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Hydrogeological Desktop Study
White Church Secondary Plan
White Church Road East and Upper James Street, Hamilton, Ontario

Prepared for:

White Church Landowners Group
% SCS Consulting Group Ltd.
30 Centurian Drive, Suite 100
Markham, Ontario
L3R 8B8

Landtek File: 23355
December 5, 2023

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1.0 INTRODUCTION

Landtek Limited (Landtek) has been retained by Urban Solutions to complete a Hydrogeological Desktop Study for the proposed development at White Church Road East and Upper James Street in Hamilton, Ontario (the Site or development).

It is understood that the proposed development will include single detached, townhouse, high density and residential condominium development, community parks, an institutional and community centre block, and Storm Water Management (herein "*SWM*") ponds. Municipally adopted road pavement structures and services will be also included.

The project is approximately 326.3 hectares in plan area and is situated in the City of Hamilton. The area includes the lands bound by Upper James Street to the west, Miles Road to the east, Airport Road East to the north, and White Church Road East to the south. The Site location, and Land Use Plan are shown on Figures 1 and 3 in Appendix A, respectively.

Based on the information obtained from the Greenbelt Foundation stewards Ontario's Greenbelt, the Site is bounded to the east and east portion of the south boundary by the Greenbelt. The Greenbelt Area map is shown on Figure 2 in Appendix A.

The objective of the hydrogeological desktop study includes the following:

1. Provide a review of related available information of the Site.

2. Identify preliminary hydrogeological issues.

3. Assess the potential impacts on the groundwater at the Site, existing surrounding water well users, regulated lands, and surrounding developments by the proposed development.

It should be noted that no site-specific hydrogeological field investigation was carried out as part of this study.

2.0 SCOPE OF WORK

The scope of work for the Study includes the following:

1. Review of available background information including geology, hydrogeology, Ministry of the Environment, Conservation and Park (MECP) Water Well Records.

2. Site Assessment consisting of a detailed visual inspection of the Site to identify and document surface water drainage features, and the potential presence of significant hydrogeologic features such as closed depressions (areas of groundwater recharge), seeps, springs, or the presence of phreatophytic vegetation.

3. Data Analysis and Reporting: Following completion of the assessment, a Hydrogeological Desktop Report report will be prepared summarizing the hydrogeological conditions of the Site.

3.0 RECORD REVIEW

3.1 Aerial Photograph

Aerial photographs of the Site were obtained from Google Earth and reviewed for the historical land uses of the Site. The aerial photographs for the following years reviewed: 2005, 2009, 2012, 2015, 2018, 2021, 2022 and 2023. Copies of these photographs are presented in Appendix B.

Based on the aerial photographs, the Study Area has generally been occupied by a few residential properties, largely farmlands/vacant lands since 2005.

3.2 Local Physiographic, Geological, Karst, and Hydrogeological Information

Physiography

As shown on Figure1 in Appendix C, the Site is located within the physiographical regions of the Haldimand Clay Plain comprised of till moraines and clay plains according to the “Physiography Map of South-Central Portion of Southern Ontario” (Map 2226, Scale 1:253,440) prepared by the Ontario Department of Mines and Northern Affairs and based on the database maintained by Ontario Geological Survey (“OGS”).

Surficial Geology

Based on the OGS surficial geology Map, the Site is generally covered with fine-textured glaciolacustrine deposits; and till (clay to silt-textured till, derived from glaciolacusrine deposits or shale as shown on Figure 2 in Appendix C.

Bedrock Geology

Based on the Bedrock Geology of Ontario Southern Sheet, Map 2544 (1: 1,000,000) by OGS, the bedrock at the Site consisted of sandstone, shale, dolostone and siltstone of Lower Silurian age, as shown on Figure 3 in Appendix C

Potential Karst

Based on the Karst Map of Southern Ontario, the Site is located within an area of Potential Karst described as areas of carbonate rock units identified as most susceptible to karst processes, a thick cover of drift. This is shown on Figure 4 in Appendix C.

Conservation Area

The Site is located within the Niagara Peninsula Conservation Authority (NPCA) Watershed. The watershed maps, one showing Regulated Lands, and the other showing Groundwater Protection – Quality area, are shown on Figures 1 and 2 in Appendix D, respectively.

Greenbelt Area

Based on the information obtained from the Greenbelt Foundation stewards Ontario's Greenbelt, the Study Area is bounded by the greenbelt area to the east and east portion of the south boundary. The Greenbelt Area Map is shown on Figure 2 in Appendix A.

Topography

Based on Google Earth, the topography of the Study Area varies from elevations ranging from 225 masl to 230 masl.

Ground water flow is known to be from areas of higher elevation to areas of lower elevation. Based on topography and mapping information of the area, the ground surface elevations indicate that the area generally slopes to the northeast towards Lake Ontario. As a result, the shallow groundwater flow is expected to flow in a general direction of north, towards Lake Ontario.

3.3 Ministry of the Environment and Climate Change Water Well Records

The Ministry of Environment, Conservation and Park (MECP) Water Well Information System is a publicly available database which contains information such as groundwater well location, well construction details, static water level, geologic units encountered with depth, general water quality observations, water use, date of construction, and screened interval.

The MECP records for wells located within approximately 500 meters of the site were reviewed to assess the general nature and use of the groundwater resource in the area and to characterize local hydrogeologic conditions.

Desk Top Study

A search of the MECP water well records within approximately 500 m of the site, conducted on November 17, 2023, returned a total of 220 wells comprising of 206 water wells, 3 observation wells, 11 monitoring/test holes. The records were reviewed to assess the general nature of the groundwater resource in the area and to characterize local hydrogeologic conditions. The locations of the wells are shown on Figure 5 in Appendix A. The well records summary is provided in Appendix E.

A summary of the data obtained from the well survey is presented below.

Water Wells Construction

- Wells terminated in bedrock 182
- Wells terminated in sedimentary deposits (overburden).....24
- **Total.....206**

All Well Uses

- Water Wells 206
- Observation Wells 3
- Monitoring Wells/Test Holes 11
- **Total.....220**

Water Wells Depths

- Less than 15 m 0
- Between 15 m and 30 m.....35
- Greater than 30 m 171
- **Total.....206**

Based on the well records review, it was determined that there are two hundred and six (206) water wells within 500 m radius of the Site.

A review of all water wells lithology logs determined that they mostly have a thick upper layer of clayey deposit overlying the bedrock or sandy/gravel aquifer, resulting in the isolation of deeper-seated aquifers from impacts due to proposed construction activities which are usually surficial.

Depth to bedrock varies widely from approximately 15 m (49 ft) to 39 m (128 ft).

3.4 Source Protection

Based on the Ontario Source Protection Information Atlas, the Site is described as not within a *Wellhead Protection Area* (“WPA”) and *Intake Protection Zone* (IPZ”). However, there are areas *Highly Vulnerable Aquifer Areas* (“HVA”) which vary across the Site with Scores ranging from 0 to 6.

4.0 SITE INSPECTION TO ASSESS HYDROGEOLOGIC FEATURES

A detailed site inspection has earlier been conducted by Landtek on June 22, 2023, to assess the presence of features which may be significant from a hydrogeologic viewpoint. In particular, the site was inspected to assess the following:

- The presence of closed drainage features, depressions, or sandy areas which may allow for ponding and significant or enhanced infiltration of water.

- Assessment of the presence of phreatophytic vegetation which may indicate seasonally high groundwater levels and/or groundwater discharge and seepage.

- Identification of any zones of visible seepage or groundwater discharge.

The observations made during the inspection include surface drainage features (streams), and ponds. Five (5) streams, and seven (7) ponds were identified within the Site These are summarized on Figure 4 in Appendix A.

5.0 HYDROGEOLOGICAL ASSESSMENT

It is understood that the proposed development will include single detached homes, townhouses, high density and residential condominium development, community parks, an institutional and community centre block, and Storm Water management (SWM) ponds.

This section provides preliminary hydrogeological comments pertaining to the suitability of the site for the above proposed development, as well as potential constraints to development, from a hydrogeology point of view. The comments provided in this study are based only on review of available geologic and hydrogeologic information, MECP water well records, site visit/reconnaissance, our experience in undertaking similar projects.

It should be noted that past hydrogeological and geotechnical investigation reports were not available for review.

Anticipated Subsurface Conditions

Based on review of site geology information, MECP wells logs, and the site reconnaissance, a summary of the anticipated subsurface conditions are as follows:

- The surficial conditions at the sites are anticipated to consist of mainly cohesive nature of deposits (clay, sandy silt to clayey silt, sandy seams, till) over bedrock at depths ranging from approximately 15 m (50 ft) to 39 m (129 ft).

- Bedrock is expected to be mainly limestone or shale formation. Depth to bedrock varies widely from approximately 15 m (49 ft) to 39 m (128 ft).

- Groundwater may be encountered at varying depths.

Construction Excavation Dewatering

Based on the MECP wells logs review and anticipated subsurface conditions, groundwater control for shallow depth excavations could be handled by standard construction sump pump/well points or equivalent. However, a more robust and elaborate groundwater control measures, such as deep wells and well points, may be considered for deep overburden excavations and excavations extending to bedrock depending on depth to groundwater.

6.0 POTENTIAL IMPACTS

The following potential impacts are anticipated to result from the proposed development at the site.

1. Impact on Existing Groundwater Wells: A search of the MECP Well Records within an area extending approximately 500 m outward from the Site identified one hundred and eighty-two (182) water supply wells completed in bedrock, while a total of twenty-four (24) water supply wells completed in sedimentary deposits (overburden).

2. Impact on Surface and Natural Functions of the Ecosystem: The Study Area is located within the NPCA Watershed, comprising of Surface and Natural Regulated Lands, and Groundwater Protection – Quality areas.

3. Impacts to surrounding structures, and developments: This occurs during construction groundwater dewatering resulting in depression of the groundwater table extending to radius of influence which may range from low to high, depending on the subsurface soil types and groundwater condition.

7.0 RECOMMENDATION

A Hydrogeological Investigation is required to assess the current site groundwater conditions, determine potential development/post development effects of the proposed development; and provide monitoring and mitigation plans for the development.

8.0 CLOSURE

We trust this report is satisfactory for your purposes. If you have any questions regarding our submission, please do not hesitate to contact Landtek.

Yours truly,

Landtek Limited

Henry Erebor, M.Sc., P.Geo.,
Senior Hydrogeologist

9.0 LIMITATIONS

This hydrogeological desktop study report was prepared for the exclusive use of the Client. This report is based on review of data and information collected from the desktop study and a reconnaissance of the Site carried out by Landtek as described in this study and is based only on the information reviewed.

No site investigation was completed as part of this assessment, and no past hydrogeological and geotechnical investigation reports were available for review.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Landtek accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

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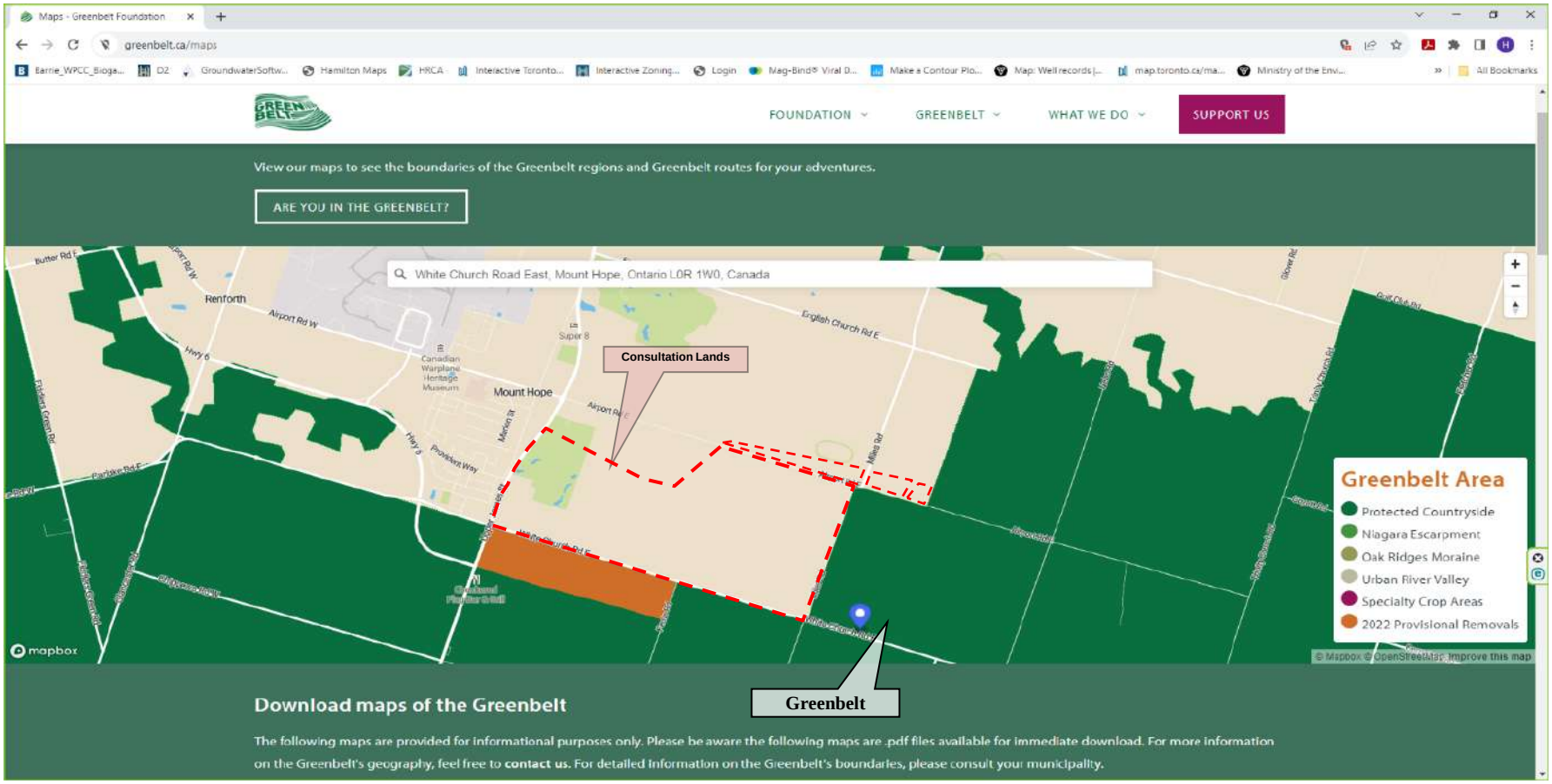
APPENDIX A

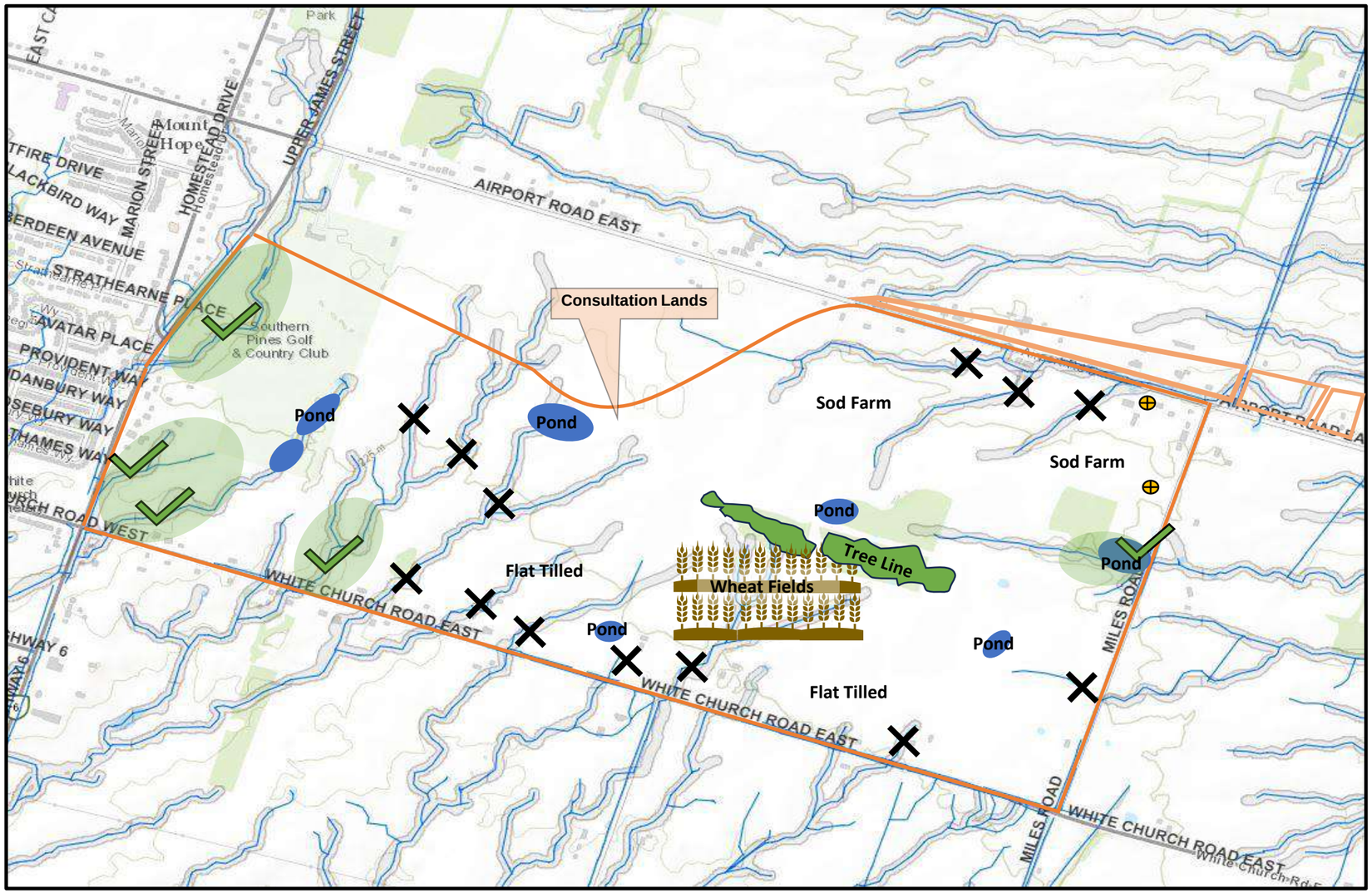
FIGURES

	LANDTEK LIMITED ***CONSULTING ENGINEERS*** **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**
	Scale: On Map | Date: November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario
Title:	Figure 1: Site Location
Project No.	23355



	LANDTEK LIMITED ***CONSULTING ENGINEERS*** **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**	
	Scale: On Map	Date: November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 2: Greenbelt Area	
Project No.	23355	

	LANDTEK LIMITED ***CONSULTING ENGINEERS*** **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**	
	Scale: On Map	Date: November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 3: Land Use Plan	
Project No.	23355	



N

Visible Drainage Features

Non-Visible Drainage Features

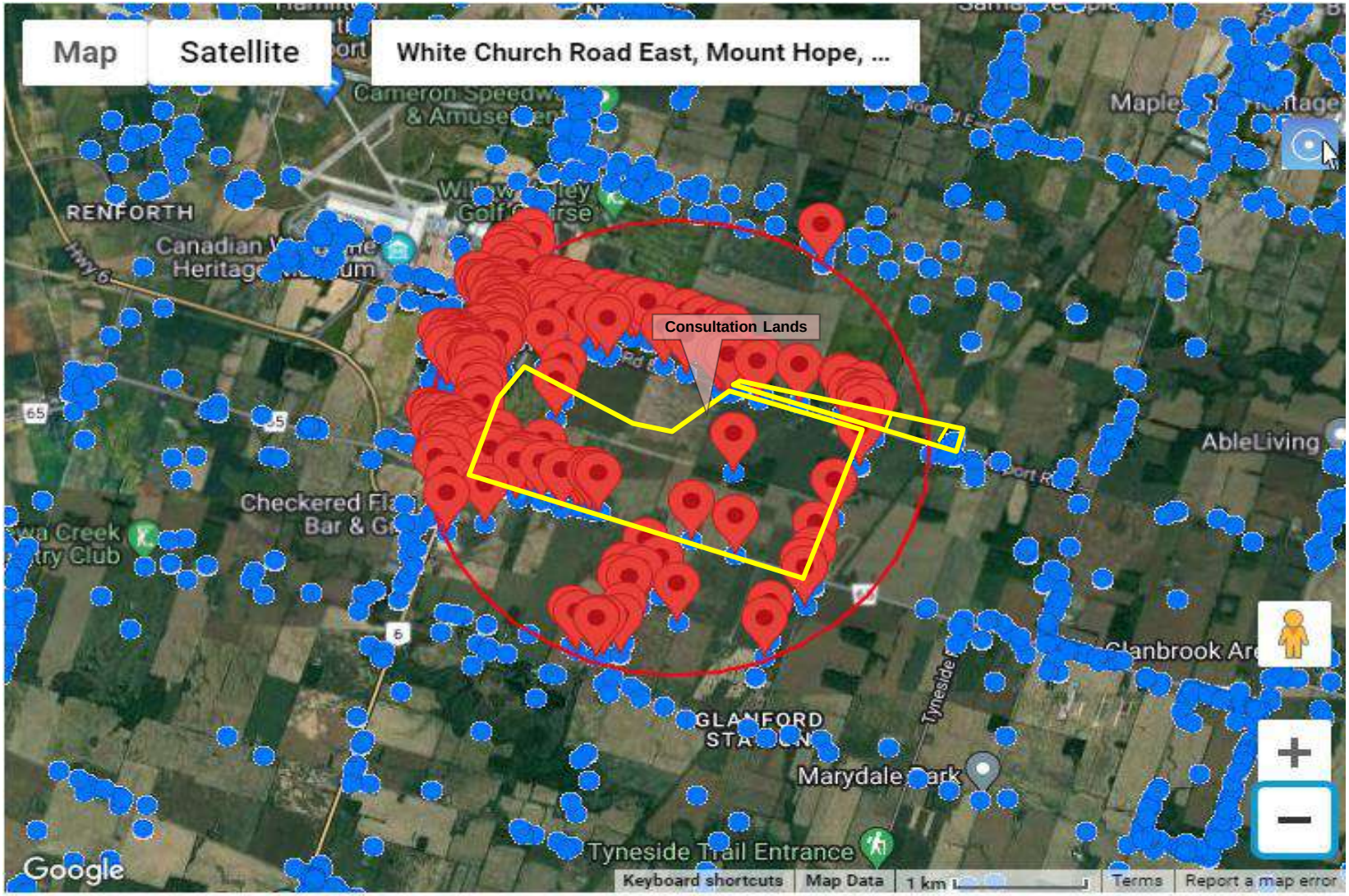
Ponds or Pooling

Visible Reaches of Features

Monitoring Well

LANDTEK LIMITED

Scale:	NTS	Date: June 2023
Project:	Hydrogeological Desktop Study White Chrch Road E & Upper James St Hamilton , Ontario	
Title:	Figure 4: Site Visit Map	
Project No.	23355	



Latitude:43.12282, Longitude:-79.86096 (UTM Zone:17, Easting:592657, Northing:4775083)

● MECP Wells

LANDTEK LIMITED *CONSULTING ENGINEERS* **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**		
	Scale: On Map	Date:November 2023
Project:	Hydrogeological Desktop Study	
	White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 4: MECP Wells Locations	
Project No.	23355	

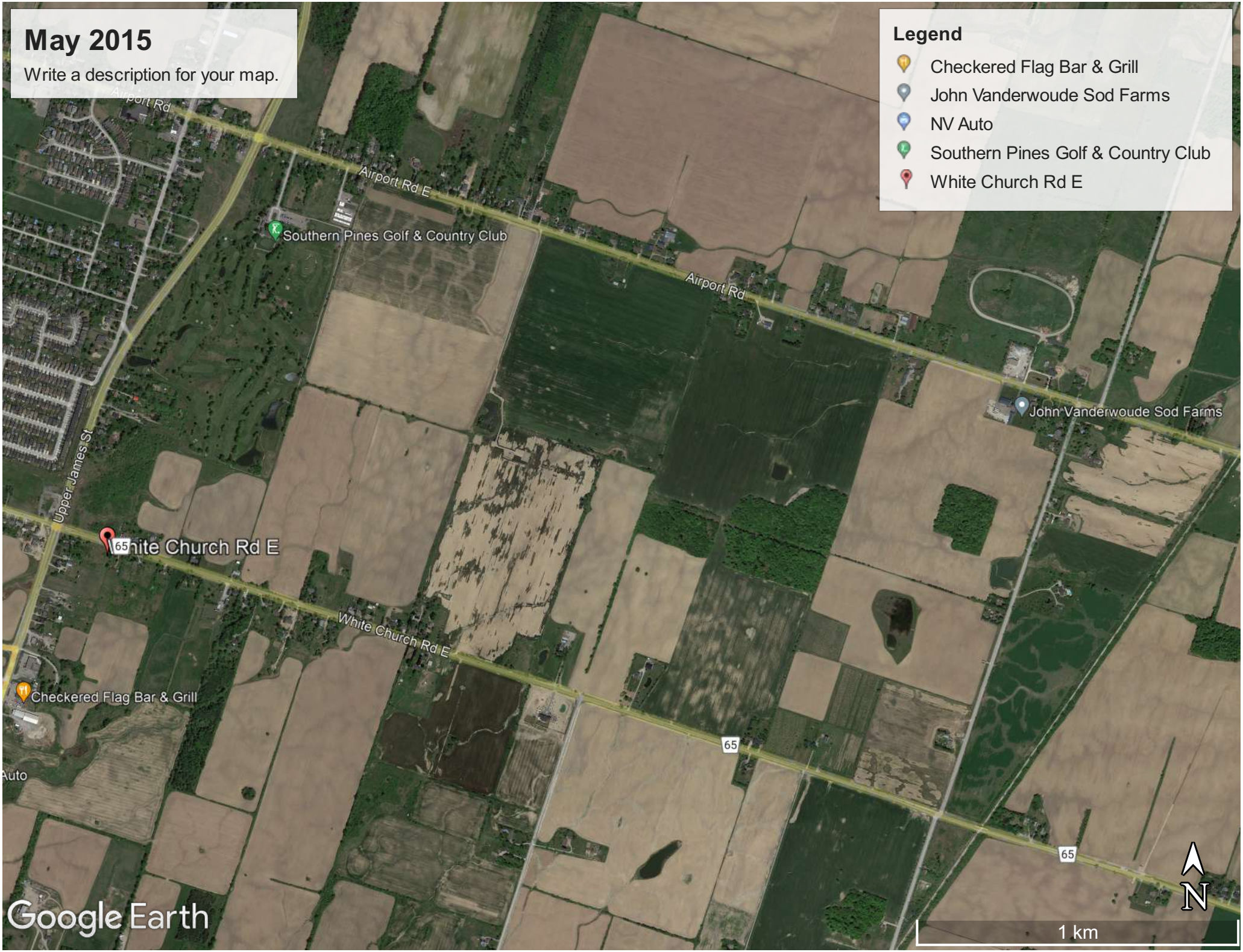
APPENDIX B

AERIAL PHOTOGRAPHS


December 2005
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
Checkered Flag Bar & Grill
65
Google Earth
Image © 2023 First Base Solutions
N
1 km

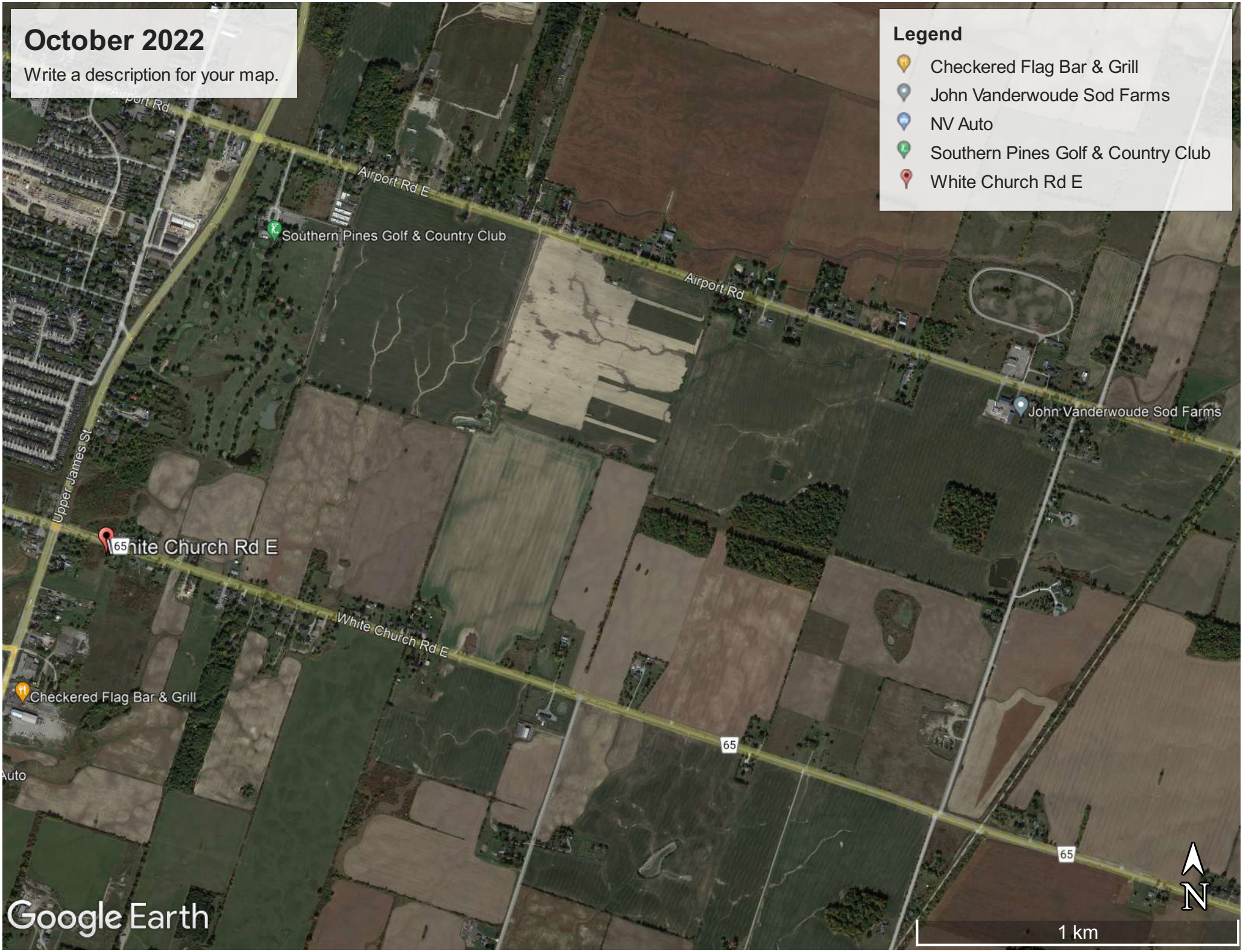

August 2009
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
Checkered Flag Bar & Grill
65
Google Earth
Image © 2023 CNES / Airbus
N
1 km


November 2012
Write a description for your map.
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
65
Checkered Flag Bar & Grill
Google Earth
Image © 2023 Maxar Technologies
Image © 2023 CNES / Airbus
N
1 km


May 2015
Write a description for your map.
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
65
Checkered Flag Bar & Grill
Google Earth
1 km
N


July 2018
Write a description for your map.
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
White Church Rd E
Checkered Flag Bar & Grill
65
65
65
N
1 km
Google Earth
Image © 2023 Maxar Technologies

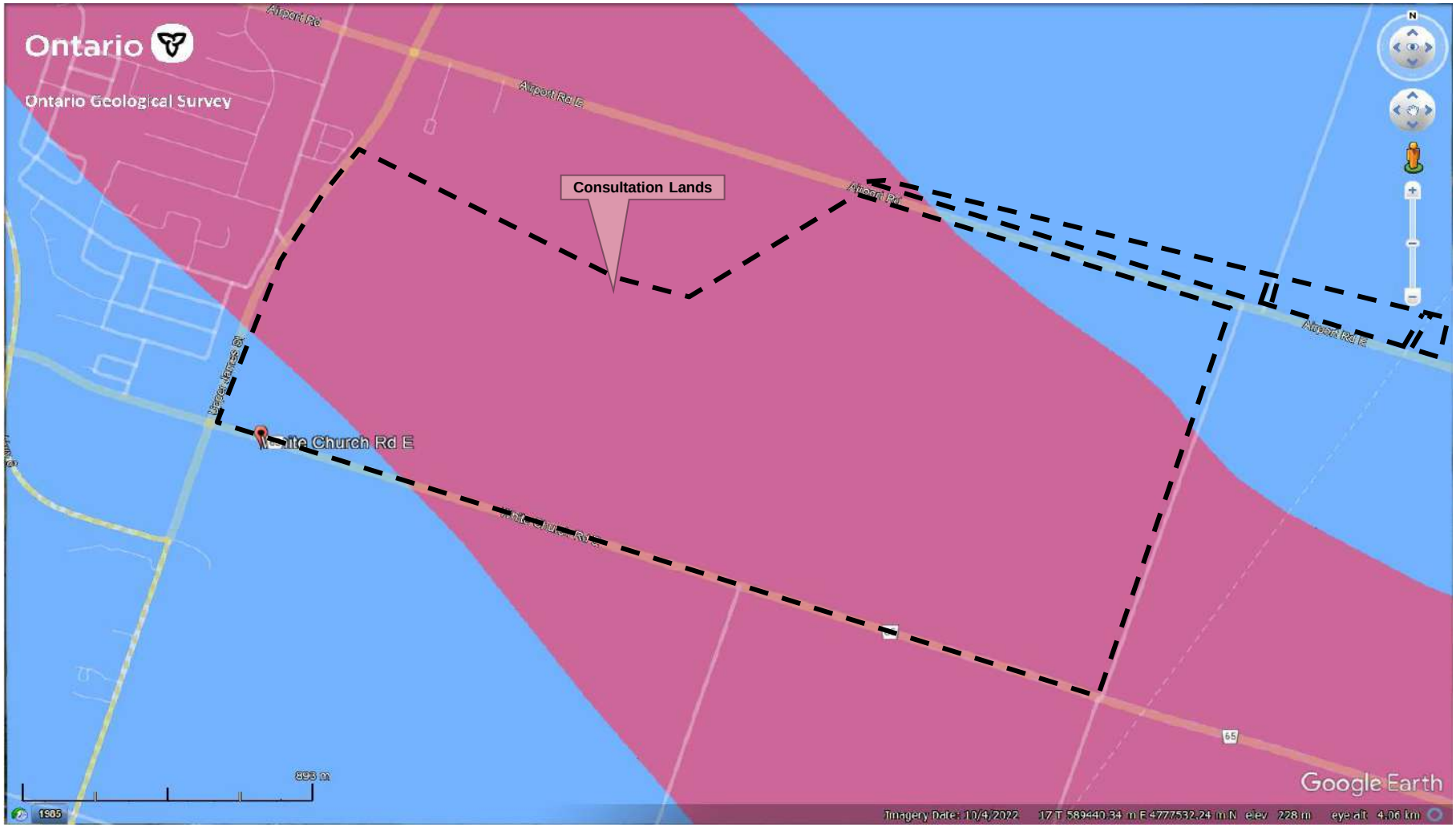

November 2021
Write a description for your map.
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
White Church Rd E
Checkered Flag Bar & Grill
65
65
65
N
1 km
Google Earth
Image © 2023 Maxar Technologies


October 2022
Write a description for your map.
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
Checkered Flag Bar & Grill
65
N
1 km
Google Earth


November 2023
Write a description for your map.
Legend
Checkered Flag Bar & Grill
John Vanderwoude Sod Farms
NV Auto
Southern Pines Golf & Country Club
White Church Rd E
Airport Rd E
Airport Rd
Southern Pines Golf & Country Club
John Vanderwoude Sod Farms
Upper James St
White Church Rd E
Checkered Flag Bar & Grill
65
N
1 km
Google Earth

APPENDICES C

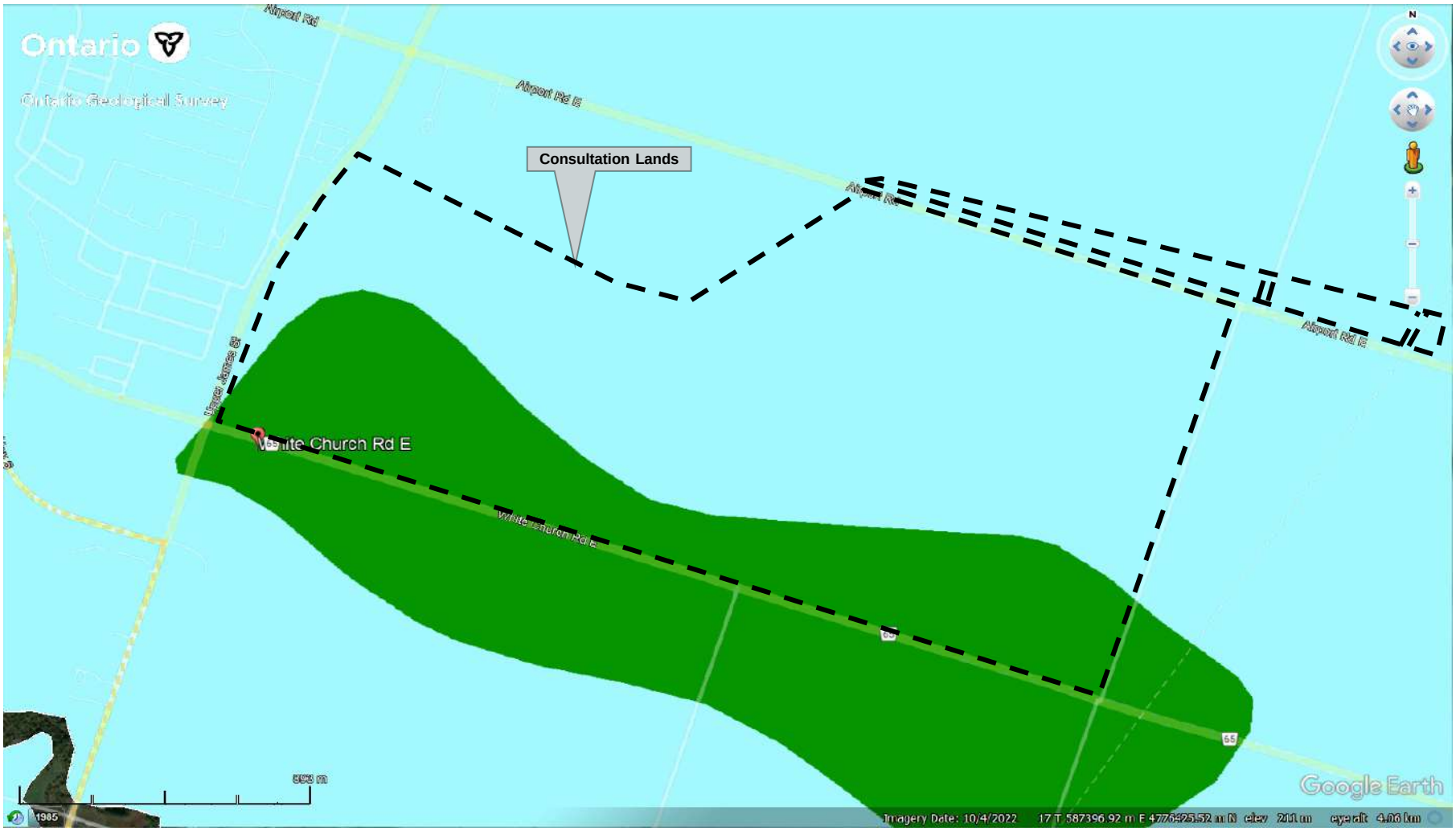
GEOLOGICAL MAPS



Till Moraines

Clay Plains

	LANDTEK LIMITED *CONSULTING ENGINEERS* **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**	
	Scale: On Map	Date:November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 1: Physiographic Map	
Project No.	23355	



Fine-textured glaciolacustrine deposits - *silt and clay, minor sand and gravel, massive to well laminated.*

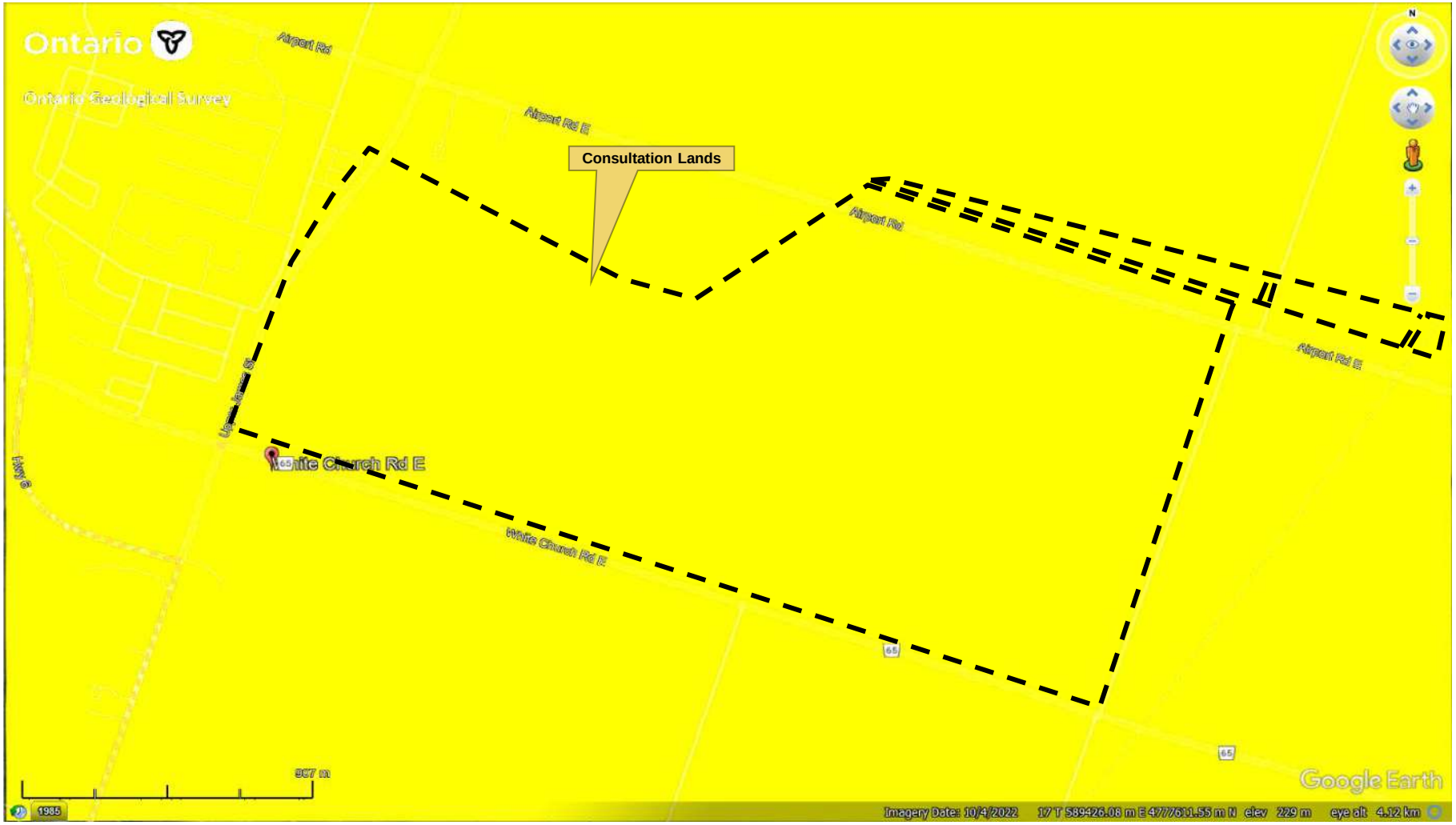
Till - *Clay to silt-textured till (derived from glaciolacustrine deposits or shale)*

LANDTEK LIMITED
CONSULTING ENGINEERS
205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1

	Scale: On Map	Date:November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 2: Surficial Geology Map	
Project No.	23355	

Sandstone, shale, dolostone, siltstone Guelph Formation

	LANDTEK LIMITED ***CONSULTING ENGINEERS*** **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**	
	Scale: On Map	Date:November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 3: Bedrock Geology Map	
Project No.	23355	

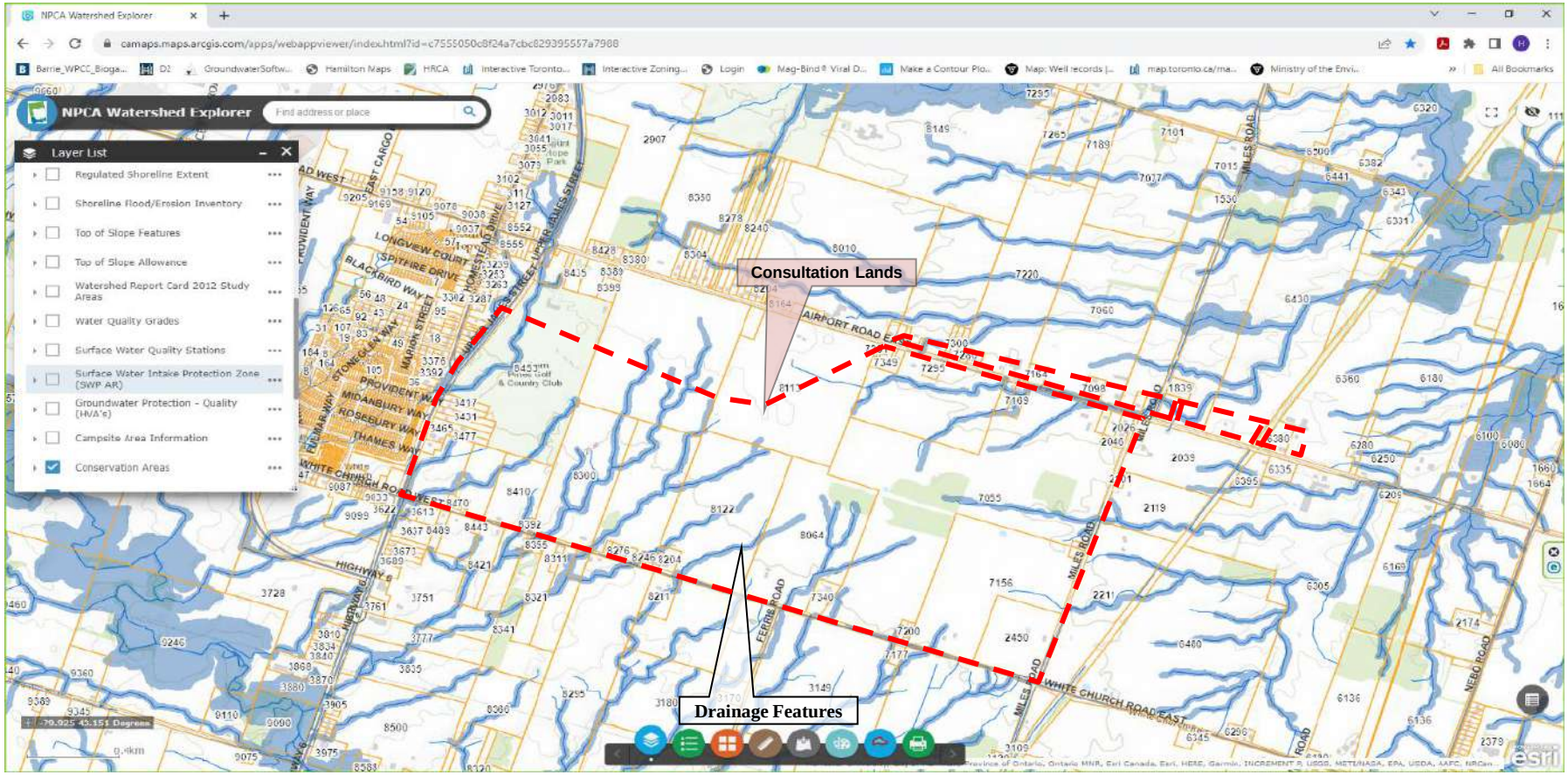


Potential Karst - Areas of carbonate rock units identified as most susceptible to karst processes Drift Cover - thick drift

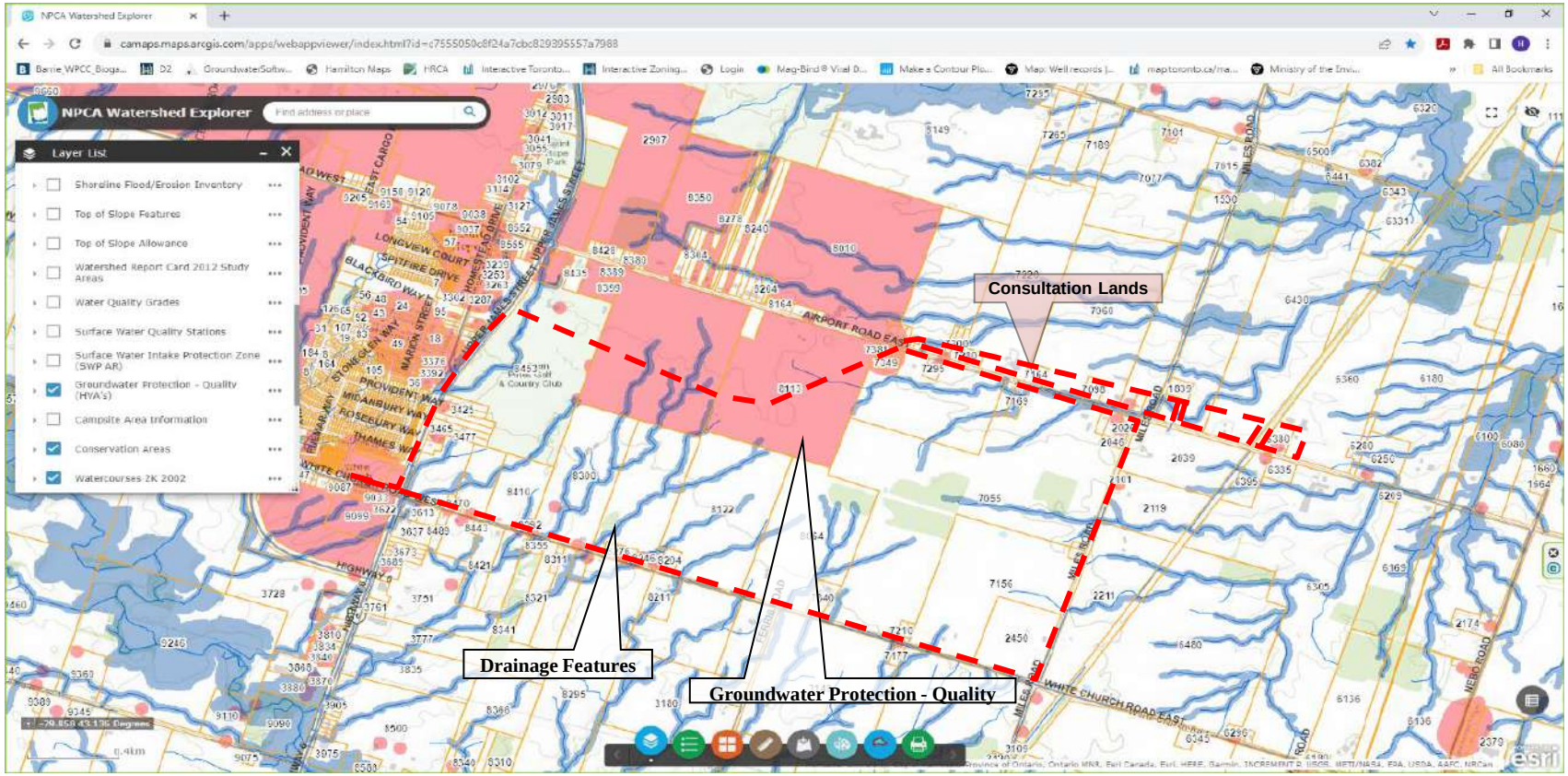
LANDTEK LIMITED *CONSULTING ENGINEERS* 205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1	
	Scale: On Map — Date:November 2023
Project:	Hydrogeological Desktop Study White Chrch Road East & Upper James Street Hamilton, Ontario
Title:	Figure 4: Karst Geology Map
Project No.	23355

APPENDIX D

CONSERVATION AREA MAPS



	LANDTEK LIMITED ***CONSULTING ENGINEERS*** **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**	
	Scale: On Map	Date:November 2023
Project:	Hydrogeological Desktop Study	
	White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 1: NPCA Regulated Lands	
Project No.	23355	



	LANDTEK LIMITED ***CONSULTING ENGINEERS*** **205 NEBO ROAD, HAMILTON, ONTARIO, L8W 2E1**	
	Scale: On Map	Date:November 2023
Project:	Hydrogeological Desktop Study White Church Road East & Upper James Street Hamilton, Ontario	
Title:	Figure 2: NPCA Groundwater Protection - Quality	
Project No.	23355	

APPENDIX E

SUMMARY OF MECP WELLS RECORDS

Summary of MECP Well Records

Well ID	Date of Completion (MM/DD/YYYY)	Diameter (inches)	UTM NAD83 — Zone 17		Water Found (ft)	SWL	Type	Bedrock Depth (ft)	Well Depth (ft)	Well Depth (m)	Aquifer	Use	Log	Address
			Eastings	Northings										None
6803926	5/16/1952	6	588228.4	4779106	112 ft	35 ft	Fresh	109	119	35.1	Limestone	Domestic & Commercial Water Supply	Clay over Limestone	None
6803929	7/6/1953	6	588196.4	4779010	111	12	Fresh	103	111	33.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6803933	6/4/1957	6	588201.4	4779086	108	30	Fresh	105	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6803946	4/20/1951	5	588246.4	4778940	112	27	Fresh	110	113	34.4	Limestione	Domestic Water Supply	Clay over Limestone	None
6803947	7/14/1951	6	588610.4	4778818	149	22	Fresh	124	151	46	Limestone	Domestic Water Supply	Clay over Limestone	None
6803950	8/29/1958	6	588582.11	4778560.3	113	30	Fresh	111	113	34.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6803951	3/26/1959	6	588334.4	4778900	110	55	Fresh	108	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6803952	3/9/1963	6	588271.4	4779036	112	55	Fresh	110	114	34.7	Limestone	Domestic Water Supply	Clay/Shale over Limestone	None
6803954	10/31/1963	6	588555.4	4778823	111	70	Fresh	110	121	36.9	Limestone	Domestic and Livestock Water Supply	Clay/Shale over Limestone	None
6803955	4/10/1964	6	588552.4	4778830	120	60	Fresh	115	122	37.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6803957	6/29/1965	6	588642.4	4778815	122	40	Fresh	118	122	37.2	Limestone	Domestic Water Supply	Clay/QSND/Clay over Limestone	None
6803958	10/26/1965	6	588730.4	4778780	122	50	Fresh	115	123	37.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6803960	3/12/1949	6	588961.4	4778718	128	28	Fresh	127	165	50.3	Limestone	Domestic Water Supply	Clay/QSND over Limestone	None
6803964	6/10/1956	6	589210.4	4778655	126	12	Fresh	124	128	39	Limestone	Domestic Water Supply	Clay over Limestone	None
6803965	10/2/1956	6	589303.4	4778618	108	20	Fresh	105	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6803966	7/4/1959	5	588961.4	4778723	130	37	Fresh	125	135	41.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6803967	11/1/1960	5	589165.4	4778655	126	80	Fresh	120	128	39	Limestone	Domestic Water Supply	Clay/QSND/Clay over Limestone	None
6803968	1/13/1961	6	589049.4	4778690	135	29	Fresh	129	150	45.7	Limestone	Domestic Water Supply	Clay over Limestone	None
6803971	7/31/1957	6	589724.4	4778501	110	45	Fresh	110 Gravel	110	33.5	Gravel	Domestic Water Supply	Clay over Gravel	None
6803973	5/16/1959	5	589880.4	4778456	103	38	Fresh	98	105	32	Limestone	Domestic Water Supply	Clay over Limestone	None
6803974	6/3/1961	6	589393.4	4778606	112	55	Fresh	112	114	34.7	Shale	Domestic Water Supply	Clay/Grave/Shale	None
6803975	10/29/1954	6	589930.4	4778443	99	23	Fresh	97	100	30.5	Limestone	Domestic Water Supply	Clay/MSND/Limestone	None
6804002	4/25/1947	6	588150.4	4778728	NA	40	Fresh	106	108	32.9	Limestone	Domestic Water Supply	Clay/QSND/over Limestone	None
6804003	7/28/1949	6	588198.4	4778661	100	25	Fresh	100 QSND	100	30.5	QSND	Domestic Water Supply	Clay over QSND	None
6804004	5/18/1951	5	588197.4	4778736	106	27	Fresh	106	107	32.6	Shale	Domestic Water Supply	Clay/GRVL/Shale	None
6804005	7/14/1951	6	588173.4	4778583	112	12	Fresh	106	112	34.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6804006	1/24/1953	6	588180.4	4778581	112	12	Fresh	104	114	34.7	Limestone	Domestic Water Supply	Clay over Limestone	None
6804007	4/25/1953	6	588184.4	4778581	108	18	Fresh	106	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6804008	6/10/1953	6	588097.4	4778347	100	16	Fresh	98	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804009	8/20/1953	6	588147.4	4778505	110	10	Fresh	108	114	34.7	Limestone	Domestic Water Supply	Clay over Limestone	None
6804010	5/29/1954	6	588157.4	4778746	110	40	Fresh	107	112	34.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6804011	8/7/1954	6	587973.4	4778203	100	35	Fresh	96	101	30.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6804012	9/16/1954	6	588187.4	4778580	111	18	Fresh	100	112	34.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6804013	6/3/1955	6	588041.4	4778176	108	25	Fresh	104	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6804014	10/14/1955	6	587923.4	4778180	105	32	Fresh	98	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6804015	3/20/1956	6	587938.4	4778180	101	25	Fresh	103 GRVL	103	31.4	Gravel	Domestic Water Supply	Clay over Gravel	None
6804016	5/11/1956	6	587977.4	4778167	101	25	Fresh	101	102	31.1	Gravel	Domestic Water Supply	Clay over Gravel	None
6804017	6/1/1956	6	587856.4	4778244	107	30	Fresh	99	107	32.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6804018	7/25/1956	6	587923.4	4778186	100	45	Fresh	90	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804019	9/19/1956	6	587906.4	4778194	100	45	Fresh	90	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804020	10/24/1956	6	588009.4	4778160	104	18	Fresh	100	104	31.7	Limestone	Domestic Water Supply	Clay/GRVL/QSND/Limestone	None
6804021	11/8/1956	6	587847.4	4778176	100	60	Fresh	87	105	32	Limestone	Domestic Water Supply	Clay over Limestone	None
6804022	12/2/1956	6	587877.4	4778197	107	45	Fresh	97	107	32.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6804023	1/29/1957	6	587956.4	4778173	105	45	Fresh	95	105	32	Limestone	Domestic Water Supply	Clay over Limestone	None
6804024	5/24/1957	6	587906.4	4778279	100	40	Fresh	97	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804025	8/2/1957	6	588037.4	4778783	108	40	Fresh	105	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6804026	5/20/1958	6	588002.4	4778046	107	27	Fresh	104	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6804027	5/22/1958	6	588084.4	4778768	106	30	Fresh	104	106	32.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6804029	8/26/1958	6	587880.4	4778343	97	30	Fresh	95	97	29.6	Shale	Domestic Water Supply	Clay over Shale	None
6804030	9/19/1958	6	587719.4	4778363	103	30	Fresh	100	103	31.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6804031	9/30/1958	6	587859.4	4778312	98	40	Fresh	93	100	30.5	Limestone	Domestic Water Supply	Muck over Limestone	None
6804032	10/3/1958	6	588008.4	4778209	100	30	Fresh	95	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804033	11/6/1958	6	587940.4	4778292	96	40	Fresh	90	96	29.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6804034	11/14/1958	6	588185.4	4778738	100	28	Fresh	98	100	30.5	Limestone	Domestic Water Supply	Clay/MSND/Clay/Limestone	None
6804035	12/31/1958	6	587933.4	4778297	90	20	Fresh	89	90	27.4	Gravel	Domestic Water Supply	Clay over Gravel	None
6804036	1/12/1959	6	587844.4	4778241	100	20	Fresh	85	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804037	5/6/1959	6	587869.4	4778344	90	20	Fresh	93 GRVL	93	28.3	Gravel	Domestic Water Supply	clay/QSND/Gravel	None
6804038	9/24/1959	6	587896.4	4778334	102	62	Fresh	98	102	31.1	Limestone	Domestic Water Supply	Clay/QSND/Limestone	None
6804039	10/13/1959	6	587965.4	4778171	103	45	Fresh	102	103	31.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6804040	10/27/1959	5	587842.4	4778368	100	45	Fresh	99	100	30.5	Shale	Domestic Water Supply	Clay over Shale	None
6804041	10/29/1959	6	587816.4	4778249	110	60	Fresh	94	110	33.5	Limestone	Domestic Water Supply	Clay/QSND/Limestone	None
6804042	1/8/1960	6	587838.4	4778353	102	62	Fresh	98	102	31.1	Limestone	Domestic Water Supply	Clay/QSND/Limestone	None
6804043	1/14/1960	5	587870.4	4778316	101	30	Fresh	92	101	30.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6804044	6/11/1960	6	587830.4	4777514	103	40	Fresh	100	103	31.4	Limestone	Commercial Water Supply	Clay/QSND/Limestone	None
6804045	9/12/1960	6	587811.4	4778361	100	60	Fresh	100 GRVL	100	30.5	Gravel	Domestic Water Supply	Clay/QSND/clay/GRVL	None
6804046	10/6/1960	6	587904.4	4778305	95	28	Fresh	94	97	29.6	Shale	Domestic Water Supply	Clay over Shale	None
6804047	11/9/1960	6	587912.4	4778334	102	40	Fresh	104 GRVL	104	31.7	Gravel	Domestic Water Supply	Clay/Shale/Gravel	None
6804048	8/9/1962	6	588001.4	4778791	105	70	Fresh	107 GRVL	107	32.6	Gravel	Domestic Water Supply	Clay over Gravel	None
6804049	9/4/1962	6	587907.4	4778187	94	30	Fresh	79	98	29.9	Limestone	Domestic Water Supply	Clay over Limestone	None
6804050	9/24/1962	6	588184.4	4778664	102	60	Fresh	100	104	31.7	Limestone	Domestic Water Supply	Clay over Limestone	None
6804051	10/15/1962	6	587893.4	4778194	94	35	Fresh	82	82	29.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6804052	6/28/1963	6	588216.4	4778705	112	40	Sulphur	110	112	34.1	Limestone	Commercial Water Supply	Clay/QSND/clay/Limestone	None
6804053	7/8/1963	6	588105.4	4778647	105	40	Fresh	113	105	32	Limestone	Domestic Water Supply	Clay/QSND/clay/Limestone	None
6804054	2/5/1964	6	588072.4	4778770	98	42	Sulphur	92	99	30.2	Limestone	Domestic Water Supply	Clay/QSND/clay/Limestone	None
6804055	3/19/1964	6	588167.4	4778745	105	55	Fresh	104	105	32	Gravel	Domestic Water Supply	Clay over Gravel	None
6804056	8/7/1964	6	588117.4	4778510	105	57	Fresh	99	108	32.9	Limestone	Domestic Water Supply	Clay over Limestone	None
6804057	2/2/1965	6	588224.4	4778729	112	55	Sulphur	109	114	34.7	Limestone	Commercial Water Supply	Clay over Limestone	None
6804058	8/22/1966	6	588171.4	4778619	100	60	Fresh	100	101	30.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6804059	4/12/1949	6	588220.4	4778589	110	30	Fresh	99	115	35.1	Limestone	Domestic Water Supply	Clay/QSND/Limestone	None
6804060	6/22/1950	5	588225.4	4778589	98	23	Fresh	100	102	31.1	Limestone	Domestic Water Supply	Clay/QSND/Clay/Shale/Gravel/limestone	None
6804061	7/7/1951	6	588195.4	4778464	126	30	Fresh	112	131	39.9	Limestone	Domestic Water Supply	Clay over Limestone	None

Summary of MECP Well Records

Well ID	Date of Completion (MM/DD/YYYY)	Diameter (inches)	UTM NAD83 — Zone 17		Water Found (ft)	SWL	Type	Bedrock Depth (ft)	Well Depth (ft)	Well Depth (m)	Aquifer	Use	Log	Address
			Eastings	Northings										None
6804062	6/15/1953	6	588059.4	4777955	100	30	Fresh	100 GRVL	100	30.5	Gravel	Domestic Water Supply	Clayey Loam over Gravel	None
6804063	10/8/1953	6	588188.4	4778469	106	23	Fresh	99	108	32.9	Limestone	Domestic Water Supply	Clay over Limestone	None
6804064	5/24/1955	6	588026.4	4777436	110	35	Fresh	100	120	36.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6804065	6/13/1955	6	588042.4	4777754	110	110	Fresh	96	115	35.1	Limestone	Abandoned	Clay over Limestone	None
6804066	6/23/1955	6	588007.4	4777764	100	20	Fresh	93	108	32.9	Limestone	Domestic/Livestock	Clay over Limestone	None
6804067	10/25/1955	6	588190.4	4778479	108	24	Fresh	85	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804068	3/27/1958	6	588429.4	4778662	111	35	Fresh	110	112	34.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6804069	3/25/1960	7	588247.4	4777380	105	28	Fresh	104	108	32.9	Limestone	Domestic/Commercial Water Supply	Clay over Limestone	None
6804070	5/24/1960	4	588220.4	4778544	104	45	Fresh	103	104	31.7	Limestone	Domestic Water Supply	Clay over Limestone	None
6804071	8/24/1960	6	588552.4	4778614	120	40	Fresh	118	120	36.6	Shale	Domestic Water Supply	Clay over Shale	None
6804072	10/4/1961	6	588521.4	4778386	112	50	Fresh	110	112	34.1	Limestone	Irrigation	Clay/QSND/Clay/limestone	None
6804073	5/7/1962	6	588606.4	4777954	122	40	Fresh	113	124	37.8	Limestone	Irrigation	Clay/QSND/Clay/limestone	None
6804074	5/12/1962	6	588029.4	4777912	118	30	Fresh	109	120	36.6	Limestone	Domestic Water Supply	clay/FSND/Limestone	None
6804075	6/30/1964	8	588656.4	4778112	135	55	Fresh	112	191	58.2	Limestone	Irrigation	Clay/QSND/Clay/Gravel/limestone	None
6804076	9/16/1964	6	588362.4	4777337	102	35	Fresh	102	105	32	Limestone	Domestic Water Supply	Clay/Silt/Gravel/Limestone	None
6804077	1/21/1965	6	588496.4	4778627	120	50	Fresh	110	121	36.9	Limestone	Domestic Water Supply	Clay/QSND/Clay/Limestone	None
6804078	1/31/1967	6	588755.4	4778526	130	83	Fresh	121	133	40.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804079	5/16/1956	6	588993.4	4778476	124	40	Fresh	118	124	37.8	Limestone	Domestic Water Supply	Clay/QSND/Clay/limestone	None
6804080	7/4/1956	6	588914.4	4777179	82	18	Fresh	80	84	25.6	Limestone	Domesti/Livestock	Clay over Limestone	None
6804081	1/20/1959	6	588869.4	4777182	115	30	Fresh	115 GRVL	115	35.1	Gravel	Domestic Water Supply	clay over Gravel	None
6804082	4/27/1959	6	588879.4	4777207	105	30	Fresh	105 GRVL	105	32	Gravel	Domestic Water Supply	Clay/QSND/Gravel	None
6804083	8/17/1959	6	588811.4	4777207	116	50	Fresh	117 GRVL	117	35.7	Gravel	Domestic Water Supply	Clay over Gravel	None
6804084	6/6/1963	6	588771.4	4777217	113	35	Fresh	114 Hradpan	114	34.7	Hardpan	Domestic Water Supply	Clay over Hardpan	None
6804085	3/27/1965	6	588771.4	4777217	112	30	Fresh	112 GRVL	112	34.1	Gravel	Domestic Water Supply	Clay/QSND/Clay/Gravel	None
6804086	9/6/1956	6	589893.4	4778197	98	30	Fresh	93	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804087	5/24/1958	6	589871.4	4778217	98	37	Fresh	89	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804088	4/23/1959	6	588944.4	4777176	102	30	Fresh	102 GRVL	102	31.1	Gravel	Domestic Water Supply	Clay/QSND/Gravel	None
6804089	2/10/1952	6	590939.4	4777890	94	20	Fresh	90	98	29.9	Limestone	Domestic Water Supply	Clay/QSND/Limestone	None
6804090	10/19/1961	6	590931.4	4777842	100	35	Fresh	91	113	34.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6804091	2/26/1964	6	590921.4	4777887	108	60	Fresh	93	110	33.5	Limestone	Domestic/Livestock Water Supply	Clay over Limestone	None
6804094	6/19/1962	6	590594.4	4776563	112	60	Fresh	90	130	39.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6804132	9/10/1951	6	587681.4	4777675	97	6	Fresh	90	97	29.6	Limestone	Domestic Water Supply	Clayey Loam over Limestone	None
6804133	3/21/1954	6	587681.4	4777667	120	40	Fresh	110	120	36.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6804134	3/16/1957	6	587726.4	4777670	90	10	Fresh	86	91	27.7	Limestone	Domestic Water Supply	Clay over Limestone	None
6804136	6/13/1957	6	587630.4	4777702	110	32	Fresh	105	116	35.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6804138	6/17/1958	6	587673.4	4777662	105	25	Fresh	97	105	32	Limestone	Commercial Water Supply	Clay over Limestone	None
6804139	8/27/1958	6	587683.4	4777557	76	14	Fresh	78	79	24.1	Limestone	Domestic Water Supply	loam/Clay/Gravely Sand/Liimestone	None
6804143	2/7/1958	6	587676.4	4777685	108	20	Fresh	98	108	32.9	Limestone	Public	Clay over Limestone	None
6804144	3/4/1961	6	587726.4	4777657	100	30	Fresh	92	102	31.1	Limestone	Public	Clay over Limestone	None
6804151	5/13/1947	6	587786.4	4777474	NA	20	Fresh	100	120	36.6	Limestone	Domestic Water Supply	Clay/QSND/Limestone	None
6804152	11/15/1948	6	587914.4	4777602	113	35	Fresh	108	118	36	Limestone	Domestic Water Supply	Clay/MSND/Limestone	None
6804154	10/2/1953	6	587781.4	4777542	73	4	Fresh	70	75	22.9	Limestone	Domestic Water Supply	Clay over Limestone	None
6804155	9/29/1954	6	588163.4	4777518	113	35	Fresh	113 GRVL	113	34.4	Gravel	Domestic Water Supply	Clay/FSND/Gravel	None
6804156	12/8/1954	6	587746.4	4777487	102	35	Fresh	101	102	31.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6804159	8/18/1959	7	587701.4	4777294	100	50	Fresh	99	100	30.5	Shale	Domestic Water Supply	Clay over Shale	None
6804160	10/17/1959	6	587704.4	4777339	100	50	Fresh	100 GRVL	100	30.5	Gravel	Domestic Water Supply	clay over Gravel	None
6804168	12/2/1967	6	588073.4	4777068	114	30	Fresh	115 GRVL	115	35.1	Gravel	Domestic Water Supply	clay over Gravel	None
6804171	4/11/1951	6	588935.4	4775956	53	41	Fresh	50	53	16.2	Limestone	Domestic Water Supply	Clay/MSND/Clay/Limestone	None
6804172	9/15/1951	6	588935.4	4775953	52	45	Fresh	51	52	15.8	Limestone	Domestic Water Supply	Clay/MSND/Hardpan/Limestone	None
6804173	7/22/1957	6	588787.4	4775998	52	47	Fresh	51	52	15.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6804174	1/9/1958	6	588995.4	4775961	70	10	Fresh	63	73	22.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6804175	2/12/1958	6	588739.4	4776046	96	20	Fresh	95	97	29.6	Limestone	Domestic Water Supply	Clay/MSND/Gravrl/Limestone	None
6804176	5/14/1958	6	589138.4	4776405	83	40	Fresh	82	83	25.3	Shale	Domestic Water Supply	Clay over Shale	None
6804177	11/17/1960	6	589115.4	4776307	90	28	Fresh	84	92	28	Limestone	Domestic Water Supply	Clay over Limestone	None
6804178	9/20/1955	6	590262.4	4776110	100	20	Fresh	83	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6804180	6/6/1964	6	590219.4	4775967	115	50	Fresh	114	116	35.4	Shale	Domestic Water Supply	Clay over Shale	None
6804181	2/9/1953	6	590534.4	4776403	114	24	Fresh	114	118	36	Limestone	Domestic/Livestock Water Supply	Clay over Limestone	None
6806911	8/12/1968	6	589594.4	4778353	99	65	Fresh	95	102	31.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6806912	4/26/1968	6	587994.4	4777783	115	85	Sulphur	108	120	36.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6806915	6/24/1968	6	588174.4	4778303	106	60	Fresh	105	106	32.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6806925	12/9/1968	6	589124.4	4775973	60	13	Fresh	65 GRVL	65	19.8	Gravel	Domestic Water Supply	Clay/Hardpan/Gravel	None
6807084	4/21/1969	6	587954.4	4778023	93	42	Fresh	93 GRVL	93	28.3	Gravel	Domestic Water Supply	Clay over Gravel	None
6807153	6/27/1969	6	590934.4	4777583	96	55	Fresh	94	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6807293	9/1/1969	6	587754.4	4778273	95	43	Fresh	84	105	32	Limestone	Domestic Water Supply	Clay over Limestone	None
6807294	9/2/1969	6	588174.4	4778803	108	75	Fresh	106	108	32.9	Limestone	Domestic Water Supply	Clay over Limestone	None
6807395	11/21/1969	6	589924.4	4778193	120	40	Fresh	96	140	42.7	Limestone	Domestic Water Supply	Clay/QSND/ over Limestone	None
6807427	10/27/1969	6	588134.4	4778813	107	76	Fresh	106	107	32.6	Shale	Domestic Water Supply	Clay over Shale	None
6807492	2/18/1970	6	588254.4	4778663	112	42	Fresh	110	112	34.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6807546	8/28/1970	6	588654.4	4777203	106	50	Fresh	106 GRVL	106	32.3	Gravel	Domestic Water Supply	Clay over Gravel	None
6807848	7/15/1971	6	590174.4	4778173	90	40	Fresh	85	100	30.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6807880	8/24/1971	6	589994.4	4776823	101	48	Fresh	100	101	30.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6807997	8/17/1971	6	588199.4	4778733	114	75	Fresh	108	115	35.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6808140	3/17/1972	6	590974.4	4777963	76	32	Fresh	76 GRVL	76	23.2	Gravel	Domestic Water Supply	Clay over Gravel	None
6808170	4/6/1972	6	588614.4	4777263	112	45	Fresh	110	112	34.1	Shale	Domestic Water Supply	Clay over Shale	None
6808175	5/20/1972	6	588814.4	4778593	130	45	Fresh	124	138	42.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6808326	3/23/1972	6	588294.4	4778663	112	64	Fresh	110	113	34.4	Shale	Domestic Water Supply	Clay over Shale	None
6808327	6/7/1972	6	587764.4	4778223	109	55	Fresh	90	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6808435	1/19/1973	6	588154.4	4777403	125	50	Fresh	115	126	38.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6808666	9/27/1973	6	588394.4	4779223	109	76	Fresh	108	109	33.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6808709	9/7/1973	6	588409.4	4779132	112	76	Fresh	109	112	34.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6808728	12/15/1973	6	587794.4	4777150	98	20	Fresh	100 GRVL	100	30.5	Gravel	Industrial Water Supply	clay over Gravel	None

Summary of MECP Well Records

Well ID	Date of Completion (MM/DD/YYYY)	Diameter (inches)	UTM NAD83 — Zone 17		Water Found (ft)	SWL	Type	Bedrock Depth (ft)	Well Depth (ft)	Well Depth (m)	Aquifer	Use	Log	Address
			Eastings	Northings										None
6808776	9/19/1973	6	588134.4	4778803	105	80	Fresh	104	105	32	Shale	Domestic Water Supply	Clay over Shale	None
6808779	11/30/1973	6	587897.4	4778270	106	39	Fresh	97	107	32.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6809305	6/7/1975	6	590147.4	4778131	100	49	Fresh	94	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6809329	5/3/1975	6	589014.4	4778523	104	61	Fresh	101	101	32.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6809339	10/29/1975	6	588183.4	4778435	106	50	Sulphur	104	106	32.3	Shale	Domestic Water Supply	Clay over Shale	None
6809521	6/7/1976	6	588514.4	4777443	215/220	70	Sulphur	107	247	75.3	Limestone	Irrigation	Clay over Limestone	None
6809560	3/19/1976	6	588054.4	4777423	109	45	Fresh	108	109	33.2	Shale	Domestic Water Supply	Clay over Shale	None
6809565	7/1/1976	6	587934.4	4777463	108	49	Fresh	107	108	32.9	Shale	Domestic Water Supply	Clay over Shale	None
6809566	8/3/1976	6	588414.4	4777323	115	55	Fresh	110	115	35.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6809577	11/11/1976	6	588354.4	4777343	110	40	Fresh	108	110	33.5	Shale	Domestic Water Supply	Clay over Shale	None
6809628	6/2/1977	6	587814.4	4777643	97	45	Fresh	97 GRVL	97	29.6	Gravel	Industrial Water Supply	clay over Gravel	None
6810236	10/8/1980	6	589594.4	4778563	83	45	Fresh	76	150	45.7	Limestone	Livestock	Clay over Limestone	None
6810237	7/7/1980	6	589994.4	4778223	95	56	Fresh	89	96	29.3	Limestone	Domestic Water Supply	Clay over Limestone	None
6810238	6/30/1980	6	589934.4	4778243	95	64	Fresh	89	99	30.2	Limestone	Domestic Water Supply	Clay over Limestone	None
6810239	6/25/1980	6	589934.4	4778263	89	50	Fresh	88	90	27.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6810240	5/26/1980	6	588002.1	4778852	107	68	Fresh	106	108	32.9	Shale	Domestic Water Supply	Clay over Shale	None
6810248	7/2/1980	6	589194.4	4776303	59	35	Fresh	57	60	18.3	Shale	Domestic Water Supply	Clay over Shale	None
6810369	8/18/1981	6	589854.4	4778203	96	74	Fresh	95	132	40.2	Limestone	Domestic Water Supply	Clay/Shale/Limestone	None
6810803	6/19/1984	6	588112.4	4777373	109	60	Fresh	108	109	35.1	Limestone	Domestic Water Supply	Clay/Shale/Limestone	None
6811165	6/17/1986	6	590506.2	4776468	100	50	Fresh	99	100	30.5	Shale	Domestic Water Supply	Clay over Shale	None
6811170	4/29/1986	6	590947.2	4777765	96	50	Fresh	94	103	31.4	Limestone	Domestic Water Supply	Clay over Limestone	None
6811293	5/25/1987	6	589652.2	4776949	105	55	Fresh	101	105	32	Limestone	Domestic Water Supply	Clay over Limestone	None
6811407	3/24/1988	6	588316.2	4777280	102	40	Fresh	102	110	33.5	Limestone	Domestic Water Supply	Clay/Shale/Limestone	None
6811472	7/19/1988	6	588672.2	4778665	120	55	Fresh	118	120	36.6	Shale	Domestic Water Supply	Clay over Shale	None
6811483	6/18/1988	6	589273.2	4776386	88	35	Fresh	87	88	26.8	Shale	Domestic Water Supply	Clay over Shale	None
6811559	9/21/1988	6	588903.2	4778529	102	60	Fresh	100	104	31.7	Shale	Domestic Water Supply	Clay over Shale	None
6811681	7/3/1989	6	589146.2	4776069	87	25	Fresh	86	87	26.5	Shale	Domestic Water Supply	Clay over Shale	None
6811750	7/8/1989	6	590798.2	4778017	90	40	Fresh	81	111	33.8	Limestone	Domestic Water Supply	Clay over Limestone	None
6812123	8/16/1991	6	589309.2	4776618	110	40	Fresh	106	110	33.5	Shale	Domestic Water Supply	Clay over Shale	None
6812146	9/6/1991	6	589556.4	4776251	119	55	Fresh	118	120	36.6	Limestone	Livestock and Domestic	Clay over Limestone	None
6812252	10/7/1992	7	590736.2	4777147	100	60	Fresh	101	118	36	Limestone	Domestic Water Supply	Clay/Gravel/Limestone	None
6812313	11/30/1992	6	587792.4	4777415	89	35	Fresh	88	92	28	Limestone	Commercial Water Supply	Clay/Shale/Limestone	None
6812466	6/20/1994	6	587738.4	4777493	130	55	Fresh	109	135	41.1	Limestone	Domestic Water Supply	Clay over Limestone	None
6812575	12/1/1994	6	590964.2	4777885	98	65	Fresh	94	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6812613	6/8/1995	6	588325.2	4777309	99	50	Fresh	98	100	30.5	Shale	Domestic Water Supply	Clay over Shale	None
6812646	7/24/1995	6	590600.2	4776770	122	75	Sulphur	100	130	39.6	Limestone	Domestic Water Supply	Clay over Limestone	None
6812846	5/2/1997	6	589962.4	4777525	107	52	NA	105	110	33.5	Limestone	Domestic Water Supply	Clay over Limestone	None
6812866	3/17/1997	6	590458.2	4778114	95	40	Fresh	81	105	32	Limestone	Domestic Water Supply	Clay over Limestone	None
6812962	7/29/1997	6	589419.2	4778420	87	45	NA	84	90	27.4	Limestone	Domestic Water Supply	clay/HPAN/Limestone	None
6813175	4/13/1998	6	591034.2	4777824	95	40	Fresh	94	98	29.9	Shale	Domestic Water Supply	Clay over Shale	None
6813257	12/6/1999	6	589427.2	4776471	113	52	Fresh	113 SAND	112	34.4	Sand	Domestic Water Supply	Clay over Sand	None
6814029	6/11/2004	6	588500	4777258	103	41	Fresh	102	105	32	Limestone	Domestic Water Supply	Clay over Limestone	8321 WHITE CHURCH RD.
7048935	8/15/2007	6	590621	4779290	71	22	NA	58	95	28.9	Limestone	Domestic Water Supply	Clay over Limestone	7265 ENGLISH CHURCH ROAD
7248423	5/23/2015	6	590857	4777903	113	42	Fresh	108	120	36.6	Limestone	Domestic Water Supply	Clay over Limestone	7055 AIRPORT ROAD
7268137	5/24/2016	2	587817	4777303	NA	NA	NA	NA	30	9.1	Silt	Observation	Sand/Clay/Silt	3659 UPPER JAMES ST
7282068	12/22/2016	2	588026	4778406	NA	NA	NA	NA	25	7.6	Silty Clay	Observation	Loam over Clay	80 MARION STREET APPROC 40M EAST OF MARION ST
7305831	11/30/2012	2	588192	4778335	NA	NA	NA	NA	22	6.7	Clay	Observation	Fill over Clay	3311 HOMESTEAD RD
7306938	2/5/2018	2	587784	4776995	NA	NA	NA	NA	20	6.1	Silt	Test Hole	Clay over Silt	3737 HIGHWAY 65
7308095	2/12/2018	1	588176	4778545	NA	NA	NA	NA	66	20	Clay Till	Test Hole	Clay Till	3253 HOMESTEAD DR.
7318512	6/25/2018	NA	588175	4778335	NA	NA	NA	NA	NA	N/A	NA	Test Hole	NA	3311 HOMESTEAD DR
7318513	6/25/2018	NA	588169	4778333	NA	NA	NA	NA	NA	N/A	NA	Test Hole	NA	3311 HOMESTEAD DR
7342203	7/2/2019	2	587813	4777552	NA	NA	NA	NA	25	7.6	Clay	Monitoring and Test Hole	Sand over Clay	3530 UPPER JAMES STREET
7342204	7/2/2019	2	587831	4777550	NA	NA	NA	NA	25	7.6	Clay	Monitoring and Test Hole	Sand over Clay	3530 UPPER JAMES STREET
7342205	7/2/2019	2	587841	4777547	NA	NA	NA	NA	30	9.1	Clay	Monitoring and Test Hole	Sand over Clay	3530 UPPER JAMES STREET
7342206	7/3/2019	2	587845	4777570	NA	NA	NA	NA	25	7.6	Clay	Monitoring and Test Hole	Sand over Clay	3530 UPPER JAMES STREET
7342207	7/2/2019	2	587832	4777574	NA	NA	NA	NA	20	6.1	Clay	Monitoring and Test Hole	Sandy Gravel over Clay	3530 UPPER JAMES STREET
7348321	10/4/2019	2	587799	4777577	NA	NA	NA	NA	25	7.6	Silt	Monitoring and Test Hole	Sandy Silt	3530 Highway 6
7348322	10/4/2019	2	587836	4777595	NA	NA	NA	NA	25	7.6	Silt	Monitoring and Test Hole	Sandy Silt	3530 Highway 6