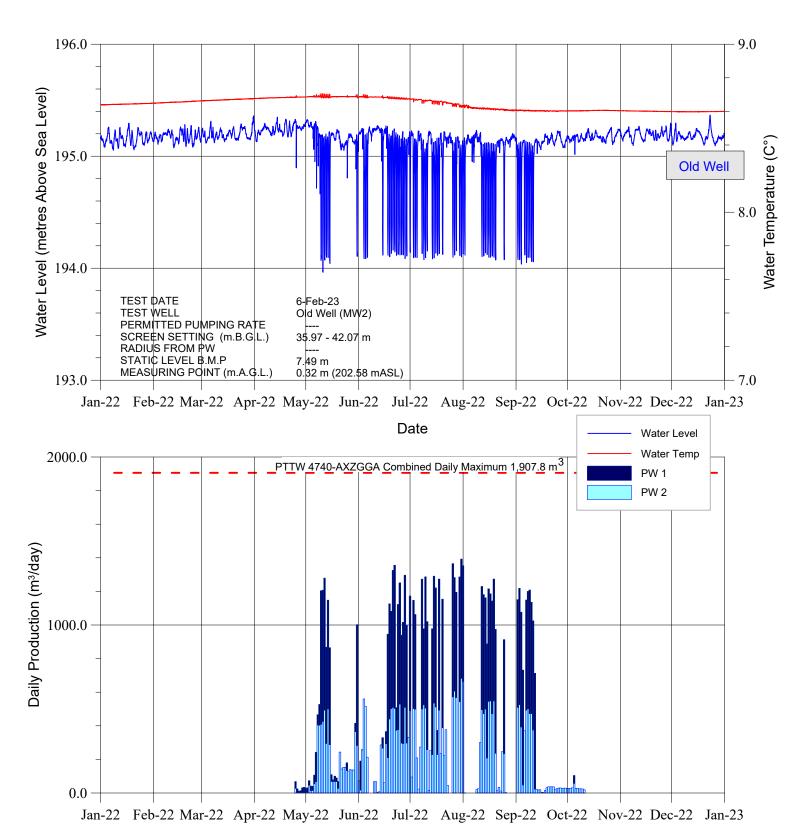
International Water Consultants Ltd.



MIDLAND GOLF AND COUNTRY CLUB
"OLD WELL" WATER LEVEL HYDROGRAPH WITH
PW 1 and PW2 2021 COMBINED DAILY PRODUCTION
Dwg. No. A23048



International Water Consultants Ltd.



Date

MIDLAND GOLF AND COUNTRY CLUB
"OLD WELL" WATER LEVEL HYDROGRAPH WITH
PW 1 and PW2 2022 COMBINED DAILY PRODUCTION
Dwg. No. A23049

APPENDIX

UTNU 177 z 5 8 5 1 4 4 F 5 R 449 5 4 9 4 8 N Flev 4 R 1 7 4 5 7 7 7 7 7 7 7 7 7			57 N	10 1502
Elev. 6 R 0 7 4 5 WATER WEI Basin 2 2 Simcoe Con. 1 W.P.R. Lot E. half 109	LL REC	ORD Town or City	Line Survivors con Tiny	MISSION 1967
	ressMidla		- 1	year)
Casing and Screen Record		Pumpi	ng Test	
Inside diameter of casing 10 **	Static level	1541		
Total length of casing 312†	Test-pumping	rate 383		G.P.M.
Type of screen 10" x 16 slot stainless steel	Pumping level	2081	••••	
Length of screen 251	Duration of test	pumping	24 hrs.	
Depth to top of screen 312 !	Water clear or o	loudy at end o	f testclear	
Diameter of finished hole 10 ^{tt}				G.P.M.
				w ground surface
Well Log	l Parispool			r Record
Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
gravel & stones coarse sand	0.	14	300	fresh
medium sand	1.70	266		
fine sand	266	309		
coarse & medium sand	309	338		
For what purpose(s) is the water to be used? Irrigation Is well on upland, in valley, or on hillside? upland		m below show	of Well PW distances of wel licate north by	l from
Drilling or Boring Firm Snider Drilling		lot line. Inc	21	\
Address Craighurst	Lot	. //		*
Licence Number 2272	LOT//	O KIN		
Name of Driller or Borer R. Snider	20.7	.35 MV.		
Address Craighurst		24/M1.		
Date Jan. 28/67		1. / /		
(Signature of Licensed Drilling or Boring Contractor)	_	200	(-
Form 7 15M-60-4138		~		
O W R C COPY		4	628.38	

Rethe Screen

By 15 feet 5 8 4 8 9 7 E 1

Bottom 5 " LAG | S | S | Y | Z | N

ONTARIO

Elev 9 R | 0 | 6 | 7 | 0 |

Basin | 2 | 2 | 2 | 2 | 2 | 2 |

Department of Mines

GROUND WATER BRANCA
FEB 25 1958
ONTARIO WATER
RESOURCES COMMISSION

Water-Well Record

County or Territorial District				Village, Town or Cit		
			Ad	dress	•••••	
(day)	(month)	(year)				
Pipe and Casing	Record	<u> </u>		P	umping Test	
Casing diameter(s)			GT.	atic level 26'		
Length(s)	18'	•••••	D.,	mping rate2.4.	6 40	
Type of screen Johnson W	MAR LINES d			mping rate		
Type of screen	+ 2/2+/	······				
Length of screen 2.2 fut	- la di ma	· · · · ·	טע	ration of test/	ang	
guage	+ aux pr	3/400				
Well Log				V	Vater Record	
	W			Depth(s)	No. of fact	Kind of water
Overburden and Bedrock Record	From ft.	To ft.		at which water (s)	No. of feet water rises	(fresh, salty, or sulphur)
Tax wil		2		found		
Iddied sand	2	50				
The clay mark	50	55				
Slue Clay Sand	55	65				
land pan	65	70				
Here Clay land pan	70	90			·	
and pan gravel	90	97				
andy clay mifed						
with hard balls	97	10:	· –			
medium Sand	105	124		105-140	114	fresh
Coasal Sand	124	140				
land becoming						
fine and Setty	140					
For what purpose(s) is the water	to be used?	•))
1						W 2
Is water clear or cloudy?	leas)			In diagram below s		
Is well on upland, in valley, or on				road and lot line.	Indicate north	by arrow.
				1		
Drilling firm	•••••					
Address						
Name of Driller Charles	& Smit	en	_	,6	Havy 12	-
Address Wad				r§ .	~-/	
P. R. H	ant			no 3	1	

200 x 12

Licence Number 219

I certify that the foregoing statements of fact are true.

Dato Tel 3/580 Charles to Smider



MIDLAND GOLD AND COUNTRY CLUB

PERMIT TO TAKE WATER NUMBER 4740-AXZGGA SUPPLEMENTAL REPORT

by

INTERNATIONAL WATER CONSULTANTS LTD.

March 12, 2024

INTRODUCTION

International Water Consultants Ltd. was requested by Midland Golf and County Club to undertake the reporting of groundwater withdrawals and water level information to fulfil the conditions of the Permit to Take Water Number 4740-AXZGGA.

BACKGROUND

These PTTW conditions include maintaining a continuous water level recorder, in well PW2 (MECP ID 5704503), or another monitoring well of comparable depth in this area. A Solinst Levelogger with associated Barologger was installed in 2014 in the "Old Well" approximately 9.85m south of PW2. The Levelogger is programmed at hourly recording intervals. The current dataset begins in April 2023, just prior to the Golf Club's 2023 irrigation season. The water level in PW2 and the Old Well are measured manually with a water level indicator. Historically, manual water level measurements at PW 1 (MECP ID 5704502), were not possible due to the dual pumping arrangement, power cables, and the approximate 44m water level. This was improved in August 2020, when a well contractor installed a reverse reading altitude gauge, enabling the user to measure the water level without opening the well. A stilling tube is also installed in PW1 to a depth of 85 m, however there is no access port in the discharge head.

Midland Golf and Country Club maintains in-line flow meters at Wells PW1 and PW2 and collects and records daily volumes and flow rates. This water taking data and water levels from the Old Well are presented in the following graphs and Tables.

PW1 is approximately 650 metres south of PW 2. PW1 is 1,100 metres north-west of The Town of Midland Well No. 9, and PW 2 is approximately 1,500 metres east of The Town of Midland Vindin Street Wellfield. Previous reports indicate that potentially 0.2m of interference from these wells is seen in the water level trends from the Midland Golf Old Well.

PRODUCTION

The following tables summarize the Total Annual Withdrawal, Average Daily Withdrawal, and Maximum Daily Withdrawal, in cubic meters. To clarify, this average is calculated using the sum of the total well withdrawals divided by the number of days that the well was operated during the year.

Table 1 - Summary of Withdrawals from PW 1

Well PW 1	# of Days Production	Total Annual Withdrawal (m³)	Average Daily Withdrawal (m³)	Maximum Daily Withdrawal (m³) PTTW = 1,090(m³)
2020	91	50,366.25	553.48	1,068.58
2021	132	65,204.44	493.97	1,087.90
2022	86	40,840.60	474.89	853.07
2023	177	48,180.55	272.21	757.82

Table 2 - Summary of Withdrawals from PW 2

Well PW 2	# of Days Production	Total Annual Withdrawal (m³)	Average Daily Withdrawal (m³)	Maximum Daily Withdrawal (m³) PTTW = 817.2 (m³)
2020	158	39,989.40	253.10	621.23
2021	166	34,541.14	208.08	642.01
2022	144	34,582.34	240.16	681.98
2023	158	36,407.91	230.43	665.24

Table 3 - Summary of Combined Withdrawals from PW1 and PW 2

Year	Well PW 1 Annual Withdrawal (m³)	Well PW 2 Annual Withdrawal (m³)	Combined 24 Hr Max Withdrawal (m³)*	Combined Annual Withdrawal (m³)
2020	50,366.25	39,989.40	1,582.0	90,355.65
2021	65,204.44	34,541.14	1,573.9	99,745.58
2022	40,840.60	34,582.34	1,393.0	75,422.94
2023	48,180.55	36,407.91	1,264.7	84,588.46

^{*} on one individual day each year

The typical irrigation season spans from May to October. From 2020 to 2023, PW 1 was in operation an average of 103 days per year and PW 2 an average of 156 days per year, over this four year period. During 2023, 177 days of operation were recorded at PW 1 and 158 days at PW 2.

It is noted that PW 1 was out of service for 64 days during the 2020 irrigation season for pump service.

WATER LEVELS

Hourly water levels are recorded using a Solinst Levelogger that is installed in the Old Well, 9.85m south of PW2. The data has been barometrically compensated to remove the barometric pressure fluctuations from the submerged Levelogger recordings with hourly recordings from the on-site Barologger.

Water levels in the Old Well appear to have approximately one meter of interference from the operation of PW2. The water level response at the Old Well from production at PW1, some 620 metres away, appears to be marginal.

The water level trends have a "saw-tooth" pattern during times of non-production. It is presumed that this water level variation of approximately 0.15 to 0.2 m is from the usage of the nearby Town of Midland Municipal Wells.

In general, for the past four years of data that were processed, the water levels at the Old Well maintained around the 194.2mASL range during irrigation events, with a static water level elevation in the 195.2mASL range.

Both PW1 and PW2 were operated within the conditions of PTTW 4740-AXZGGA, Water levels in the Old Well, were recorded hourly and appeared to be similar to that of previous years. Daily volumes pumped were logged and recorded. No interference complaints or negative impacts were logged.

Conclusions and Recommendations

- Midland Golf and Country Club water use for irrigation was within the permitted withdrawals.
- It is suggested that a weekly non-pumping and pumping water levels be measured and recorded at PW 1. This would assist in tracking the well performance, water level and potential deterioration of the well.

- Hourly water level monitoring is completed automatically in an old production well (Old Well 2) about 10 metres from PW2. These data indicated about 1 meter of interference from the pumping of PW2.
- Measurable water level fluctuations is thought to be from the Midland Town Wells. This fluctuation is negligible in the order of 0.15 to 0.2m.
- No adverse effects of the withdrawals have been reported.

Please do not hesitate to contact us if you have any questions or concerns.

Yours truly,

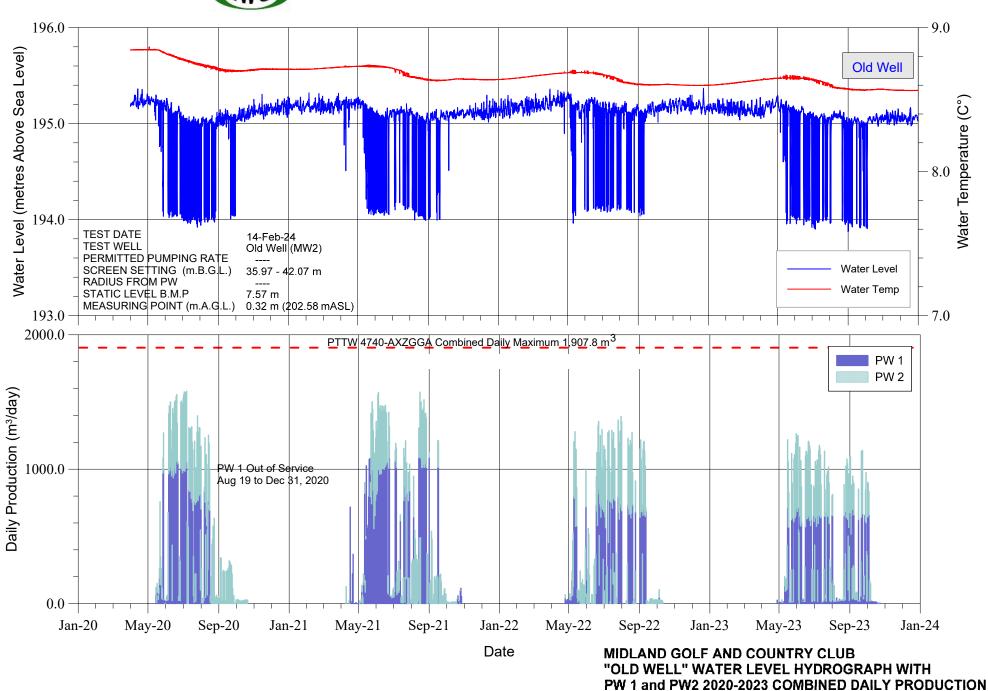
International Water Consultants Ltd.

Terry Brown, C. Tech

DRAWINGS



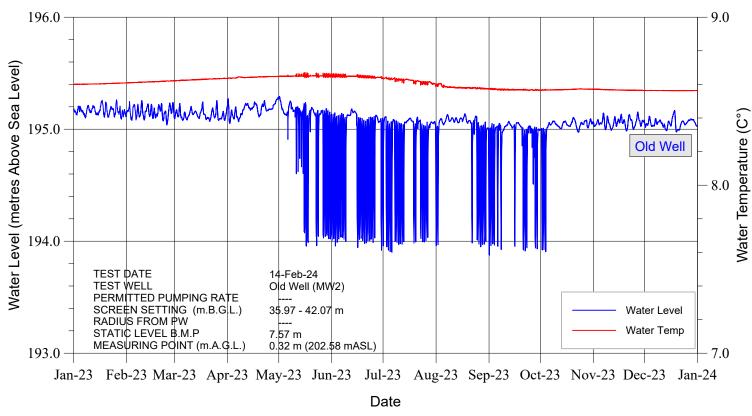
International Water Consultants Ltd.

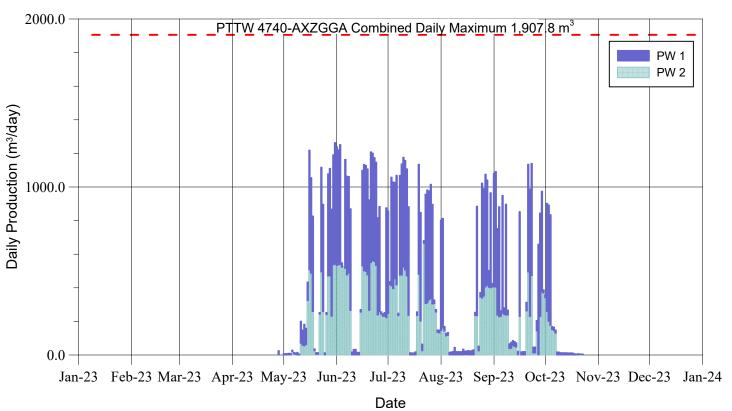


Dwg. No. A24038



International Water Consultants Ltd.





MIDLAND GOLF AND COUNTRY CLUB
"OLD WELL" WATER LEVEL HYDROGRAPH WITH
PW 1 and PW2 2023 COMBINED DAILY PRODUCTION
Dwg. No. A24039

APPENDIX

Ministry of the Environment and Climate Change

Central Region Technical Support Section Water Resources 8th Floor 5775 Yonge St Toronto ON M2M 4J1 Fax: (416) 325-6347 Tel: (416) 326-3766

Ministère de l'Environnement et de l'Action en matière de changement climatique

Direction régionale du Centre Secteur du Soutien Technique Ressource en eau 8e étage 5775 rue Yonge Toronto ON M2M 4J1 Télécopieur: (416) 325-6347 Tél:(416) 326-3766



April 27, 2018

Midland Golf & Country Club Limited Post Office Box 98 Midland, Ontario, L4R 4K6 Canada

ATTN: Ian Kirkpatrick

RE: Permit To Take Water, Irrigation, Midland Golf & Country Club Lot: 109 & 110, Concession: 1, WPR Midland, County of Simcoe

Lot 109 and 110 Midland, County Of Simcoe Reference Number 6620-AVXJ9G

Dear Mr. Kirkpatrick,

Please find attached **Permit to Take Water No. 4740-AXZGGA** issued to **Midland Golf & Country Club Limited**, which authorizes the withdrawal of water in accordance with the application for this Permit to Take Water, dated February 5, 2018 and signed by Ian Kirkpatrick.

The Permit is valid until **April 30, 2028** and shall be kept available on site for inspection by Ontario Ministry of the Environment and Climate Change staff. This Permit cancels and replaces Permit Number 3066-96FJTE, issued on April 19, 2013.

Please note, Ontario Regulation 387/04 "Water Taking" requires all water takers to report daily water taking amounts to the Water Taking Reporting System (WTRS) electronic database: https://www.lrcsde.lrc.gov.on.ca/wtrs/. Daily water taking must be reported on a calendar year basis. If no water is taken, then a "no taking" report must be entered. Please consult the Regulation and Section 4 of this Permit for monitoring requirements.

If you have questions about reporting requirements, please call the WTRS Help Desk at 416-235-6322 (toll free: 1-877-344-2011) or by email, <a href="https://www.wtrs.help.com/wtrs.help

Technical Bulletin: Permit To Take Water (PTTW) - Monitoring and Reporting of Water Takings), which can be downloaded from the above web site, and fax your completed forms to 416-235-6549 or mail them to: Water User Reporting Section, 125 Resources Rd. Toronto, ON M9P 3V6.

Take notice that in issuing this Permit to Take Water, terms and conditions pertaining to the taking of water and to the results of the taking have been imposed on **Midland Golf & Country Club Limited**. The terms and conditions have been designed to allow for the development of water resources, while providing reasonable protection to the surrounding natural environment, existing water uses and users.

One of the purposes of the issuance of a Permit is to ensure that the permitted taking(s) will not cause negative impacts to the surrounding natural environment or other water supplies which were in use prior to the date of this Permit. If the taking of water should result in any negative impacts, the Permit Holder, **Midland Golf & Country Club Limited** will be required to restore the water supplies of those affected in a manner acceptable to the Ontario Ministry of the Environment and Climate Change or to reduce the rate and amount of taking until any negative impacts are eliminated.

Any change of address or ownership of the property for which this Permit is issued must be reported immediately to the Director. The issuance of this Permit to Take Water does not relieve you from compliance with the legislative requirements of this Ministry or any other agencies.

It is the responsibility of **Midland Golf & Country Club Limited** to ensure that any person taking water under the authority of this Permit is familiar with and complies with the terms and conditions.

Yours truly,

Cynthia Doughty Supervisor (Acting)

Cunthia Doughto

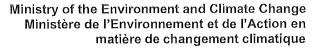
Central Region

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

GAM/

CC (electronic copy):

J.Garry Bryant, P.Geo., Bryant Groundwater Consulting (bryantgwconsult@rogers.com)





PERMIT TO TAKE WATER

Ground Water NUMBER 4740-AXZGGA

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:

Midland Golf & Country Club Limited

Post Office Box 98

Midland, Ontario, L4R 4K6

Canada

For the water

PW1/MGCC1 (WWR 5704502); and PW2/MGCC2 (WWR 5704503)

taking from:

Located at: Lot 109 & 110, Concession 1, WPR, Geographic Township of Tiny

Midland, County of Simcoe

Lot 110, Concession 1, Geographic Township of Tiny

Midland, 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 and Climate Change.
- (d) "District Office" means the Barrie District Office.
- (e) "Permit" means this Permit to Take Water No. 4740-AXZGGA including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA.
- (f) "Permit Holder" means Midland Golf & Country Club Limited.
- (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 February 5, 2018 and signed by lan Kirkpatrick, 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 April 30, 2028. 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/MGCC1 (WWR 5704502)	Well Drilled	Golf Course Irrigation	Commercial	1,514	12	1,090,195	180	17 585321 4955069
2	PW2/MGCC2 (WWR 5704503)	Well Drilled	Golf Course Irrigation	Commercial	1,135	12	817,646	180	17 584914 4955595
			A 100 C 100		ent discovere miss of a second block block place of the Second Sec	Total Taking:	1,907,841		

4. Monitoring

- 4.1 Under section 9 of O. Reg. 387/04, and as authorized by subsection 34(6) of the *Ontario Water Resources Act*, 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. A separate record shall be maintained for each source. 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 maintain a continuous water level recorder in PW2/MGCC2 or another monitoring well of comparable depth in this area. Water levels shall be monitored and recorded at least hourly, between April 1 and November 15. The Permit Holder shall keep all records required by this condition current and available at or near the site of the taking. Records shall be made available to Ministry staff at any time upon request.
- Any application for an amendment or a renewal of this Permit shall be accompanied by a report prepared by a Qualified Person (P. Geo. or equivalent). The report shall include, but not necessarily be limited to, the following: (1) the information generated by the conditions of this Permit; (2) an analysis and assessment of the information collected; (3) an evaluation of the adequacy of the monitoring program; and (4) any recommendations concerning changes to the conditions of the Permit.

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 eomplaint. 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 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 Environmental Commissioner, **Euvironmental Bill of Rights**, R.S.O. 1993, Chapter 28, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner 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:

<u>AND</u>

- 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:

ERTTribimalsecretary@ontario.ca

The Environmental Commissioner 1075 Bay Street

6th Floor, Suite 605 Toronto, Ontario M5S 2W5 The Director, Section 34.1, Ministry of the Environment and

Climate Change 8th Floor 5775 Yonge St Toronto ON M2M 4J1

Fax: (416) 325-6347

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

by Telephone at

(416) 212-6349 Toll Free 1(866) 448-2248 by Fax at

(416) 326-5370

Toll Free 1(844) 213-3474

by e-mail at

<u>AND</u>

www.ert.gov.on.ca

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 3066-96FJTE, issued on 2013/04/19.

Dated at Toronto this 27th day of April, 2018.

Cynthia Doughty

Director, Section 34.1

Cunthia Douglety

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

Schedule A

This Schedule "A" forms part of Permit To Take Water 4740-AXZGGA, dated April 27, 2018.

- 1. Application for Permit To Take Water dated February 5, 2018 and signed by Ian Kirkpatrick of Midland Golf & Country Club Limited.
- 2. Report entitled "Report on Midland Golf & Country Club, 2013-2017 Water Takings and Water Level Monitoring". Prepared by Bryant Groundwater Consulting, signed by J. Garry Bryant, P.Geo., dated February 5, 2018

Midland Golf and Country Club

Analysis Date & TIme:

REPORT TO:

Client:

Certificate of Analysis

Water Works Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

Sample Receipt Date & Time:	2023-03-20 15:54
Total Number of Samples Received:	1
Bacterial Analysis Start Date & Time:	2023-03-20 15:56



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Address:	9536 Hw	y. 93 N.								H	PC -	· Method /	4EL/	AB02-HP	C Perl	forme	ed by	Spread	Plate		
	Midland,	ON. L4R 4K6								р	H - I	Method Al	ELA	B05-pH F	erfor	rmed i	by Ele	ectrome	etric N	1eth	od
Contact:	Stephen	Sagar, Manager								т	urhi	dity - Met	hod	AFI ABO	4-Tur	hidity	, Perf	ormed l	hv Ne	nhel	ometric
Email:	stephens	agar@rogers.com	Vater W	orks N	umber:	7600037	40				1eth	•		, , , , , , , , , , , , , , , , , , , ,		Diancy	CIT	omica .	by He	piic.	Officerio
Phone:	705-526-	5822 H	lealth U	nit:	SMDHU	J				N	1icro	ocystin - N	1eth	od AELA	B03-N	Micro	cystin	n Perfori	med b	y EL	_ISA
Fax:	705-528-	7014 C	Comments	:							Res	gulation:		170,	/03		319	/08	Dr	rivat	
After Ho	ours Cont	act:										Salationi			3/17	·	N/A		<u> </u>	ivac	
Date ar	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RC = Raw Water Consumed; REC = Recreational		orine g/L	Temp. of Sample	Laboratory	Tot	al Coliform	,	E.coli	Ba	ckground		НРС				Turbid	dity	Mic	crocystin
Sam	pled	Swimming	Free	Total	(°C/°F)	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 ml		рН		NTU			μg/L
2023-03-2	0 15:10	Bar Sink - D				3070		0		0		0					\Box				
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			-												+		\dashv				
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Results relate only to the items tested. Results apply to sample as received. CFU = Colony Forming Units HPM = Heavy Particulate Matter Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Sample Collection:	Stephen Sagar	Date Approved	2023-03-21	Approved By <u></u> 代入	1
Sample Relinquishment:					

Total Coliform E.coli

HPC

Detection Limit: 0 - 150 Detection Limit: 300

Detection Limit: 0 - 150

Reportable Limit: 1 Reportable Limit: 1 Indicates Deterioration: >500 Microcystin pH Turbidity Detection Limit: 0.150 µg/L Detection Limit: 4 - 10 Detection Limit: 0.10 - 40.0 NTU Reportable Limit: ≥ 1.50 μg/L

by Membrane Filtration

Analysis Date & TIme:

REPORT TO:

Certificate of Analysis

2023-04-06 15:27 Sample Receipt Date & Time: Total Number of Samples Received: 1 Bacterial Analysis Start Date & Time: 2023-04-06 15:30



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

Email: aquaenvirolab@gmail.com

Client:	Midland	Golf and Country Club	9536 Hwy.	93 N. IV	lidlar	nd, ON. L4R	4K6)			,									
Address:	9536 Hw	y. 93 N.								ŀ	HPC -	- Method <i>i</i>	AELAB	02-HP0	C Perfo	rme	d by Sp	read Plat	е	
	Midland,	ON. L4R 4K6								р)H -	Method A	ELAB0	5-pH P	erform	ed b	y Electi	rometric	Meth	nod
Contact:	Stephen	Sagar, Manager								Т	urbi	idity - Met	hod A	FLAB04	4-Turbi	ditv	Perforr	ned by N	enhe	lometric
Email:	stephens	agar@rogers.com	Drinking W	/ater Sys	stem	Number:	7	600037	40		Иeth	•				٠,				
Phone:	705-526-	5822	Health Uni	it: SN	1DHL	J				N	Micro	ocystin - N	1ethod	AELAE	B03-Mi	croc	ystin Pe	erformed	by E	LISA
Fax:	705-528-	7014	Comments:								D _O	gulation:		170/	_{'02}		319/08	,	Priva	t-0
After Ho	ours Conta	act:									IVE!	guiation.		493			319/00 N/A	<u> </u>	riiva	ie
Date ar	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RWC = Raw Water Consumed; REC = Recreationa	m	orine g/L	System	Laboratory	Tot	al Coliform		E.coli	Ва	ckground	Н	PC	ļ	οН	T	urbidity	Mi	crocystin
Sam		Swimming	Free	Total	s vu	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL	C	FU/1 mL	Temp. (°	C) pH		NTU		μg/L
2023-04-0	6 07:20	Bar Sink - D				3903		0		0		0								

Drinking Water System Address:

Results relate only to the items tested. Results apply to sample as received. CFU = Colony Forming Units HPM = Heavy Particulate Matter Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Sample Collection:	Stephen Sagar	Date Approved	2023-04-11	Approved By	At
Sample Relinquishment:					

Total Coliform Detection Limit: 0 - 200 E.coli Detection Limit: 0 - 200 HPC

Detection Limit: 300

Reportable Limit: 1 Reportable Limit: 1 Microcystin Turbidity

Detection Limit: 0.150 µg/L Detection Limit: 4 - 10 Detection Limit: 0.10 - 40.0 NTU Reportable Limit: ≥ 1.50 µg/L

Certificate of Analysis

Sample Receipt Date & Time:	2023-05-03 15:45
Total Number of Samples Received:	1
Bacterial Analysis Start Date & Time:	2023-05-03 15:49

2023-05-03 15:49

Analysis Date & TIme:

Midland Golf and Country Club



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Chefft.	iviiuiaiiu (John and Country Club	, ,			,										_		_			
Address:	9536 Hwy	y. 93 N.									HPC -	- Method	AELA	\B02-I	HPC Pe	erform	ed by	Spread	Plate		
	Midland,	ON. L4R 4K6								ŀ	1 - Hc	Method A	ELAB	805-pl	H Perf	ormed	by El	ectrom	etric N	/letho	od
Contact:	Stephen S	Sagar, Manager									Furhi	dity - Met	hod	ΔFΙΔ	RO4-Tı	ırhidit	v Perl	formed	hv Ne	nheld	ometri
mail:	stephens	agar@rogers.com	Drinking V	Vater Sys	stem	Number:	7	600037	40		Meth	•	inou	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	504 10	urbiaic	.y i Ci i	orrica	by Ive	prici	Ometh
Phone:	705-526-	5822	Health Un	it: SN	ΛDHL	J				1	Micro	ocystin - N	1etho	od AE	LAB03	-Micro	ocystii	n Perfor	rmed t	oy EL	ISA
ax:	705-528-	7014	Comments:									. 1.12.		Т.	/	Τ.	T		<u></u>		
After Ho	ours Conta	act:									ке	gulation	-		70/03 93/17	,	319 N/A	9/08	Pr	rivate	е
Date ar	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RWC = Raw Water Consumed; REC = Recreationa	m	orine g/L	System	Laboratory	Tot	al Coliform		E.coli	Ba	ckground		НРС		рН		Turbio	ditv	Mici	rocyst
	pled	Swimming	Free	Total	S VU	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1	mL Ter	mp. (°C) p	pH Unit	NT	-	Method ephelome by ELISA Private Microcys	μg/L
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																			\rightarrow		
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Date Approved

Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

Total Coliform E.coli HPC

Sample Collection:

Sample Relinquishment:

REPORT TO:

Client:

Detection Limit: 0 - 200 Detection Limit: 0 - 200 Detection Limit: 300

Stephen Sagar

Reportable Limit: 1 Reportable Limit: 1

Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Microcystin Turbidity

Detection Limit: 0.150 µg/L Detection Limit: 4 - 10 Detection Limit: 0.10 - 40.0 NTU

2023-05-04

Reportable Limit: ≥ 1.50 μg/L

Approved By

Bacterial Analysis Start Date & Time:

Sample Relinquishment:

Detection Limit: 0 - 200

Detection Limit: 0 - 200

Detection Limit: 300

Reportable Limit: 1

Reportable Limit: 1

Total Coliform

E.coli

HPC

Certificate of Analysis

2023-05-31 15:47 Sample Receipt Date & Time: Total Number of Samples Received: 1

2023-05-31 15:50

Analysis Date & TIme:



Detection Limit: 0.150 µg/L

Detection Limit: 0.10 - 40.0 NTU

Detection Limit: 4 - 10

Reportable Limit: ≥ 1.50 µg/L

3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Fax: 705-722-5224

Email: aquaenvirolab@gmail.com

REPORT	то:		Drinking W	ater Sys	tem	Address:						Coliform,			round -	Metho	d AELA	AB01-D	C Per	formed
Client:	Midland	Golf and Country Club	9536 Hwy.	93 N. M	lidlar	id, ON. L4R	4K6	õ			•	embrane I								
Address:	9536 Hwy	/. 93 N.								F	IPC -	Method	AELA	B02-HPC	Perfori	ned by	y Sprea	d Plate	?	
	Midland,	ON. L4R 4K6								p)H - N	∕lethod A	ELAB	305-pH P	erforme	d by E	lectror	netric N	vieth	od
Contact:	Stephen S	Sagar, Manager								ľ				•						
Email:	stephens	agar@rogers.com	Drinking W	/ater Sys	tem	Number:	7	600037	40		vi bic Metho	dity - Met od	nou	AELABU4	r-Turbia	ity Per	Torrie	и бу ме	pnei	Jinetric
Phone:	705-526-	5822	Health Uni	t: SN	1DHL	J					Micro	cystin - N	1etho	od AELAE	803-Mic	ocvsti	in Perf	ormed	bv EL	ISA
Fax:	705-528-	7014	Comments:									•				.				
After H	ours Conta	oct:									Reg	ulation	-	170/ 493		31 N/A	9/08	P	rivate	5
Date a	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution;	l m	orine g/L	System	Laboratory	Tot	al Coliform		E.coli	Вас	kground	ļ	НРС	pl	•		oidity	Mic	rocystin
	pled	RWC = Raw Water Consumed; REC = Recreationa Swimming	Free	Total	UV S	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 mL	Temp. (°C)	pH Unit		TU		μg/L
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		he items tested. Results apply to sample as r duced, except in full, without written approve							ucu	iate iviatt	er									
Sample C	Collection:					Date App	rov	ed	2	2023-06 [.]	-01		Ар	proved	By	KN				

Microcystin

Turbidity

Midland Golf and Country Club

Analysis Date & TIme:

REPORT TO:

Client:

Certificate of Analysis

Sample Receipt Date & Time:	2023-07-24 14:40
Total Number of Samples Received:	1
Bacterial Analysis Start Date & Time:	2023-07-24 14:43



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Address:	9536 H	wy. 93 N.									H	PC -	Method A	AELA	B02-HPC	Perfo	rme	d by Spre	ead Plate	9	
	Midlan	d, ON. L4R 4K6									р	H - ſ	Method Al	ELAE	805-pH P	erform	ed b	y Electro	metric I	Meth	od
Contact:	Stephe	n Sagar, Manager									т	urbi	dity - Met	hod	AFI ABO	l-Turbi	ditv	Perform	ed by Ne	onhe	lometric
Email:	stephe	nsagar@rogers.com	Dri	inking W	ater Sys	tem	Number:	7	6000374	10		1eth	•		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		٠.٠,		ou o,		
Phone:	705-52	5-5822	Не	alth Uni	:: SN	1DHL	J				N	1icrc	ocystin - M	1eth	od AELAE	303-Mi	croc	ystin Per	formed	by El	LISA
Fax:	705-52		Cor	nments:								Reg	gulation:		170/	03	<u>, </u>	319/08	P	rivat	e
After Ho	ours Co	tact:													493	/17		N/A			
Date ar	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RWC = Raw Water Consumed; REC = Recreation		Chlo mg		System	Laboratory	Tot	al Coliform		E.coli	Bad	ckground		НРС	ļ	эΗ		rbidity	Mid	crocystin
	pled	Swimming	ııaı	Free	Total	NV S	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 mL	Temp. (°	C) pH		NTU		μg/L
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Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

Results relate only to the items tested. Results apply to sample as received. CFU = Colony Forming Units HPM = Heavy Particulate Matter Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Sample Collection:	Stephen Sagar	Date Approved	2023-07-25	Approved By	₹N
Sample Relinquishment:					

Total Coliform Detection Limit: 0 - 200
E.coli Detection Limit: 0 - 200
HPC Detection Limit: 300

Reportable Limit: 1
Reportable Limit: 1

Microcystin pH Turbidity Detection Limit: 0.150 μg/L Detection Limit: 4 - 10 Detection Limit: 0.10 - 40.0 NTU Reportable Limit: ≥ 1.50 μg/L

Midland Golf and Country Club

Bacterial Analysis Start Date & Time:

Analysis Date & TIme:

REPORT TO:

Client:

Certificate of Analysis

Sample Receipt Date & Time:	2023-10-13 14:22
Total Number of Samples Received:	1

2023-10-13 14:56



Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Address:	9536 Hw	y. 93 N.	1								Н	PC -	Method A	4EL/	AB02-HPC	Perfor	med	by Sprea	ad Plate	ž	
	Midland,	ON. L4R 4K6									р	H - I	Method Al	ELA	305-рН Ре	erforme	ed by	Electror	metric I	Meth	ıod
Contact:	Stephen	Sagar, Manager										urhi	dity - Met	hod	AFI ARO4	-Turbic	litv P	erforme	d by Ne	enhe	lometrio
Email:	stephens	agar@rogers.com	Drink	king W	ater Sys	tem	Number:	7	600037	40		1eth	•		712271301		,		u 5, 110	.piic	omean
Phone:	705-526-	5822	Healt	th Unit	: SN	1DHL	J				N	licro	cystin - N	leth	od AELAB	03-Mic	rocys	stin Perf	ormed	by E	LISA
Fax:	705-528-	7014	Comm	nents:								Dor	gulation:		170/0	na ,	, 3	319/08	<u></u>	rivat	
After H	ours Cont	act:										IVE	guiation.	-	493/			/A		IIVat	<u>e</u>
Date a	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RWC = Raw Water Consumed; REC = Recreation;	al	Chlo mg		' System	Laboratory	Tot	al Coliform		E.coli	Ba	ckground		НРС	р	Н	Turk	bidity	Mic	crocystii
	npled	Swimming		Free	Total	ΛN	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 mL	Temp. (°C	.) pH Ur	ait N	TU		μg/L
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Results relate only to the items tested. Results apply to sample as received. CFU = Colony Forming Units HPM = Heavy Particulate Matter Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Sample Collection:	Stephen Saga	Date Approved	2023-10-16	Approved By	0	
Sample Relinguishment:					.40	

Total Coliform Detection Limit: 0 - 200
E.coli Detection Limit: 0 - 200
HPC Detection Limit: 300

Reportable Limit: 1
Reportable Limit: 1

Microcystin pH Turbidity

Detection Limit: 0.150 µg/L
Detection Limit: 4 - 10
Detection Limit: 0.10 - 40.0 NTU

Reportable Limit: ≥ 1.50 µg/L

Aquatic and Environmental Laboratory Inc. F-064 Certificate of Analysis

Midland Golf and Country Club

Certificate of Analysis

Sample Receipt Date & Time: 2024-03-15 14:45

Total Number of Samples Received: Bacterial Analysis Start Date & Time: 1 2024-03-15 14:48

Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Reportable Limit: 1

Reportable Limit: 1

Stephen

Detection Limit: 0 - 200

Detection Limit: 0 - 200

Detection Limit: 300

Analysis Date & TIme:

REPORT TO:

Sample Collection:

Total Coliform

E.coli

HPC

Sample Relinquishment:

Client:



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

Approved By

Reportable Limit: ≥ 1.50 µg/L

2024-03-18

Detection Limit: 0.150 µg/L

Detection Limit: 0.10 - 40.0 NTU

Detection Limit: 4 - 10

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Revision 1.9

Page 1 of 1

Address:	9536 Hw	y. 93 N.								ŀ	HPC -	- Method	AELA	AB02-HF	PC Perf	orme	d by S	pread Pla	ate	
	Midland,	ON. L4R 4K6								F	1 - Hc	Method A	ELAE	305-pH	Perforr	ned b	y Elec	ctrometri	c Metl	nod
Contact:	Stephen :	Sagar, Manager									Γurbi	dity - Met	hod	AELAB()4-Turb	iditv	Perfo	rmed by	Nephe	elometric
Email:	stephens	agar@rogers.com	Drinking W	/ater Sys	stem	Number:	7	600037	40		Meth	•				,		,		
Phone:	705-526-	5822	Health Uni	t: SN	1DHL	J				ľ	Micro	ocystin - N	1eth	od AELA	AB03-M	licroc	ystin I	Performe	d by E	LISA
Fax:	705-528-	7014	Comments:								Doc	zulation:	. [170	1/02		240/	00	Duri va	
After Ho	ours Conta	act:									ке	gulation	\vdash		3/17	~	319/ N/A	08	Priva	te
Date an	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RWC = Raw Water Consumed; REC = Recreationa	m	orine g/L	System	Laboratory	Tota	al Coliform		E.coli	Bad	ckground		НРС		pН		Turbidity	, Mi	crocystir
Date a Sam	pled	Swimming	Free	Total	NV S	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 m	L Temp.	(°C) pH		NTU		μg/L
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Date Approved

Microcystin

Turbidity

Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

Aquatic and Environmental Laboratory Inc. F-064 Certificate of Analysis

REPORT TO:

Sample Collection:

Total Coliform

E.coli

HPC

Sample Relinquishment:

Client:

Certificate of Analysis

Report not to be reproduced, except in full, without written approval of Aquatic and Environmental Laboratory Inc.

Reportable Limit: 1

Reportable Limit: 1

Stephen Sagar

Detection Limit: 0 - 200

Detection Limit: 0 - 200

Detection Limit: 300

Sample Receipt Date & Time:	2024-07-02 14:51
Total Number of Samples Received:	1

Bacterial Analysis Start Date & Time: 2024-07-02 15:48

Midland Golf and Country Club

Analysis Date & TIme:



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Revision 1.9

Page 1 of 1

Address:	9536 Hwy	y. 93 N.								H	IPC -	Method A	ELAI	302-HPC	Perfor	ned b	y Sprea	ıd Plate		
	Midland,	ON. L4R 4K6								р	H - N	/lethod AE	LAB)5-pH Pe	erforme	d by E	lectror	metric N	∕leth	od
Contact:	Stephen S	Sagar, Manager								т	urbid	litv - Metl	nod A	AELAB04	-Turbid	itv Per	forme	d bv Ne	phel	ometric
Email:	stephens	agar@rogers.com	Drinking	Water Sy	stem	Number:	7	600037	40			•				•		,		
Phone:	705-526-	5822	Health U	nit: SI	MDHL	J				N	/licro	cystin - M	etho	d AELAB	03-Mic	rocysti	in Perf	ormed l	oy El	.ISA
Fax:	705-528-	7014	Comments	:							Por	ulation	Г	170/0	n2	21	0/00		rivat	
After Ho	stephensagar@rogers.com Drinking Water System Number: 760003740		=																	
Date an	nd Time	R = Raw; T = Entry/Treated; D = Distribution;			ystem	Laboratory	Tot	al Coliform		E.coli	Bac	kground		IPC .	pl	1	Turk	nidity	Mic	crocystin
	-	,		Total	s vu	•		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 mL	Temp. (°C)	pH Unit				μg/L
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Date Approved

Microcystin

Turbidity

2024-07-03

Detection Limit: 0.150 µg/L

Detection Limit: 0.10 - 40.0 NTU

Detection Limit: 4 - 10

Approved By

Reportable Limit: ≥ 1.50 μg/L

Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

Bacterial Analysis Start Date & Time:

REPORT TO:

Certificate of Analysis

Sample Receipt Date & Time:	2024-07-22 10:45
Total Number of Samples Received:	1

2024-07-22 12:21

Analysis Date & TIme:



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Client:	Midland (Midland Golf and Country Club 9536 Hwy. 93 N. Midland, ON. L4R 4K6										embrane i									
Address:	9536 Hwy	v. 93 N.								F	IPC -	Method	AELA	4B02-ŀ	IPC Po	erform	ed by	Spread	l Plate		
	Midland,	ON. L4R 4K6								р)H - N	Method A	ELA	B05-pH	l Perf	ormed	by El	ectrom	etric M	1etho	od
Contact:	Stephen S	Sagar, Manager									urhi	dity - Met	hod	ΔΕΙΔΙ	304-T	urhidit	v Perf	formed	hy Nei	nheld	nmetri
mail:	stephens	agar@rogers.com	Drinking W	/ater Sys	stem	Number:	7	600037	40		⁄leth	•	iiou	ALLAI	JU4-1	urbiuit	yren	omea	Dy NC	prier	Jilletti
Phone:	705-526-5	5822	Health Uni	t: SN	N	Лicro	ocystin - N	1eth	od AE	_AB03	3-Micro	ocystir	n Perfo	rmed b	y ELI	ISA					
Fax:	705-528-7	7014	Comments:													T	1				
After Ho	ours Conta	ict:									Reg	gulation:	-	_	'0/03 93/17	7	319 N/A	9/08	Pr	ivate	5
Date an	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; RWC = Raw Water Consumed; REC = Recreational	m	orine g/L	System	Laboratory	Tota	al Coliform		E.coli	Bac	ckground	<u> </u>	НРС	30, 27	рН	•	Turbi	dity	Micı	ocyst
Date and 1 Sample		Swimming	Free	Total	NV S	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1	mL Te	mp. (°C) _[oH Unit	NT	'		μg/L
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		ne items tested. Results apply to sample as re																			

Date Approved

Drinking Water System Address:

Total Coliform E.coli HPC

Sample Collection:

Sample Relinquishment:

Detection Limit: 0 - 200 Detection Limit: 0 - 200 Detection Limit: 300

Stephen Sagar

Reportable Limit: 1 Reportable Limit: 1 Microcystin pH Turbidity Detection Limit: 0.150 µg/L
Detection Limit: 4 - 10
Detection Limit: 0.10 - 40.0 NTU

2024-07-23

Reportable Limit: $\geq 1.50 \mu g/L$

Approved By

Midland Golf and Country Club

Analysis Date & TIme:

REPORT TO:

Client:

Certificate of Analysis

2024-09-05 14:54 Sample Receipt Date & Time: Total Number of Samples Received: 1 Bacterial Analysis Start Date & Time:

2024-09-05 15:07



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

by Membrane Filtration

Email: aquaenvirolab@gmail.com

Address:	9536 Hwy	y. 93 N.									ŀ	IPC -	- Method <i>i</i>	AELA	B02-HPC	Perfor	med I	by Spre	ad Plate	?	
	Midland,	ON. L4R 4K6									p) H - I	Method A	ELAB	05-pH Pe	erforme	d by	Electro	metric I	Иeth	od
Contact:	Stephen S	Sagar, Manager									т	urhi	dity - Met	hod .	ΔFI ΔRΩ4	-Turhid	itv Pe	erforme	d by Ne	nhel	ometric
Email:	stephens	agar@rogers.com	Drink	king W	ater Sys	tem	Number:	7	600037	40		∕leth	-	1100 /	(LL) (DO-	Tarbia	, .	211011110	u by NC	prici	ometric
Phone:	705-526-	5822	Healt	th Unit	t: SN	1DHL	J				N	Micro	ocystin - N	1ethc	d AELAB	03-Mic	rocys	tin Perf	formed	by EL	ISA
Fax:	705-528-	7014	Comm	nents:								Dog	- ulation	Г	470/	22		40/00			
After Ho	ours Conta	act:										ке	gulation:	-	170/0 493/		N,	19/08 /A	<u> P</u>	rivat	5
Date ar	nd Time	Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution;		Chlo mg		System	Laboratory	Tot	al Coliform		E.coli	Ba	ckground		HPC	pl			bidity	Mic	rocystin
	pled	RWC = Raw Water Consumed; REC = Recreations Swimming		Free	Total	vs vn	Number		CFU/100 mL		CFU/100 mL		CFU/100 mL		CFU/1 mL	Temp. (°C)	pH Un		NTU		μg/L
2024-09-0	5 14:00	Bar Sink - D					14650		0		0		0								
												<u> </u>									
											1									H	

Date Approved

Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

Total Coliform E.coli HPC

Sample Collection:

Sample Relinquishment:

Detection Limit: 0 - 200 Detection Limit: 0 - 200 Detection Limit: 300

Stephen Sagar

Reportable Limit: 1 Reportable Limit: 1

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Results relate only to the items tested. Results apply to sample as received. CFU = Colony Forming Units HPM = Heavy Particulate Matter

Microcystin Turbidity

Detection Limit: 0.150 µg/L Detection Limit: 4 - 10 Detection Limit: 0.10 - 40.0 NTU

2024-09-06

Reportable Limit: ≥ 1.50 µg/L

Approved By

by Membrane Filtration

REPORT TO:

Sample Collection:

Total Coliform

E.coli

HPC

Sample Relinquishment:

Client:

Certificate of Analysis

2024-10-02 10:52 Sample Receipt Date & Time: Total Number of Samples Received: 1 Bacterial Analysis Start Date & Time:

2024-10-02 12:36

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Reportable Limit: 1

Reportable Limit: 1

Stephen

Detection Limit: 0 - 200

Detection Limit: 0 - 200

Detection Limit: 300

Analysis Date & TIme:

Midland Golf and Country Club



3239 Penetanguishene Rd.

Barrie, ON. L4M 4Y8

Telephone: 705-722-5227

Total Coliform, E.coli, Background - Method AELAB01-DC Performed

Fax: 705-722-5224

Email: aquaenvirolab@gmail.com

Cilciit.	IVIIGIAIIG	don and country club		,			,														
Address:	9536 Hwy. 93 N.										ŀ	IPC -	Method A	AELAE	02-HPC	Perfor	med b	y Spre	ead Plate	9	
	Midland,									p	H - N	Method Al	ELABO)5-pH Pe	erforme	ed by I	Electro	metric N	Иeth	od	
Contact: Stephen Sagar, Manager												urbi	dity - Met	hod A	FI AB04	-Turbic	litv Pe	rform	ed by Ne	ohel	ometr
Email:	: stephensagar@rogers.com				Drinking Water System Number: 760003740										,, .		,		ou o,		
Phone:	705-526-	5822	Health Unit: SMDHU								N	/licro	cystin - M	etho	d AELAB	03-Mic	rocyst	in Per	formed	by EL	.ISA
=ax:	705-528-	7014	Comments:									Da sulatiana				22	319/08			Private	
After Hours Contact:												Regulation:		\vdash	170/0 493/		/ 3.	19/08 A	I I ^P	rivat	e
Sample ID, Location and Type: R = Raw; T = Entry/Treated; D = Distribution; Date and Time RWC = Raw Water Consumed: REC = Recreation;			I IIIg/L I is I		Laboratory	Total Coliform E.col			E.coli	Background		<u> </u> 	НРС		nu l		urbidity Microcyst				
Sampled		RWC = Raw Water Consumed; REC = Recreation Swimming		Free	Total S	NV S	Number	CFU/100 mL	CFU/100 mL		CFU/100 mL		CFU/100 mL	CFU	CFU/1 mL	Temp. (°C) pH Uni		NTU		μg/l
2024-10-0	2 10:20	Bar Sink - D					16280		0		0		0								
								_													
		he items tested. Results apply to sample as																			

Date Approved

Microcystin

Turbidity

2024-10-03

Detection Limit: 0.150 µg/L

Detection Limit: 0.10 - 40.0 NTU

Detection Limit: 4 - 10

Approved By

Reportable Limit: ≥ 1.50 µg/L

Drinking Water System Address:

9536 Hwy. 93 N. Midland, ON. L4R 4K6

DOMESTIC WATER SERVICE DESIGN

MGCC, Proposed Clubhouse

Date: August 15, 2025

Prepared By: DW

A. Design Calculations:

1.Fixtures.

Based on the architectural plans the proposed clubhouse will be equiped with fixtures as noted below.

2.Proposed Loading.

<u>Fixture</u>	Hydraulic Loading	Quantity	Total Fixture Units
i)lower level			
-bar sink	1.0	1.0	1.0
-dishwasher	1.4	1.0	1.4
-kitchen sink	1.4	2.0	2.8
-bathroom group (6LPF)	3.6	7.0	25.2
-shower head, 9.5 lpm per head	1.4	2.0	2.8
			33.2
ii)main level			
-bar sink	1.0	1.0	1.0
-dishwasher	1.4	1.0	1.4
-kitchen sink	1.4	2.0	2.8
-bathroom group (6LPF)	3.6	2.0	7.2
			12.4
		Total	45.6

Note: Per Ontario Building Code (OBC, 2012) Appendix A, Volume 2. Table 7.6.3.2.A, Sizing of Water Distribution Systems - Private Use

B. Existing System

- -Existing 25mmØ service lateral connected to 25mmØ watermain.
- -Existing water system pressure is approximately 310kPa (assumed).

C. Proposed Service

System Pressure Range	200-310 kPa
Length	305.0 m
Diameter	50.0 mm
Maximum Fixture Units Served	51.0

Based on the proposed 45.6 fixture units noted in Section A above, the proposed 345m - 50mm Ø water service will supply the proposed clubhouse.

Note

- 1.Per Ontario Building Code (OBC, 2012) Appendix A, Volume 2. Table 7.6.3.1, Pipe size based on number of fixture units served.
- 2.The existing water system pressure will be confirmed by the contractor at the time of construction and the service size adjusted as required.



Table 7.6.3.2.A. Sizing of Water Distribution Systems⁽¹⁾⁽²⁾ Forming Part of Sentences 7.6.3.2.(1) to (3) and 7.6.3.4.(2), (3) and (5)

Fixture or Device	Minimum Size of Supply Pipe,	Private	Use Hydraul fixture units		Public Use Hydraulic Load, fixture units			
	in.	Cold	Hot	Total	Cold	Hot	Total	
Bathroom group with 6 LPF flush tank(3)	N/A	2.7	1.5	3.6	-	·	· ·	
Bathroom group with greater than 6 LPF flush tank ⁽³⁾	N/A	4	3	6	V#	-	-	
Bathroom group with more than 3 fixtures		(8.7)	150	(4)	-			
Bathtub with or without shower head	1/2	1	1	1.4	3	3	4	
Bathtub with ¾ in. spout	3/4	7.5	7.5	10	7.5	7.5	10	
Bedpan washer	1	_	-	-	7.5	7.5	10	
Bidet	3/8	1.5	1.5	2	-	-		
Clothes washer, 3.5 kg	1/2	1	1	1.4	2.25	2.25	3	
Clothes washer, 6.8 kg	1/2		-	-	3	3	4	
Clothes washer, commercial ⁽⁵⁾	-	-	-	-	175	17.0	-	
Dental lavatory	3/8 .	-	-		1.5	1.5	2	
Dental unit, cuspidor	3/8	-	-		1		1	
Dishwasher, commercial ⁽⁵⁾	•	•	-	-		-		
Dishwasher, domestic	3/8	-	1.4	1.4	-	-	-	
Drinking fountain or water cooler	3/8	-	-	-	0.25	-	0.25	
Hose bibb	1/2	2.5	-	2.5	2.5		2.5	
Hose bibb	3/4	3	-	3	6	-	6	
Hose bibb, combination hot and cold	1/2	1.9	1.9	2.5	1.9	1.9	2.5	
Lavatory, 8.3 L/min or less (Brithroom CTHA)	3/8	0.5	0.5	0.7	1.5	1.5	2	
Lavatory, greater than 8.3 L/min	3/8	0.75	0.75	1	1.5	1.5	2	
Shower head, 9.5 L/min or less per head	1/2	1	1	1.4	3	3	4	
Shower head, greater than 9.5 L/min per head	1/2	1.5	1.5	2	3	3	4	
Shower, spray, multi-head, fixture unit per head	(5)	1	1	1.4	3	. 3	4	
Sink, bar	3/8	0.75	0.75	1	1.5	1.5	2	
Sink, clinic service faucet	1/2	-	-	-	2.25	2.25	3	
Sink, clinic service with direct flush valve	1	-			6	-	6	
Sink, kitchen, commercial, per faucet	1/2		-	-	3	3	4	
Sink, kitchen, domestic, 8.3 L/min or less	3/8	1	1	1.4	1	1	1.4	
Sink, kitchen, domestic, greater than 8.3 L/min	3/8	1.5	1.5	2	1.5	1.5	2,	
Sink, laboratory	3/8	-	-	-	1.5	1.5	2	
Sink, laundry (1 or 2 compartments)	3/8	1	1	1.4	1	1	1.4	
Sink, service or mop basin	1/2	•	-	-	2.25	2.25	3	
Sink, washup, per faucet	1/2	-	-	-	1.5	1.5	2	
Column 1	2	3	4	5	6	7	8	



 $\label{eq:Table A-7.6.3.1.} \mbox{Pipe Size Based on the Number of Fixtures Units Served} \mbox{$^{(1)}$}$

Water	Water Distribution System, inches	Maximum Allowable Length, m														
Service, inches		12	18	24	30	46	61	76	91	122	152	183	213	244	274	305
Pressure Range							Num	ber of I	ixture I	Units Se	erved	11000				
200 to 310 H	Pa (30 to 45 ps	i)				1.05				11/1						
3/4"	1/2"	6	5	4	3	2	1	1	1	0	0	0	0	0	0	0
3/4"	3/4"	18	16	14	12	9	6	5	5	4	4	3	2	2	2	1
3/4"	1"	29	25	23	21	17	15	13	12	10	9	7	6	6	6	6
1"	1"	36	31	27	25	20	17	15	13	12	10	8	6	6	6	6
11/2"	11/4"	90	68	57	48	38	32	28	25	21	18	15	12	12	11	11
11/2"	1½"	151	124	105	91	70	57	49	45	36	31	26	23	21	20	20
2"	1½"	151	151	132	110	80	64	53	46	38	32	27	23	21	20	20
2"	2"	359	329	292	265	217	185	164	147	124	96	70	61	57	54	51
21/2"	21/2"	445	418	390	370	330	300	280	265	240	220	198	175	158	143	133
311 to 413 k	Pa (46 to 60 ps	i)	-0							10 3			100			
3/4"	1/2"	8	7	6	5	4	3	2	2	1	1	- 1	0	0	0	0
3/4"	3/4"	21	21	19	17	14	- 11	9	8	6	5	4	4	3	3	3
1"	1"	42	42	41	36	30	25	23	20	18	15	12	10	9	8	8
11/2"	11/4"	83	83	83	83	66	52	44	39	33	29	24	20	19	17	16
11/2"	1½"	151	151	151	151	128	105	90	78	62	52	42	38	35	32	30
2"	11/2"	151	151	151	151	150	117	98	84	67	55	42	38	35	32	30
2"	2"	359	359	359	359	359	318	280	250	205	165	142	123	110	102	94
21/2"	21/2"	611	611	610	580	535	500	470	440	400	365	335	315	285	267	250
Over 413 kF	Pa (60 psi)															
3/4"	1/2"	8	8	7	6	5	4	3	3	2	1	1	1	1	1	0
3/4"	3/4"	21	21	21	21	17	13	11	10	8	7	6	6	5	4	4
· 1"	1"	42	42	42	42	38	32	29	26	22	18	14	13	12	12	11
1½"	1¼"	83	83	83	83	83	74	62	54	43	34	26	25	23	22	21
11/2"	1½"	151	151	151	151	151	151	130	113	88	73	51	51	46	43	40
2"	1½"	151	151	151	151	151	151	142	122	98	82	64	51	46	43	40
2"	2"	359	359	359	359	359	359	359	340	288	245	204	172	153	141	129
21/2"	21/2"	611	611	611	611	611	611	610	570	510	460	430	404	380	356	329
Column 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Notes to Table A-7.6.3.1.:
(1) Where total fixture unit values exceed those given in this Table, the system must be designed according to a detailed engineering design method.

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Appendix A • Volume 2

Simcoe County District Health Unit

SEWAGE SYSTEM INSPECTION FORM

July 18/73			MUNICIPALITY
109- LOT s 110 CON. 1 0.S. PLAN	LOT	BUILDING:	Club House
OWNER: Midland Golf & Count	ry Club Ltd	., NO. OF BEDROO	DMS: -
ADDRESS: 675 Yonge St., Midland, Ont.		2-pie Kite Lau	ece bath hen sink hdry tubs
CONTRACTOR: Mr. Bruce Tinn R.R.#1, ADDRESS: Penetang, Ont.		Othe	omatic laundry er Appendix "B"
LIQUID CAPACITY OF SEPTIC TAN	K:5000 gal.	CONSTRUCTION: Pref	abx Other
TOTAL FT. OF TILE BED: 1800 ft	5. 7	TYPE OF SOIL: sa	nd
LEADER: 3 th P.V.C.	1	HEADER: 3" P.V.	C.
LATERALS: 3" P.V.C., 1-12 ft	c. cover, c	rushed stone, go	od grades
WATER SUPPLY: Type of Well dr	illed Distan	ce from bed 500 '+	Municipal
COMMENTS: Area bed. 4' ce	entres.		

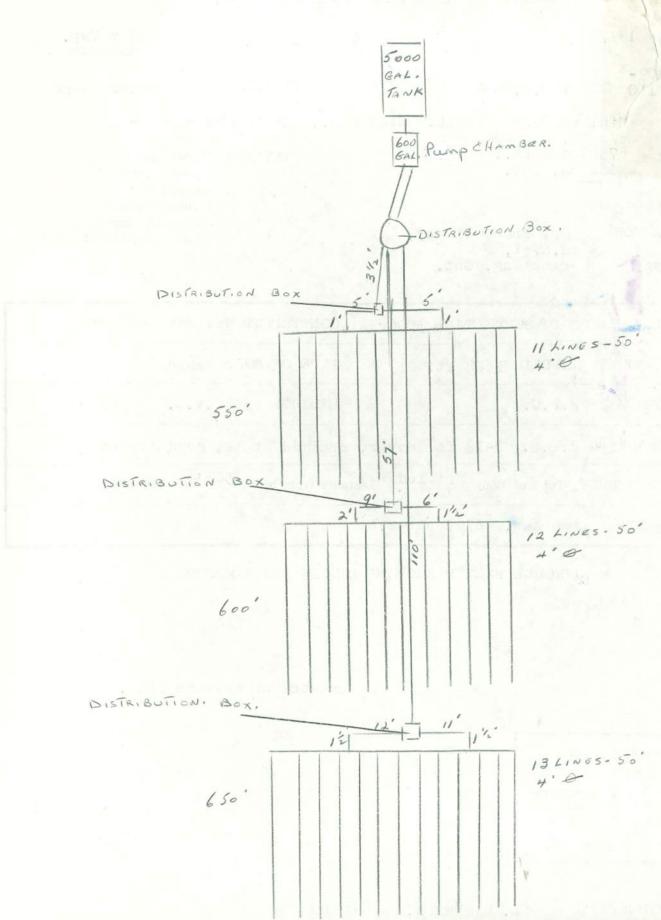
ROUGH SKETCH SHOWING DESIGN AND LOCATION

BENTION 2 W/C 3 SINK

4 Showers WITH TIMER

See sketch on reverse side.

INSPECTOR L. G. But.ts., C.P.H.I.(C)



TOTAL ___ 1800'

Simon County District Mealth Unit

578 King Street, Midland, Ont. L4R-3M92

Midland Golf & Country Club, 225 King Street, Midland, Ontario.

Tear Sirs:

Re: Proposed Sewage Disposal System

Your application for a sewage disposal system at Lot 110, Con. 1 O.S.

Tiny Twp. has been received. We consider the above-mentioned

not suitable for a sewage disposal system to serve a dwelling of ann + sq. ft.

and bedrooms. The sewage disposal system will consist of a concrete

septic tank a minimum of gallons, and feet of weeping

tile, laid in a minimum of 13 inches of crushed stone (approximately 6 inches

under the tile and 3 inches over).

The tile bed is to be levelled, and will require a minimum —
of granular fill, which will extend at least 10 feet beyond the laterals on all
four sides. The fill is to be retained, and the amount of cover over the weeping
tile is to be a maximum of 15 inches.
Note: Approval for locker room addition — approx. 88'8" x 24' x 20'
Existing sewage system satisfactory at present.
No increase in membership.

Before final approval can be issued, it will be necessary for the system to be inspected before covering, and at least 48 hours notice must be given to the above office.

Should the system be covered without inspection, it will be necessary to expose the entire system. Failure to comply may result in proceedings being taken under Section 14 of Schedule B of the Public Health Act.

This approval is valid for one year from date of issue.

Yours truly,

Public Health Inspector

L. l. Butts per St

Date Nov. 7/74

LUDITC UG

APPLICATION FOR SEWAGE DISPOSAL

	19000
fil 10	44
TTTE	77

Premises in Municipality	of	11000
v.	of(town or Village)	or (Township)
TWSP. LOT COT	1C. Sub Tat	Reg. Plan
Directions to Lot:	alway 27	
OWNER: ADDRESS.	- d Country Club Phone	No. D.G. Haig Chairna
ADDRESS: 726 Kin	of (D.a. Has)	
Contractor: Sen ors	Phone	● No
Address: 5 75	1 Barrel	
Type of Bldg. (hb	No. of Bedrooms No. Max. N	No. Persons
Water Supply well	Size of Lot Siz	se of Bldg & + cg ft
No. of Fixtures: Water Class	ets 5 3-Compart.Sink	se of Blug. book _ sq.ft.
(A + 1)	3-Compart.Sink	Bath Tubs Wil
Kitchen Si	nks 3 Wash Basins 7	Auto.Washer_ NI
New the ing Shower State	ils 6 Laundry Tubs MI	Dishwasher W
Garb.Grinde	er N Urinals Other	(specify)
Has this parcel been seven	red since 1970 No Yea	r severed 19
Owner name under which parcel v		Action Can Only:
	section 201 and fine 201 and	Tales acceptance
	INFORMATION IN THIS APPLICATION IS DULY APPROVED, THE PLAN APPROVED BY THE MEDICAL ARE APPLICABLE.	ENSUING INSTALLATION WILL L OFFICER OF HEALTH, AND
Nov 5 1974		WEIR CRIPPS PARTNERS ARCHITECTS
Month Day Yr.	Signature of Owner of	r Agent TORONTO Z E ONTARIO

NOTICE:

Approval of plan expires in 12 months if installation not completed. Notification must be received by the Health Unit that the two 5 foot deep test holes have been dug and flagged in the proposed tile bed area in order to process this application.

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		Street Bedrooms : Street Server Street Server Server Street Server Serve
nod a nodical annual de Arganes Dissalant de		Strehog Stake Nach Nach Nach
Office II	Totto Totto	
Office Us Terrain:	FlatGently undulating	Less than 10% slope More than 10% slope
Soil:	Soil Description - 0 1 2	Surface Drainage: Good Average

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Simcoe County District Health Unit

a) Septic tank/holding tank of working capacity of

WORK AUTHORIZED BY THE CERTIFICATE OF APPROVAL HAS BEEN SATISFACTORILY COMPLETED AND INCLUDES:

TWSP. Midland

FILE NO.

Litres (800 Imp. Gals.) constructed of concrete X fibreglass on site

USE PERMIT FOR CLASS 4,5,6 SEWAGE SYSTEMS	DATE SENT May 6, 19	96
FOR CLASS 4,5,0 SEVVAGE SYSTEMS	DATE SENT May 6,	19

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Simcoe County Bistrict Health Unit

FILE NO.

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TWSP. Midland		
CONC. 1 0.S.	R.P.	
LOT Pt. 110	S.L.	
DATE SENT MAY	6. 1996	

USE PERMIT
FOR CLASS 4,5,6 SEWAGE SYSTEMS

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ENVIRONMENTAL HEALTH SERVICES

FILE NUMBER 95-11-4(71)

APPLICATION FORM and CERTIFICATE OF APPROVAL TO INSTALL A SEWAGE DISPOSAL SYSTEM

	FOR OFFI	CE USE ONLY
Twp	MIDLAN	JD O
Con	10.5.	Twp. Lot Pt. L+110
Plan		Sub. Lot

						Fidil		Sub. Lot
Date Rovd:	May 10	1/95			Fee Rcpt. No:		83383	
1 ,	NAME and AD	DRESS of REGIS	TERED OWNER	R	2	OWNE	R'S AUTHORIZED A	GENT
Mix	LAND	Golfa	Com	TRY	CHAI	s con	40E AN	
Elul	3, Box	98,	medle	and)	469	MM	vcy.	STREET
			On	t.				
POSTAL	CODE	HOME PHONE	BUS	S. PHONE	POSTAL	CODE	HOME PHONE	BUS. PHONE
							526-5587	, \$26-2878
3			This Applica	tion refers to a	property locate	ed as follows:		Table 2
TWP -	NEW NAME	TWP - OL	D NAME	CONCESSI		VP. LOT NO.	REG. PLAN NO	SUB. LOT NO.
MIDL	AND	Ti~	/	1-0-	5 Pt.	4110		
4 LOT DI	MENSIONS:	25	o Acro	25			and LOT AREA	sq. ft.
5 DIRECT	IONS to LOT:	History	13	10	MIDER	NO C	OIF COL	UPSE
6 Is this p	roject under the	ONTARIO NEW H	OME WARRAN	ITY PROGRAM	? Yes	No.	The building to be	e serviced is a
New o	or Existing	Single	Family Home o	LE CA	Unit Dwel	ling or [Commercial or Inc	lustrial bldg.
Witho	ut Basement or	With Base	ment that is	Finished o	r Unfinis	shed. The	building has	_ sq. ft. per floor
and	# of floors (include	ding basement).	FLOOR PLANS	S MAY BE REQ	UIRED.	The Septic S	ystem to serve the b	ouilding will be a
Class	4 - Trench Bed	or Cla	ss 4 - Filter Me	dium System o	Clas	ss 5 - Holding	Tank or Cl	ass A - over 4500 Litres
7	BEDROOMS	WASH	ROOMS	LA	UNDRY	KITC	HEN SINKS	OTHER
STATE	11/0	2 Piece 3 P	iece 4 Piece	Tubs	No	1 Comp.	NO	Garborator 20
NO. OF	NA	/		Auto. Wash	ner No	2 Comp.	No	Dishwasher 20
and "Roug	nhed In" Plumbing	for:						o Mariana ate cada
8 WATER	SUPPLY is	Existing or	Proposed	and comes t	rom the follow	ing:	Municipal / Commu	unal System or
☑ Drille	d Well,	Dug or Bored We	II, San	dpoint,	Other (describ	pe)		preference a
9	IT IS AN OFFEN	CE UNDER THE	ENVIRONMEN	TAL PROTECTION	ON ACT TO GIV	'E FALSE INFO	RMATION ON THIS	APPLICATION
1.0000000000000000000000000000000000000	Y THAT ALL INFO						1	
24022	THAT IF APPROVE T AND ENVIRONM				Date Now	14/95	Sign	nature of Owner or Agent
10			T	ois Application	is not transferal			

ENVIRONMENTAL HEALTH SERVICES

FILE NUMBER 95 - m1 - 4 (TI)

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IT IS THE APPLICANT	'S RESPONSIBILITY TO	ENSURE ALL INFORMATION	I GIVEN IS ACCURATE	AND COMPLETE
CERTIFICATE OF APPROREFUSED; reasons attack			Da	ite /
CERTIFICATE OF APPROGRANTED; conditions a		Maren	De	ne/Nov15/98
This Certificate is hereby issued	under Section 77 of the Env	ironmental Protection Act only for the	proposal outlined on Pages 1	and 2 of this application

Under Section 139 of the Environmental Protection Act, an applicant may appeal a decision by writing to the Director and to the Environmental Appeal Board, 112 St. Clair Ave. West, Toronto, Ont., M4V 1N3 within 15 days of receipt of the decision. An Application for which a Certificate of Approval cannot be issued within 1 year will be refused.

OFFICE COPY - WHITE

OWNER'S COPY - YELLOW BUILDING INSPECTOR'S COPY - PINK

PAGE 2 OF 2

" ENVIRONMENTAL HEALTH SERVICES

FILE MUDEAND GOLFT COUNTRY NUMBER 95M(-4(Ti)) CLUB

CONDITIONS: CLASS 4FM FILTER MEDIUM SYSTEM

No variation from this approval is allowed without prior written permission from the Director.

The addition of fill to this property or any other works specified for the purpose of complying with Ontario Regulation 358/90 or the Environmental Protection Act as amended, does not relieve the owner of liability for damage that may be caused to adjacent properties by an alteration of drainage patterns.

Compliance with this approval does not provide exemption from Ontario Regulation 358/90 or the Environmental Protection Act, as amended.

IN ADDITION TO THE ABOVE, THE FOLLOWING CLAUSES, AS CHECKED OFF, APPLY:

	IN ADDITION TO THE ABOVE, THE FOLLOWING CLAUSES, AS CHECKED OFF, APPLY:
	Keep the plumbing high enough to allow gravity flow, otherwise a pump and pump chamber that is sized to deliver gallons per 15 min. cycle will be required between the septic tank and the leaching bed. An electrical inspection of the pump wiring may be required. Contact your local Ontario Hydro office.
2	Benchmark established as
31	Minimum septic tank size <u>800</u> gallons.
4₫	Minimum Top Contact Area 2\(2\) 20240 sq. ft. Minimum Expanded Contact Area sq. ft. sq. ft. sq. ft. sq. ft.
5□	Construction details as per enclosed DWG.# FM. 01.
6☑	Combined Contact Area to be excavated to a maximum depth of 54 in. above/below benchmark/highest existing grade before site was disturbed. Grade and scarify base.
7 □	Minimum 12 in. deep sand mantle required as shown on lot diagram. Prepared base of mantle to be joined with and sloped away from Expanded Contact Area base so that sewage must pass laterally through a minimum 50 ft. of mantle material. The mantle is part of the sewage system and must not be altered or infringed upon. The mantle area is in addition to any Contact Area specified in clause 4.
8 🗆	Call Health Unit for inspection of prepared base before placement of any imported material.
91	Submit proof of compliance with Ontario Regulation 358/90 and weigh bills for installed Filter Medium material before final inspection.
NOTE:	Following inspection and approval of completed installation, backfill with 12 in. to 24 in. of suitable granular sand fill which must include 2 in. to 6 in. of topsoil.

MIDLAND



Simcoe County District Health Unit

FILTER SAND DOCUMENT

TO: ACGREGATE SUPPLIER

EPA9/89 .

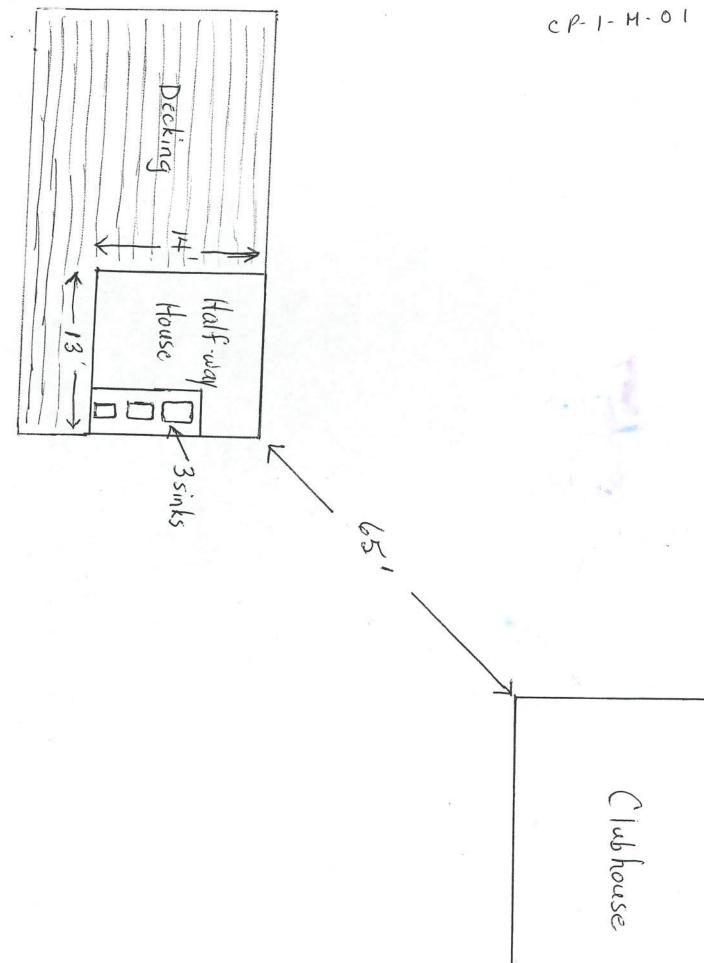
The following granular material is required as a medium for filter bed systems.

Clean sand comprised of particles ranging in size between the limits of

- (1) an effective size of 0.25 millimetres with a uniformity coefficient not less than 3.5, and
- (2) an effective size of 2.5 millimetres with a uniformity coefficient not greater than 1.5.

THE FOLLOWING STATEMENT FROM THE ACCREGATE SUPPLIER IS REQUIRED:

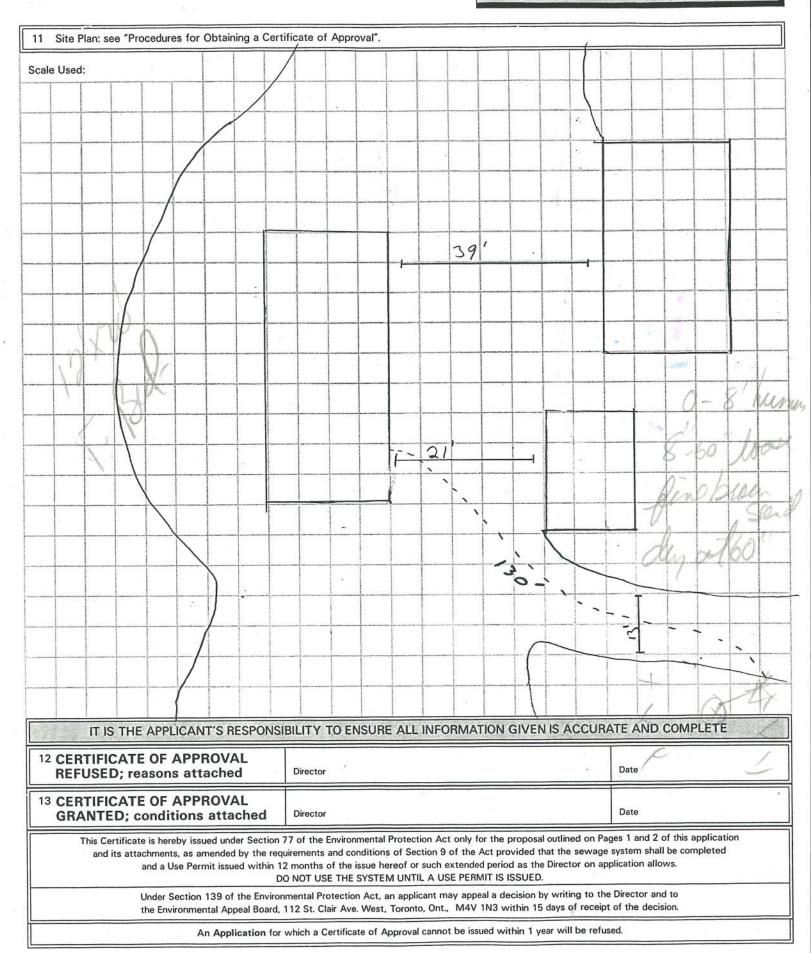
THIS IS TO CERTIFY THAT Lafor Law Sand + 6 remel Std.
HAS DELIVERED OR SOLD 29, 54. tons of the
ABOVE GRANULAR HATERIAL TO Tinney & Sceptic Services
DATE april 19 th 1996 Cyrille Charlefor
/signature of seller
NOTE TO CONTRACTOR/OWNER
 Please be careful not to mix this material with any other product as the characteristic of the filter bed material is easily changed.
2. The issuance of the sewage system Use Permit is dependant on this completed form being returned to the Health Unit.
CHINER OF PROPERTY MIDIAND GOLF & COUNTRY, Chis
CERTIFICATE OF APPROVAL # 95 - 1 - 4(TI) TOWNSHIP MOLAND
S.C.D.H.U. RECEIVED



Į,

ENVIRONMENTAL HEALTH SERVICES

NUMBER 95-MI-4





Permit Application Change of Use

Permit no. Roll no.

Fee rcpt. no. Date rcvd.

10-M-1-101

PLEASE NOTE: this application is for additions / renovation that will NOT require upgrading of an existing sewage system. If an upgrade will be required, a <u>Sewage System Permit Application</u> should be used. If you are unsure, consult the Inspector before submitting this Application.

Name and Address of Owner's Authorized Agent		2.3.4	Bus. Phone		No. Plan No. Sub. Lot No.	2	Present Zoning:	renovation[]	renovation[]	fore[] after[]	A (in sq. meters) of:	after:	after:	after:	after:	after:	after:	(check ✓ if there is)	other[] (describe)		ed work, on legal or letter size paper.	
Name and Add	6443		Home Phone		Concession Twp. Lot No.	1075 N. 110	Street No. (911#)	No. of bedrooms existing before renovation[No. of bedrooms proposed after renovation[No. of separate dwelling units before[Indicate FINISHED FLOOR AREA (in sq. meters) of:	Basement before:	First Floor before:	Second Floor before:	Third Floor before:	Other before:	Total Area before:	cwashes into the sewer lines?	lake or river[] other[]	er then was	shows the property and propose	
Registered Owner	+ COUNTRY		Bus. Phone 526-2818		Municipality Old Name	TIMY		no. after	7	λ,	1	8 9	9	К		7	7	and / or a Water Softener [] that backwashes into the sewer lines?	drilled well[d dug well[]	(year). The owner then was	tailed site plan that accurately	
Name and Address of Registered Owner	MIDLAND GOLF	ano	Home Phone	Property Assessment Roll Number:	Municipality New Name	MIDLAND.	Street Name:	Plumbing Fixtures no. before	Toilets	Tubs / Showers	Hot Tubs / Spas	Washbasins	Kitchen Sinks	Automatic Dishwashers	Garbage Grinders	Laundry Tubs	Automatic Washers	Is there a Water Filter [] and / or a	WATER SUPPLY: communal[] dr	The SEWAGE SYSTEM was installed in	Provide 3 copies of a complete and detailed site plan that accurately shows the property and proposed work, on legal or letter size paper.	

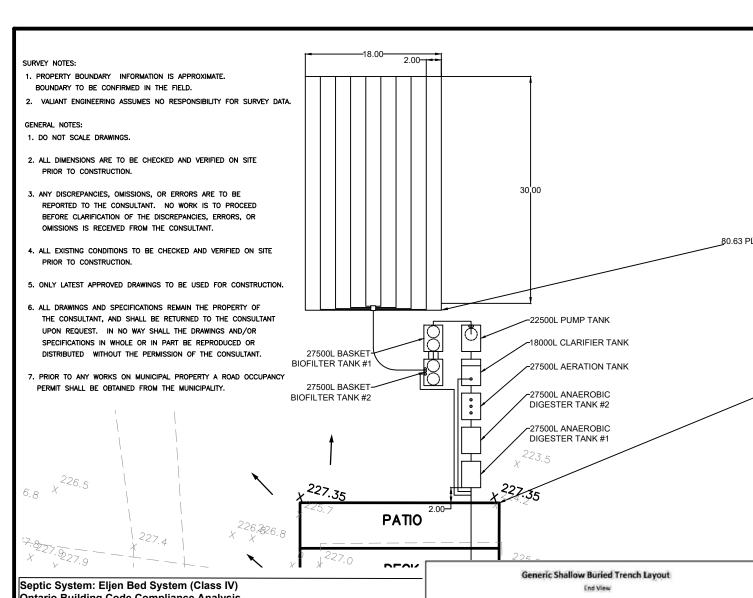
the Building Code Act and Is liable to prosecution.

I agree to comply with the provisions of the Building By-Law and Zoning By-Law of the Municipality and By-Laws of the Simcoe County Board of Health and any amendments thereto. I further agree that neither the granting of a Permit nor the approval of the drawings and specifications, nor the inspections made by the authority having jurisdiction during the work on the building shall in any way relieve me from full responsibility for carrying out the work in accordance with the Ontario Building Code and the Regulations thereunder.

inly declare that the same are in every respect, fully and truly and I sole DECLARATION
I hereby certify that I have knowledge of the particulars contained in the foregoing Statements, stated to the best of my knowledge and hallas are it made and an incompanient of the best of my knowledge and hallas are it made and are it made are it made and are it made and

	N April 17/01 Date	H-114-36 #AN	Unable to approve, reasons below[]		Date April 24/01
tated to the best of my knowledge and bellef, as if made under and by virtue of The Canada Evidence Act.	- CHRIS COHOLAN Print Name	Site Inspection[In My Date: Mput/17/8/	Granted with conditions below[]	٥	thell
rated to the best of my knowledge and belief,	ignature (Owner or Agent)	File Information[]n [X]y. Site Insp	Granted as proposed[4		Signature C.R. H.

OFFICE COPY...WHITE



Ontario Building Code Compliance Analysis

Daily Design Sewage Flow = restaurant seating (125x160) + full time employees (75x20) + store floor area (5x49) = 21,745 L/day

Septic Tank size = Provide 2 new single compartment Waterloo anaerobic digester AD-27500

Provide a 27,500 Aeration Tank

Provide a 18.000 L Clarifier Tank

Provide pump/ balancing tank 22,500 L w internal pump and redundant pump.

Provide 2 Waterloo Basket Biofilter tank BT-27,500 w/internal pump and re-circulation pump.

See detailed schematic for additional information

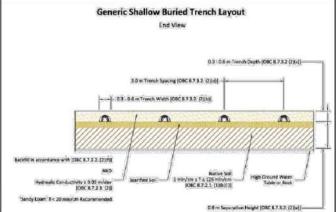
Soil Percolation: T = 10 min/cm sand some gravel

shallow buried trench (OBC Table 8.7.3.1):

L = Q/75

22000/75 293.33m

provide 300.0m of shallow buried trench as 10 runs of 30m lenths



Generic Shallow Buried Trench Layout morning 0.3 - 0.6 m Trench Depth [OBC 8.7.3.2 (2%c)]ength of Trench (OBC 8.7.3.2 (2)(a)) --

SHALLOW BURIED TRENCHES NOTES:

A shallow buried trench is a leaching bed constructed of plastic chambers and small diameter pressurized distribution pipe, as opposed to larger diameter gravity pipe and stone which are used in conventional absorption trench leaching beds. Components of a shallow buried

- a) Treatment unit certified to Level IV CAN/RNO 3680-600 "Onsite Residential Wastewater Treatment Technologies
- b) Dosing pump chamber and pump equipped with timer controls
- c) Forcemain from dosing chamber to distribution manifold which may be PVC Schedule 40 or HDPE, whichever is preferred
- d) Manifold (header) assembly, consisting of minimum 25 mm (1") pressure pipe (PVC Schedule 40)
- e) Laterals in leaching bed consisting of minimum 25 mm (1°) pressure pipe (PVC Schedule 40) with 3 mm orifice holes spaced evenly along the top of the pipe, and 3 mm drain holes occasionally on the bottom
- f) Pipe support to keep the lateral off the bottom of the trench
- q) Leaching chamber covering the laterals. Large diameter pipe cut in half is not acceptable, as the footprint of the sidewalls is not sufficient to prevent settling of chambers over time. Chambers with a wide resting foot are preferred.
- h) Filter cloth over the chambers (optional; consult with the chamber manufacturer regarding requirements for filter cloth)
- "Sweep 90" fitting extending to within 10 cm of finished grade at the end of each lateral. Vertical piece may be equipped with a ball valve if desired, and terminate in a threaded cap.

CONSTRUCTION NOTES:

83.05 PL

Proper site preparation and installation methods are important for the functionality of any leaching bed system and are crucial to the proper functioning of an SBT system. Sentence 8.7.6.1.(4) of the OBC states that "A shallow buried trench shall not be constructed unless the soil or leaching bed fill is sufficiently dry to resist compaction and smearing during excavation." This is critically important in order to maintain the permeability of the underlying receiving soil, particularly when installing in lower permeability soils that contain clay. Care should be taken to minimize traffic in the area of the bed. This includes ensuring that construction traffic is not permitted to drive across the leaching bed area prior to the start of installation. For example, if the SBT leaching bed is located in the front yard of a property, construction traffic associated with other elements of the building construction should not be permitted to access the site by crossing the area of the SBT bed.

When installing in permeable native soils, the following should be considered:

· Use track mounted equipment only.

When installing in low permeability native soils, the following should be considered:

- · Use track mounted equipment only
- · Avoid foot traffic directly in the trenches when working in clay
- · Underlying soil should be scarified with the teeth of the bucket.

When installing in leaching bed fill, the following should be considered:

- · Use track mounted equipment only
- · Backfill placed between trenches should be hand tamped.
- · Base contact area underlying soil should be scarified with the teeth of the bucket.
- Leaching bed fill should be sufficiently compacted to prevent chambers from settling. Consideration could be given to placing thin layer of crushed stone beneath chambers to prevent settlement of the chamber in leaching bed fill, although this is not a code

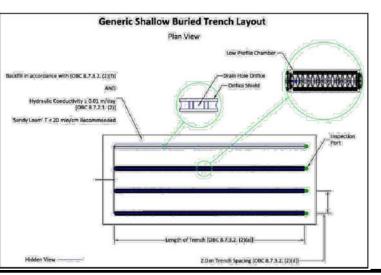
Onsite soil could be used as backfill in the trench. At least 300 mm of topsoil should cover the chamber

When using infiltration chambers, consideration should be given to the use of a geotextile over the chambers to prevent errant pressure flows hitting the side louvers and possibly drawing in backfill material.

The placement and positioning of the pressurized piping within the chamber is important and the following should be considered:

- · Provide support for the piping within the chamber; piping should not be placed directly on the soil in the base of the trench.
- ·Orient the pipe within the chamber to allow the effluent spray pattern to be upward, toward the top of the chamber. Piping should not be placed at the very top of the chamber.
- · Secure the piping to prevent it from twisting within the chamber, which would affect the spray pattern orientation
- · Orifice drain holes in the bottom of the piping should have orifice shields installed.
- · At the end of each pressurized pipe a long radius sweep elbow should be installed to allow clean out. The elbow should be fitted wit a gate valve, and a threaded end cap. It is recommended that the end cap not be glued on, as future maintenance activities such as pipe flushing are more easily conducted with the end cap removed.
- ·Consider whether check valves and/or high point vacuum breaks are required. This will be dependent on the elevation of the SBT relative to the dosing pump chamber.

- · Avoid construction on wet soil to reduce compaction and smearing
- ·Use low-load, tracked construction vehicles and always keep sand between the vehicle and soil during construction.
- · Add the sand, berm soil and aggregate from the upslope side
- · Keep all equipment and vehicles off the absorption area at all times.
- · Keep all equipment and vehicles off the undisturbed area down slope of the raised
- · Lightly compact the berm to limit lateral flow.



Valiant Engineering 20463 Leslie St Queensville, Ont. L0G 1R0 Bus: 905-806-8835 Email: Tim@valiantengineering.ca



Tim Gallagher BCIN 45174 review and take responsibility for the design work on behalf of a Valiant Engineering BCIN 105022 registered under subsection 3.2.4.of Division C, of the Building Code, I am auglified, and the firm is registered, in the appropriate classes/ categories.

9536 Penetanguishene Rd, Midland, ON L4R 2K6

SEPTIC SYSTEM DESIGN

Scale: 1:500	Designed By:	TG
Date: 2024-11-28	Drawn By:	TG
Project No.:	Checked By:	SD

SANITARY SEWER DESIGN SHEET MGCC - PROPOSED CLUBHOUSE

q = average per capita daily flow	450	L/cap.d
c = unit of commercial/institutional flow	28.00	m³/ha.d
c = unit of peak commercial/institutional extraneous flow	0.26	L/ha.s
p = unit of population density	2.30	ppu

 $\begin{array}{cccc} & Q(p) & = \mbox{peak population flow (L/s)} \\ Q(i) = & i \ x \ A & = \mbox{peak extraneous flow (L/s)} \\ Q(c) = & c \ x \ A & = \mbox{peak commercial flow (L/s)} \\ \hline Q(d) = & Q(p) + Q(i) & = \mbox{peak design flow (L/s)} \\ \end{array}$

P = population
M = peaking factor (Harmon)
P = p x # units / 1000
$M = 1 + 14 / (4 + P^{1/2})$, maximum of 4.0.

P = p x # units / 1000 $M = 1 + 14 / (4 + P^{1/2}), maximum of 4.0, minimum of 2.0$ Q = (P x q x M) / 86.4 $M Min = \underbrace{1.5}_{M Max} = \underbrace{3.8}$

 DATE: Aug. 04, 2025
 FILE No.:
 1

 DESIGNED: DW
 PROJECT:
 MGCC

CHECKED: Quantum Engineering

____1 OF ___1

	LOCATION			INI	DIVIDUAL			CUMULA	ATIVE										PROPOSED SA	ANITARY SEWI	£R		
_	FROM	ТО	No. RESIDENTIAL		RES. AREA			RES. AREA	COM./INST. AREA	TOTAL AREA	PEAKING FACTOR	FLOW, Q(p)	CUMULATIVE COM./INST. FLOWS	PEAK EXTRANEOUS FLOW, Q(i)	PEAK DESIGN FLOW, Q(d)	LENGTH	PIPE SIZE DIAMETER	GRADE		CAPACITY	FULL FLOW VELOCITY	VELOCITY	PERCEN
STREET	MH	MH	UNITS	POP	(ha)	COMM. (ha)	POP	(ha)	(ha)	(ha)	(M)	(L/s)	(L/s)	(L/s)	(L/s)	(m)	(mm)	(%)	MANNING'S n	(L/s)	(m/s)	(m/s)	FULL
Dorking Let	В	Δ				0.007	0.00	0.00	0.007	0.01	3.80	0.000	0.002	0.002	0.004	35.4	150	10.00%	0.013	48.2	2.72	0.25	0.0%
Parking Lot	_	Α Α				1 1 1																	
From Clubhouse	Clubhouse	A				0.684	0.00	0.00	0.691	0.69	3.80	0.000	0.224	0.180	0.403	24.0	150	10.00%	0.013	48.2	2.72	0.86	0.8%
To Tertiary System	A	Digester Tank#1				0.000	0.00	0.00	0.691	0.69	3.80	0.000	0.226	0.180	0.406	60.0	150	5.30%	0.013	35.1	1.98	0.68	1.2%
											ļ												
Notes:																							
1. The design capacity	of the tertiary sewage t	reatment system is 2	2,000 L/day.																				
2. The design flow for the	ne proposed clubhouse	is 21,745 based on	the system design	by Valian	t Engineering.																		
3. The existing flow for	the administration office	e and the halfway ho	use has been esti	mated at 2	200 L/day.																		
4. For the purposes of e	establishing the design	L/s flow for use in th	is spreadsheet, the	e equivale	nt commercial a	area flow was estal	blished using a	15 hour day and	d the above dai	ily flow. See	below summ	ary.											
5. Flow Summary:	Source	Per day	L/s (based on 15	hour days	<u>s)</u>																		
	AdOffice+H.Hse	200	0.004																				
	Clubhouse	21,745	0.403																				
		Total	0.406																				

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Stormwater Management Calculations

Date: April 3, 2025 Prepared By: DW

Pre-Developme	nt Impervious								
	Asphalt	7979 sqm							
	Buildings	1745 sqm							
	Total	9724 sqm							
Post-Development Impervious									
	Asphalt	8082 sqm							
	Buildings	1733 sqm							
	Total	9815 sqm							
	% increase	0.9							

Total property area= 71.45

Parking Area Storage Calculation

Width Depth Length V= 1.5 1.5 88 198 m³

Porosity Volume

Vp= V*0.40 79.2 m³

Building Area Storage Calculation

	Width	Depth	Length
	V= 2	2	2
Per Pit	V= 8	m³	
Total (4)	V= 32	m³	

Porosity Volume

Vp= V*0.40 12.8 m³