CORPORATION OF THE

TOWNSHIP OF EDWARDSBURGH CARDINAL

BY-LAW NO. 2022-74

"A BY-LAW TO AUTHORIZE THE EXECUTION OF A DEVELOPMENT AGREEMENT WITH MADISON MULDER ENTERPRISES INC."

WHEREAS the Council of the Corporation of the Township of Edwardsburgh Cardinal is authorized to enter into a development agreement and register it against the title to the land pursuant to sections 51 and 53 of the Planning Act, R.S.O. 1990; and

WHEREAS the Council of the Corporation of the Township of Edwardsburgh Cardinal recommended in favour of Consent to Sever Application B-165-21 conditional upon entering into a Development Agreement to the satisfaction of the Township of Edwardsburgh Cardinal to implement the recommendations and findings of the geotechnical investigation, environmental impact assessment and stage 1, 2, and 3 archaeological assessments; and

WHEREAS the Consent to Sever Application B-165-21 has received conditional approval from the United Counties of Leeds and Grenville Consent Granting Authority; and

WHEREAS it is deemed expedient to enter into such a development agreement with Madison Mulder Enterprises Inc. for development of lands described as PT LT 20 CON 1 Edwardsburgh as in PR65490 lying S of PR152106, Edwardsburgh/Cardinal.

NOW THEREFORE the Council of the Corporation of the Township of Edwardsburgh Cardinal enacts as follows:

1. That the Mayor and Clerk are hereby authorized to execute the development agreement attached hereto as Schedule "A" and shall form part of this bylaw.

2. That this bylaw shall come into force and take effect on the date of final passing.

Read a first and second time in open Council this 12 day of December, 2022.

Read a third and final time, passed, signed and sealed in open Council this 12 day of December, 2022.

Mayor

Clerk

THE TOWNSHIP OF EDWARDSBUGH/CARDINAL
DEVELOPMENT AGREEMENT

THIS AGREEMENT, made in triplicate, the *12* day of December, 2022.

BETWEEN:

MADISON MULDER ENTERPRISES INC.
(the “Owner”)

-and-

THE CORPORATION OF THE TOWNSHIP OF EDWARDSBUGH/CARDINAL
(the “Township”)

FOR LANDS DESCRIBED AS
PT LT 20 CON 1 EDWARDSBURGH AS IN PR65490 LYING S OF PR152106;
EDWARDSBURGH/CARDINAL

RECITALS:

1. The Owner is the owner of the lands described in Schedule "A” to this Agreement and proposes to subdivide it for the purpose of selling, conveying, or leasing it in lots.

2. The said lands are the subject matter of consent application B-165-21 which has received conditional approval from the United Counties of Leeds and Grenville Consent Granting Authority, a copy of which is annexed hereto as Schedule "B";

3. The Township, pursuant to Section 53 of the Planning Act, R.S.O. 1990, as amended, has the authority to enter into an agreement imposed as a condition of the approval of consent.

4. This agreement shall be registered at the cost of the Owner against the land to which it applies subject to the Registry Act and the Land Titles Act;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the other good and valuable consideration and the sum of One ($1.00) Dollar of lawful money of Canada, now paid by each of the other parties hereto (the receipt whereof is hereby acknowledged) the Parties hereby covenant, promise and agree with each other as follows:

1. This Agreement affects the Lands described in Schedule "A" to this Agreement and shall ensure to the benefit of and be binding upon parties hereto, and their respective successors and assigns, The Owner hereby agrees to the registration of this Agreement against the title to the severed lands and retained lands, at the sole cost of the Owner.

2. The Owner hereby agrees to obtain all required municipal approvals and comply with all applicable Zoning By-Laws of the Township, the Building Code Act, 1992, S.O. 1992, c.23 requirements and approvals required by applicable government authorities which may be required prior to the development of the lands.

3. The Owner hereby acknowledges that the lands described in Schedule "A" to this Agreement are the subject of the Geotechnical Investigation, as shown in Schedule “C” to this Agreement, which was completed in order to assess the slope stability and identify a suitable building envelope.

4. The Owner hereby acknowledges that the lands described in Schedule "A" to this Agreement are the subject of the Environmental Impact Assessment, as shown in Schedule “D” to this Agreement, which was completed in order to identify the natural heritage features and any potential impacts the proposed development may have and recommend measures to mitigate those impacts.

5. The Owner hereby acknowledges that the lands described in Schedule "A" to this Agreement are the subject of a Phase 1, 2 and 3 Archaeological Assessment, as shown in Schedule “E” to this Agreement, which was completed in order to assess the archaeological potential of the property.

6. The owner hereby acknowledges and agrees that the professional recommendations and matters provided by Schedules “C”, “D” and “E” shall be provided and maintained by the Owner at the Owner’s sole risk and expense.

7. Any notice to be given hereunto shall be in writing to all other parties and either delivered personally or sent by prepaid registered mail, and in the latter case shall be deemed to have been given three (3) business days following the date upon which it was mailed. The address of the parties for the purpose hereof shall be:

to the Owner at:	to the Township at:
Madison Mulder Enterprises Inc PO Box 191 Spencerville ON K0E 1X0	Township of Edwardsburgh/Cardinal PO Box 129 Spencerville ON KOE 1XO

8. The following schedules will form part of this agreement:
   SCHEDULE "A" – Description of the Property
   SCHEDULE "B" – Decision of the United Counties of Leeds and Grenville
   Consent Granting Authority
   SCHEDULE "C" – Geotechnical Investigation
   Prepared by Paterson Group Inc., October 2021
   SCHEDULE "D" – Environmental Impact Statement
   Prepared by Kilgour & Associates Ltd., February 2022
   SCHEDULE "E" – Stage 1, 2, and 3 Archaeological Assessment
   Prepared by Matrix Heritage Inc., November 2021
   SCHEDULE "F" – Site Survey
   Prepared by Meldrum-Jason Surveyors, October 2022

IN WITNESS WHEREOF the parties hereto have executed this agreement.

THE CORPORATION OF THE TOWNSHIP OF EDWARDSBURGH/CARDINAL

Mayor

Clerk

I/We have authority to bind the Corporation.

OWNER, MADISON MULDER ENTERPRISES INC.

Owner

I/We have authority to bind the Corporation.

DATED AT Spencerville, ON this 19 day of December, 2022

SCHEDULE "A"

DESCRIPTION OF THE PROPERTY

PT LT 20 CON 1 EDWARDSBURGH AS IN PR65490 LYING S OF PR152106; EDWARDSBURGH/CARDINAL

SCHEDULE "B"

DECISION OF THE UNITED COUNTIES OF LEEDS AND GRENVILLE CONSENT GRANTING AUTHORITY

Phone 613-342-3840 – Ext. 2414
Fax 613-342-2101
E-Mail: krista.weidenaar@uclg.on.ca

25 Central Avenue West
Suite 100,
Brockville, ON, K6V 4N6

UNITED COUNTIES OF LEEDS AND GRENVILLE
CONSENT GRANTING AUTHORITY

DECISION

APPLICATION B-165-21

We the undersigned members of the Consent Granting Authority of the United Counties of Leeds and Grenville; do hereby certify that the following is a decision reached by us at a hearing held at the Counties Offices, 25 Central Avenue, Brockville, Ontario on **April 27, 2022.** The said decision was reached on the application of **Madison Mulder Enterprises Inc.** to sever a parcel of land being; part of Lot 20, Concession 1; **Township of Edwardsburgh Cardinal** having dimensions of approximately 82.18 metres by 149.5 metres with an area of 1.02 hectares.

DECISION: **GRANTED** providing the conditions as stated below are met.

REASONS:

Division of land is compatible with the intent and purpose of the Official Plan and meets the criteria in Section 51 (24) of the Planning Act providing conditions are met.

CONDITIONS:

(1) That all conditions imposed in the granting of this decision be met and **one (1)** original paper copy and **one (1)** digital copy of the deposited reference plan of the subject lands, which conforms substantially with the application as submitted, and the instrument relating to the transaction (deed/transfer, grant of right-of-way, etc.) be presented to the Secretary-Treasurer of the Consent Granting Authority for the Certificate of Consent no later than **April 28, 2024.**

(2) That a copy of the deposited survey plan for the newly severed lot be submitted to the Township.

(3) That the applicant submit a scaled site plan prepared by an Ontario Land Surveyor delineating the top of slope, floodplain elevation and the final development setbacks based on the approved Environmental Impact Statement and Geotechnical Investigation.

(4) That the applicant obtain a Zoning By-law amendment which addresses the following:

- a. Establishes a revised zone boundary in relation to the Provincially Significant Wetland in accordance with the Official Plan; and
- b. Establishes an appropriate residential zone category for the lands to be developed for residential use including appropriate zone standards to address development constraints and setbacks as identified in the Geotechnical Investigation and Environmental Impact Statement.

(5) That the applicant enter into a Development Agreement, to the satisfaction of Township, to implement the recommendations and findings of the updated Geotechnical Investigation, Environmental Impact Statement and Stage 1, 2 & 3 Archaeological Assessments.

(6) That a development agreement containing the recommendations of the Environmental Impact Statement and Geotechnical Investigation be registered on title of each parcel.

(7) That road widening across the severed and retained parcel to 15.25 metres from existing centerline of the road allowance of County Road 2 (if required) be conveyed to the Corporation of the United Counties of Leeds and Grenville. Should sufficient road allowance exist, a letter from a surveyor would meet the Counties' condition. The lands to be transferred for road widening purposes shall be free and clear of all encumbrances. The deed for this road widening is to be registered and submitted to the Consent Granting Authority prior to endorsement on the deed to the severed land.

(8) That written release of conditions 2, 3, 4 and 5 from the Township be submitted to the Consent Granting Authority prior to endorsement of consent on the deed for the severed land.

(9) That written release of conditions 3 and 6 from South Nation Conservation be submitted to the Consent Granting Authority prior to endorsement of consent on the deed for the severed land.

NOTES:

(1) The Township had no objection providing conditions 2, 3, 4 and 5 are complied with.

(2) South Nation Conservation had no objection providing conditions 3 and 6 are complied with.

- South Nation Conservation accepts the findings and recommendations of the final Environmental Impact Statement. The study includes the following mitigation and direction:
  - The entire Johnstown Creek Marsh Complex PSW area on the site will not be subject to severance or development and will remain as part of the retained parcel. As part of the rezoning application, the EP-W zone is proposed to be consistent with the Provincial wetland boundary.
  - No shoreline infrastructure (dock, pathways, hard or soft landscaping) will be considered as part of future development.
  - As the Provincial boundary represents a more conservative wetland delineation than the field exercise based on current conditions, the 15 m setback from the PSW will be established using the Provincial boundary.
  - Following geotechnical recommendations, no vegetation clearing is to take place on the slope face itself, as the existing vegetation cover on the slope provides additional stability to the slope and reduces surficial erosion due to surface water runoff.
  - Silt fence paired with sturdy construction fence along the project perimeter (i.e., along the setback from the top of the slope and the wetland). This fencing can also act as a wildlife exclusion measure for smaller and less mobile animals that may occupy the adjacent wetland habitat such as amphibians and turtles.
  - The Geotechnical Investigation recommends a 6-metre setback from the top of slope. South Nation Conservation accepts the consultant's findings and recommendations.
  - SNC implements Ontario Regulation 170/06, Development Interference with Wetlands and Alterations to Shorelines and Watercourses, developed under Section 28 of the Conservation Authorities Act.
  - The property contains areas within the 100-year floodplain, an unstable slope, a Provincially Significant Wetland, and areas adjacent to these features. Any development within 120m of the Provincially Significant Wetland will require a permit and restrictions may apply. Further, any interference with the St. Lawrence River will require a permit and restrictions may apply.

(3) The Health Unit had no objection.

- Proposed lot is for a new residence. Future septic tank/distribution piping must be located at least 30 metres away from the river. A permit will be required from the Health Unit office prior to constructing a new system.
- The new proposed lot lines will not infringe on minimum clearance distances on the retained land.

(4) The County Roads Department had no objection providing condition 7 is complied with.

I hereby certify this to be a true and exact copy

Chris Mills

Chair

K Weidenaar

Secretary-Treasurer

This Decision was mailed on April 28, 2022

The last date for appealing this decision is May 18, 2022

SCHEDULE "C"

GEOTECHNICAL INVESTIGATION
PREPARED BY PATERSON GROUP INC.
OCTOBER 2021

Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Noise and Vibration Studies

patersongroup

Geotechnical Investigation

Proposed Residential Development
2017 County Road 2
Edwardsburgh-Cardinal, Ontario

Prepared For

Madison Mulder Enterprises Inc.

October 12, 2021

Report: PG5966-1

Paterson Group Inc.
Consulting Engineers
154 Colonnade Road South
Ottawa (Nepean), Ontario
Canada K2E 7J5

Tel: (613) 226-7381
Fax: (613) 226-6344
www.patersongroup.ca

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Appendices

1.0 Introduction

Paterson Group (Paterson) was commissioned by Madison Mulder Enterprises Inc. to conduct a geotechnical investigation for the proposed residential development site to be located at 2017 County Road 2 in the Township of Edwardsburgh-Cardinal (refer to Figure 1 - Key Plan in Appendix 2 of this report).

The objective of the geotechnical investigation was to:

- Determine the subsoil and groundwater conditions at this site by means of test holes.

- Provide geotechnical recommendations pertaining to design of the proposed development including construction considerations which may affect the design.

The following report has been prepared specifically and solely for the aforementioned project which is described herein. It contains our findings and includes geotechnical recommendations pertaining to the design and construction of the subject development as they are understood at the time of writing this report.

Investigating the presence or potential presence of contamination on the subject property was not part of the scope of work of the present investigation. Therefore, the present report does not address environmental issues.

2.0 Proposed Development

Detailed plans of the proposed development were not available at the time of writing this report. However, based on discussion with the client it is understood that the proposed development will consist of two single-family residential dwellings with basements or slab-on-grade construction. Associated driveways and landscaped areas are also anticipated as part of the development.

The proposed development is expected to be privately serviced with on-site wells and septic systems.

3.0 Method of Investigation

3.1 Field Investigation

Field Program

The field program for the current geotechnical investigation was carried out on September 16, 2021 and consisted of advancing a total of three (3) boreholes to a maximum depth of 9.6 m below existing ground surface. The test hole locations were distributed in a manner to provide general coverage of the subject site and taking into consideration underground utilities and site features. The borehole locations are shown on Drawing PG5966-1 - Test Hole Location Plan included in Appendix 2.

The boreholes were completed using a low-clearance drill rig operated by a two-person crew. All fieldwork was conducted under the full-time supervision of Paterson personnel under the direction of a senior engineer. The drilling procedure consisted of advancing each test hole to the required depths at the selected locations and sampling the overburden.

Sampling and In Situ Testing

The soil samples were collected from the boreholes using a 50 mm diameter split spoon (SS) sampler. The samples were initially classified on site, placed in sealed plastic bags, and transported to our laboratory. The depths at which the auger and split-spoon samples were recovered from the boreholes are shown as AU, and SS respectively, on the Soil Profile and Test Data sheets in Appendix 1.

The Standard Penetration Test (SPT) was conducted in conjunction with the recovery of the split-spoon samples. The SPT results are recorded as “N” values on the Soil Profile and Test Data sheets. The “N” value is the number of blows required to drive the split-spoon sampler 300 mm into the soil after a 150 mm initial penetration using a 63.5 kg hammer falling from a height of 760 mm.

Undrained shear strength testing was carried out at regular depth intervals in cohesive soils using a vane apparatus.

The thickness of the overburden was evaluated during the course of the investigation by a dynamic cone penetration test (DCPT) at borehole BH 1-21. The DCPT consists of driving a steel drill rod, equipped with a 50 mm diameter cone at its tip, using a 63.5 kg hammer falling from a height of 760 mm. The number of blows required to drive the cone into the soil is recorded for each 300 mm increment.

The subsurface conditions observed in the boreholes were recorded in detail in the field. The soil profiles are logged on the Soil Profile and Test Data sheets in Appendix 1 of this report.

Groundwater

A monitoring well was installed at borehole BH 3-21, and the remainder of the boreholes were fitted with flexible polyethylene standpipes to permit monitoring of the groundwater levels subsequent to the completion of the sampling program. Groundwater level observations are discussed in Section 4.3 and are presented in the Soil Profile and Test Data sheets in Appendix 1.

Monitoring Well Installation

Typical monitoring well construction details are described below:

- Slotted 32 mm diameter PVC screen at the base of each borehole.
- 51 mm diameter PVC riser pipe from the top of the screen to the ground surface.
- No.3 silica sand backfill within annular space around screen.
- Bentonite hole plug directly above PVC slotted screen.
- Clean backfill from top of bentonite plug to the ground surface.

Refer to the Soil Profile and Test Data sheets in Appendix 1 for specific well construction details.

Sample Storage

All samples will be stored in the laboratory for a period of one (1) month after issuance of this report. They will then be discarded unless we are otherwise directed.

3.2 Field Survey

The test hole locations were selected by Paterson to provide general coverage of the proposed development, taking into consideration the existing site features and underground utilities. The test hole locations and ground surface elevation at each test hole location were surveyed by Paterson using a handheld GPS and referenced to a geodetic datum. The location of the boreholes and ground surface elevation at each test hole location are presented on Drawing PG5966-1 - Test Hole Location Plan in Appendix 2.

Topo survey was also completed along the slope face to collect data for the slope stability analysis. The location of the collected data was selected within the steepest portion of the slope based on field observations. The collected data was analyzed and presented on Figures 2 and 3 – Slope Stability Analysis Sections attached in Appendix 2.

3.3 Laboratory Testing

Soil samples were recovered from the subject site and visually examined in our laboratory to review the results of the field logging. All samples will be stored in the laboratory for a period of one (1) month after issuance of this report.

3.4 Analytical Testing

One (1) soil sample was submitted for analytical testing to assess the corrosion potential for exposed ferrous metals and the potential of sulphate attacks against subsurface concrete structures, one of which was collected from BH 1-21. The sample was submitted to determine the concentration of sulphate and chloride, the resistivity, and the pH of the samples. The results are presented in Appendix 1 and are discussed further in Subsection 6.7.

4.0 Observations

4.1 Surface Conditions

Generally, the subject site currently consists of a vacant land. The north portion of the subject site is generally covered by grass and areas of mature trees with a utility shed. The south portion of the subject site is located within the flood plain limit of the St. Lawrence River and consists of an environmentally protected cattail zone. The ground surface across the subject site gradually slopes downward from north to south towards Saint Lawrence River from a geodetic elevation 85 to 75 m. The slope conditions were observed in the field to carry out a slope stability assessment and are discussed further in Subsection 6.8 of this report.

The site is bordered by agricultural farmland and residential dwellings to the east and west, by County Road 2 followed by undeveloped lands to the north, and by St. Lawrence River to the south. The existing ground surface across the north portion of the site was observed to be relatively at grade with the surrounding roadways.

4.2 Subsurface Profile

Generally, the soil profile at the test hole locations consists of thin layer of topsoil underlain by a thin layer of reddish brown, compact silty sand and/or a hard to very stiff brown silty clay. A very stiff to stiff grey silty clay deposit was encountered below the above noted layers. Practical refusal to the DCPT was encountered at BH 1-21 at 14.9 m deep below existing ground surface.

Reference should be made to the Soil Profile and Test Data sheets in Appendix 1 for the details of the soil profile encountered at each test hole location.

Bedrock

Based on available geological mapping, the bedrock in the subject area consists of limestone, dolostone and dolomitic limestone of the Gull River formation with an overburden drift thickness of 8 to 15 m.

4.3 Groundwater

Groundwater level measurements were collected on September 23, 2021 within the installed monitoring well and polytube piezometers. The measured groundwater levels are presented in Table 1 below.

Table 1 – Summary of Groundwater Levels				
Test Hole Number	**Ground Surface Elevation (m)**	**Measured Groundwater Level**		**Dated Recorded**
		Depth (m)	**Elevation (m)**	
BH 1-21	84.58	3.30	81.28	September 23, 2021
BH 2-21	82.70	3.14	79.56	
BH 3-21	81.47	2.83	78.64	
Note: The ground surface elevation at each borehole location was surveyed using a handheld GPS using a geodetic datum.				

It should be noted that long-term groundwater levels can also be estimated based on the observed colour and consistency of the recovered soil samples. It should also be noted that surface water may infiltrate the open holes and be interpreted as long term groundwater table. Based on these observations, the long-term groundwater table can be expected at approximately 4 to 5 m below ground surface. The recorded groundwater levels are noted on the applicable Soil Profile and Test Data sheet presented in Appendix 1.

It should be noted that groundwater levels are subject to seasonal fluctuations. Therefore, the groundwater levels could vary at the time of construction.

5.0 Discussion

5.1 Geotechnical Assessment

From a geotechnical perspective, the subject site is suitable for the proposed development. It is expected that the proposed residential dwellings will be founded on conventional spread footings placed on an undisturbed, very stiff to hard brown silty clay.

Due to the presence of a silty clay deposit, a permissible grade raise restriction is required for the subject site. If a higher grade raise is expected within the subject site, settlement monitoring surcharge programs and/or the use of lightweight fill may be required and can be further assessed once the finalized grading is available for the proposed buildings.

The above and other considerations are discussed in the following paragraphs.

5.2 Site Grading and Preparation

Stripping Depth

Topsoil and deleterious fill, such as those containing organic materials, should be stripped from under any buildings, paved areas, pipe bedding and other settlement sensitive structures.

If encountered, existing foundation walls and other construction debris should be entirely removed from within the building perimeters. Under paved areas, existing construction remnants such as foundation walls should be excavated to a minimum of 1 m below final grade.

Fill Placement

Fill placed for grading beneath the building areas should consist, unless otherwise specified, of clean imported granular fill, such as Ontario Provincial Standard Specifications (OPSS) Granular A or Granular B Type II. The imported fill material should be tested and approved prior to delivery. The fill should be placed in maximum 300 mm thick loose lifts and compacted by suitable compaction equipment. Fill placed beneath the building should be compacted to a minimum of 99% of the standard Proctor maximum dry density (SPMDD).

Non-specified existing fill along with site-excavated soil could be placed as general landscaping fill where settlement of the ground surface is of minor concern. These materials should be spread in lifts with a maximum thickness of 300 mm and compacted by the tracks of the spreading equipment to minimize voids.

If excavated very stiff to hard brown silty clay, free of organics and deleterious materials, is to be used to build up the subgrade level for areas to be paved, the silty clay, under dry conditions and above freezing temperatures, should be compacted in thin lifts to a minimum density of 95% of their respective SPMDD using a vibratory sheepsfoot roller. Non-specified existing fill and site-excavated soils are not suitable for placement as backfill against foundation walls, unless used in conjunction with a geocomposite drainage membrane, such as Miradrain G100N or Delta Drain 6000, connected to a perimeter drainage system is provided.

5.3 Foundation Design

Bearing Resistance Values (Conventional Shallow Foundation)

Strip footings, up to 3 m wide, and pad footings, up to 5 m wide, founded on an undisturbed, very stiff to hard brown silty clay, can be designed using a bearing resistance value at serviceability limit states (SLS) of **150 kPa** and a factored bearing resistance value at ultimate limit states (ULS) of **225 kPa** incorporating a geotechnical factor of 0.5.

An undisturbed soil bearing surface consists of one from which all topsoil and deleterious materials, such as loose, frozen, or disturbed soil, have been removed, in the dry, prior to the placement of concrete footings.

Footings bearing on an undisturbed soil bearing surface and designed using the bearing resistance values provided herein will be subjected to potential post-construction total and differential settlements of 25 and 20 mm, respectively.

Lateral Support

The bearing medium under footing-supported structures is required to be provided with adequate lateral support with respect to excavations and different foundation levels.

Adequate lateral support is provided to a silty clay bearing medium when a plane extending down and out from the bottom edges of the footing, at a minimum of 1.5H:1V, passes only through in situ soil or engineered fill of the same or higher capacity as that of the bearing medium.

Permissible Grade Raise

A permissible grade raise restriction of **2 m** is recommended for the subject site in areas where silty clay is encountered below footing level. If greater permissible grade raises are required, preloading with or without a surcharge, lightweight fill, and/or other measures should be investigated to reduce the risks of unacceptable long-term post construction total and differential settlements.

5.4 Design for Earthquakes

The site class for seismic site response can be taken as **Class D** for foundations constructed at the subject site. The soils underlying the subject site are not susceptible to liquefaction. Reference should be made to the latest revision of the 2012 Ontario Building Code for a full discussion of the earthquake design requirements.

5.5 Basement Slab/Slab-on-Grade Construction

With the removal of all topsoil and deleterious fill within the footprint of the proposed building, the native silty clay will be considered an acceptable subgrade upon which to commence backfilling for slab-on-grade construction or the basement floor slab.

Any soft areas should be removed and backfilled with appropriate backfill material. OPSS Granular B Types I or II, with a maximum particle size of 50 mm, are recommended for backfilling below the floor slab (outside the zones of influence of the footings). It is recommended that the upper 200 mm of sub-floor fill consists of OPSS Granular A crushed stone.

All backfill material within the footprint of the proposed buildings (but outside the zones of influence of the footings) should be placed in maximum 300 mm thick loose layers and compacted to at least 95% of its SPMDD. Within the zones of influence of the footings, the backfill material should be compacted to a minimum of 98% of its SPMDD.

5.6 Pavement Design

Car only driveways are anticipated at this site. The proposed pavement structure is presented in Table 2.

Table 2 – Recommended Pavement Structure – Car Only Driveways	
Thickness (mm)	**Material Description**
50	**Wear Course –** HL-3 or Superpave 12.5 Asphaltic Concrete
150	**BASE –** OPSS Granular A Crushed Stone
300	**SUBBASE –** OPSS Granular B Type II
Subgrade – Either fill, in-situ soil, or OPSS Granular B Type I or II material placed over in-situ soil, or concrete fill.	

Minimum Performance Graded (PG) 58-34 asphalt cement should be used for this project.

If soft spots develop in the subgrade during compaction or due to construction traffic, the affected areas should be excavated and replaced with OPSS Granular B Type I or II material.

The pavement granular base and subbase should be placed in maximum 300 mm thick lifts and compacted to a minimum of 100% of the material's SPMDD using suitable compaction equipment.

6.0 Design and Construction Precautions

6.1 Foundation Drainage and Backfill

Foundation Drainage

It is recommended that a perimeter foundation drainage system be provided for the proposed structures. The system should consist of a 100 to 150 mm diameter perforated, corrugated plastic pipe which is surrounded on all sides by 150 mm of 19 mm clear crushed stone and is placed at the footing level around the exterior perimeter of the structure. The pipe should have a positive outlet, such as a gravity connection to the storm sewer.

Foundation Backfill

Backfill against the exterior sides of the foundation walls should consist of free-draining, non-frost susceptible granular materials. The greater part of the site excavated materials will be frost susceptible and, as such, are not recommended for re-use as backfill against the foundation walls, unless used in conjunction with a drainage geocomposite, such as Delta Drain 6000, connected to the perimeter foundation drainage system. Imported granular materials, such as clean sand or OPSS Granular B Type I granular material, should otherwise be used for this purpose.

6.2 Protection of Footings Against Frost Action

Perimeter footings of heated structures are required to be insulated against the deleterious effects of frost action. A minimum 1.5 m thick soil cover (or insulation equivalent) should be provided in this regard.

Other exterior unheated footings, such as those for isolated exterior piers and retaining walls, are more prone to deleterious movement associated with frost action. A minimum of 2.1 m thick soil cover (or equivalent) should be provided for all exterior unheated footings.

6.3 Excavation Side Slopes

The side slopes of excavations in the overburden materials should be either cut back at acceptable slopes or should be retained by shoring systems from the start of the excavation until the structure is backfilled. It is assumed that sufficient room will be available for the greater part of the excavation to be undertaken by open-cut methods (i.e., unsupported excavations). Where space restrictions exist, or to reduce the trench width, the excavation can be carried out within the confines of a fully braced steel trench box.

Unsupported Side Slopes

The excavation side slopes above the groundwater level extending to a maximum depth of 3 m should be cut back at 1H:1V or flatter. The flatter slope is required for excavation below groundwater level. The subsoil at this site is considered to be mainly a Type 2 and 3 soil according to the Occupational Health and Safety Act and Regulations for Construction Projects.

Excavated soil should not be stockpiled directly at the top of excavations and heavy equipment should be kept away from the excavation sides. Slopes in excess of 3 m in height should be periodically inspected by the geotechnical consultant in order to detect if the slopes are exhibiting signs of distress.

It is recommended that a trench box be used at all times to protect personnel working in trenches with steep or vertical sides. It is expected that services will be installed by "cut and cover" methods and excavations will not be left open for extended periods of time.

6.4 Pipe Bedding and Backfill

Bedding and backfill materials should be in accordance with the most recent Material Specifications and Standard Detail Drawings from the Department of Public Works and Services, Infrastructure Services Branch of the City of Ottawa.

At least 300 mm of OPSS Granular A should be used for pipe bedding for sewer and water pipes. The bedding should extend to the spring line of the pipe. Cover material, from the spring line to at least 300 mm above the obvert of the pipe, should consist of OPSS Granular A or Granular B Type II with a maximum size of 25 mm. The bedding and cover materials should be placed in maximum 225 mm thick lifts compacted to 99% of the material's standard Proctor maximum dry density.

It should generally be possible to re-use the upper portion of the dry to moist (not wet) silty clay and silty sand above the cover material if the excavation and filling operations are carried out in dry weather conditions. The wet silty clay should be given a sufficient drying period to decrease its moisture content to an acceptable level to make compaction possible prior to being re-used.

The backfill material within the frost zone (about 1.8 m below finished grade) should match the soils exposed at the trench walls to reduce potential differential frost heaving. The backfill should be placed in maximum 225 mm thick loose lifts and compacted to a minimum of 95% of the material's SPMDD.

Where silty clay is encountered, to reduce long-term lowering of the groundwater level at this site, clay seals should be provided in the service trenches. The seals should be at least 1.5 m long and should extend from trench wall to trench wall. Generally, the seals should extend from the frost line and fully penetrate the bedding, subbedding, and cover material.

The barriers should consist of relatively dry and compactable brown silty clay placed in maximum 225 mm thick loose layers and compacted to a minimum of 95% of the material's SPMDD. The clay seals should be placed at the site boundaries and at strategic locations at no more than 60 m intervals in the service trenches.

6.5 Groundwater Control

Groundwater Control for Building Construction

Based on our observations, it is anticipated that groundwater infiltration into the excavations should be low to moderate and controllable using open sumps. Pumping from open sumps should be sufficient to control the groundwater influx through the sides of shallow excavations. The contractor should be prepared to direct water away from all bearing surfaces and subgrades, regardless of the source, to prevent disturbance to the founding medium.

Permit to Take Water

A temporary Ministry of the Environment, Conservation and Parks (MECP) permit to take water (PTTW) may be required for this project if more than 400,000 L/day of ground and/or surface water is to be pumped during the construction phase. A minimum 4 to 5 months should be allowed for completion of the PTTW application package and issuance of the permit by the MECP.

For typical ground or surface water volumes being pumped during the construction phase, typically between 50,000 to 400,000 L/day, it is required to register on the Environmental Activity and Sector Registry (EASR). A minimum of two to four weeks should be allotted for completion of the EASR registration and the Water Taking and Discharge Plan to be prepared by a Qualified Person as stipulated under O.Reg. 63/16. If a project qualifies for a PTTW based upon anticipated conditions, an EASR will not be allowed as a temporary dewatering measure while awaiting the MECP review of the PTTW application.

6.6 Winter Construction

Precautions must be taken if winter construction is considered for this project. The subsoil conditions at this site consist of frost susceptible materials. In the presence of water and freezing conditions, ice could form within the soil mass. Heaving and settlement upon thawing could occur.

In the event of construction during below zero temperatures, the founding stratum should be protected from freezing temperatures by the use of straw, propane heaters and tarpaulins or other suitable means. In this regard, the base of the excavations should be insulated from sub-zero temperatures immediately upon exposure and until such time as heat is adequately supplied to the building and the footings are protected with sufficient soil cover to prevent freezing at founding level.

Trench excavations and pavement construction are also difficult activities to complete during freezing conditions without introducing frost in the subgrade or in the excavation walls and bottoms. Precautions should be taken if such activities are to be carried out during freezing conditions. Additional information could be provided, if required.

6.7 Corrosion Potential and Sulphate

The results of analytical testing show that the sulphate content is less than 0.1%. This result is indicative that Type 10 Portland cement (normal cement) would be appropriate for this site. The chloride content and the pH of the sample indicate that they are not significant factors in creating a corrosive environment for exposed ferrous metals at this site, whereas the resistivity is indicative of a moderate to slightly aggressive corrosive environment.

6.8 Slope Stability Assessment

A downward slope was observed in the north-south direction across the subject site towards St. Lawrence River with approximate geodetic elevations of 85 m to 75 m. A 6 m high, 2H:1V slope was observed within the central portion of the site. The slope conditions were reviewed by Paterson field personnel as part of the geotechnical investigation. One (1) slope cross-section was studied as the worst-case scenario. The cross-section location is presented on Drawing PG5966-1 Test Hole Location Plan in Appendix 2.

Field Observations

The existing slope along the south portion of the subject site, at the floodplain boundary, was generally observed to be covered by cattails and grass across its surface. The approximately 6 m high slope located within the central portion of the property running in an east-west direction with a maximum inclination of 2H:1V or flatter along the subject site. The slope is followed by a wide, flat flood plain of the St. Lawrence River that was observed to extend approximately horizontally 100 m towards the edge of the river and 150 m wide within the subject site. Generally, the overall slope face was observed to be covered by dense vegetation. The toe of slope did not present signs of active erosion. However, localized slip failures were locally noted at the face of the slope. Reference may also be given to photographs taken as part of our review in Appendix 2.

A slope stability analysis was carried out to determine the required geotechnical setback from the top of the slope based on a factor of safety of 1.5. Toe erosion and erosion access allowance were also considered in the determination of the limit of hazard lands setback line and are discussed on the following sections. If the limit of hazard lands need to be further reduced, erosional protection, or alternative means would need to be provided and will be subject to the approval of the conservation authority with jurisdiction of St. Lawrence River.

Slope Stability Analysis

The analysis of the stability of the upper slope was carried out using SLIDE, a computer program which permits a two-dimensional slope stability analysis using several methods including the Bishop's method, which is a widely used and accepted analysis method. The program calculates a factor of safety, which represents the ratio of the forces resisting failure to those favoring failure. Theoretically, a factor of safety of 1.0 represents a condition where the slope is stable. However, due to intrinsic limitations of the calculation methods and the variability of the subsoil and groundwater conditions, a factor of safety greater than one is usually required to ascertain that the risks of failure are acceptable. A minimum factor of safety of 1.5 is generally recommended for conditions where the failure of the slope would endanger permanent structures.

Subsoil conditions at the cross-sections were inferred based on nearby boreholes. For a conservative review of the groundwater conditions, the silty clay deposit was noted to be fully saturated for our analysis and exiting at the toe of the slope.

Stable Slope Allowance

The results of the slope stability analysis for static conditions at Section A are presented in Figure 2 in Appendix 2. Based on the analysis, a factor of safety of 2.2 was calculated under static conditions which is above the minimum factor of safety of 1.5.

Additionally, an analysis considering seismic loading was also completed. A horizontal acceleration of 0.16g was considered in the seismic analysis. A factor of safety of 1.1 is considered to be satisfactory for stability analyses including seismic loading. The analysis results under seismic loading are shown in Figure 3 in Appendix 2. The results indicate a slope with a factor of safety of 1.9 under seismic loading at Section A which is considered satisfactory.

Based on the above, a stable slope allowance is not required for the subject site.

Erosion and Access Allowances

Based on the soil profiles encountered at the borehole locations, the slope face consists mainly of brown silty clay followed by a grey silty clay deposit. As such, a toe erosion allowance should apply for the subject slope. It should be noted that the flood plain between the toe of the slope and the edge of the St. Laurence River was measured to be a minimum of 100 m. Therefore, the toe erosion allowance can be measured from the toe of the slope rather than the top of the slope as per the MNR Slope Stability Guidelines. A toe erosion allowance of 5 m should be applied from the edge of the toe of slope outward.

An erosion access allowance of 6 m is required from the top of slope to allow access to heavy machines for future maintenance of the slope, if required.

Limit of Hazard Lands

Based on the above, a setback taken from the top of the current slope has been provided as based on the above-noted observations and analysis. Reference should be made to Drawing PG5966-1 – Test Hole Location Plan for the proposed limit of Hazard Lands setback for development considerations at the subject site.

It is important to note that the existing vegetation on the slope faces should not be removed as it contributes to the long-term stability of the slope and reduces surficial erosion due to surface water runoff.

7.0 Recommendations

The following is recommended once the site plan is determined.

- Grading plan review from a geotechnical perspective, once the final grading plan is available.
- Review of architectural and structural drawings to ensure adequate frost protection is provided to the subsoil.
- Observation of all bearing surfaces prior to the placement of concrete.
- Sampling and testing of the concrete and fill materials.
- Periodic observation of the condition of unsupported excavation side slopes in excess of 3 m in height, if applicable.
- Observation of all subgrades prior to backfilling.
- Field density tests to determine the level of compaction achieved.
- Sampling and testing of the bituminous concrete including mix design reviews.

A report confirming that these works have been conducted in general accordance with our recommendations could be issued upon the completion of a satisfactory inspection program by the geotechnical consultant.

8.0 Statement of Limitations

The recommendations provided are in accordance with the present understanding of the project. Paterson requests permission to review the recommendations when the drawings and specifications are completed.

A soils investigation is a limited sampling of a site. Should any conditions at the site be encountered which differ from those at the test locations, Paterson requests immediate notification to permit reassessment of our recommendations.

The recommendations provided herein should only be used by the design professionals associated with this project. They are not intended for contractors bidding on or undertaking the work. The latter should evaluate the factual information provided in this report and determine the suitability and completeness for their intended construction schedule and methods. Additional testing may be required for their purposes.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than Madison Mulder Enterprises Inc. or their agents is not authorized without review by Paterson for the applicability of our recommendations to the alternative use of the report.

Paterson Group Inc.

Nicole R.L. Patey, B. Eng. Faisal I. Abou-Seido, P. Eng.

Report Distribution:

- ❑ Madison Mulder Enterprises Inc. (e-mail copy)
- ❑ Paterson Group

APPENDIX 1

SOIL PROFILE AND TEST DATA SHEETS

SYMBOLS AND TERMS

ANALYTICAL TESTING RESULTS

patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation & Slope Stability Study
Prop. Residential Development - 2017 County Road 2
Edwardsburgh/Cardinal, Ontario

DATUM Geodetic

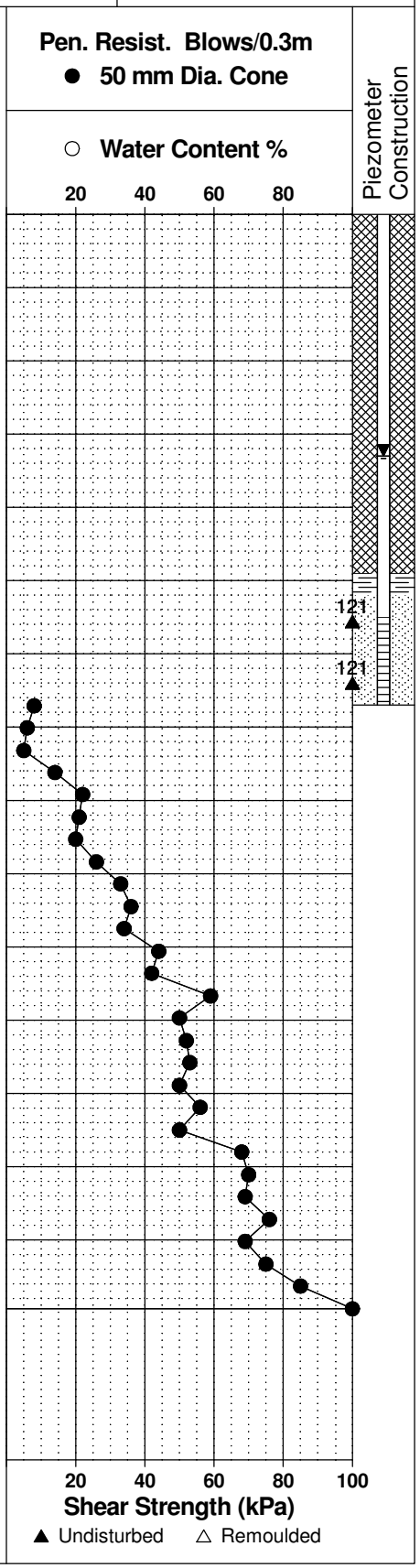
FILE NO. PG5966

REMARKS

HOLE NO. BH 1-21

BORINGS BY CME-55 Low Clearance Drill **DATE** September 16, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)
GROUND SURFACE						0	84.58
TOPSOIL 0.23		AU	1				
Compact, reddish brown **SILTY SAND** 0.48		SS	2	75	15	1	83.58
		SS	3	83	17	2	82.58
Hard to very stiff, brown **SILTY CLAY**		SS	4	100	20	3	81.58
		SS	5	100	22	4	80.58
		SS	6	100	21	5	79.58
- grey by 4.6m depth		SS	7	100	6	6	78.58
6.70		SS	8	100	15	7	77.58
Dynamic Cone Penetration Test commenced at 6.70m depth.						8	76.58
						9	75.58
						10	74.58
						11	73.58
						12	72.58
						13	71.58
14.94						14	70.58
End of Borehole Practical DCPT refusal at 14.94m depth (GWL @ 3.30m - Sept. 23, 2021)							



patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation & Slope Stability Study
Prop. Residential Development - 2017 County Road 2
Edwardsburgh/Cardinal, Ontario

DATUM Geodetic

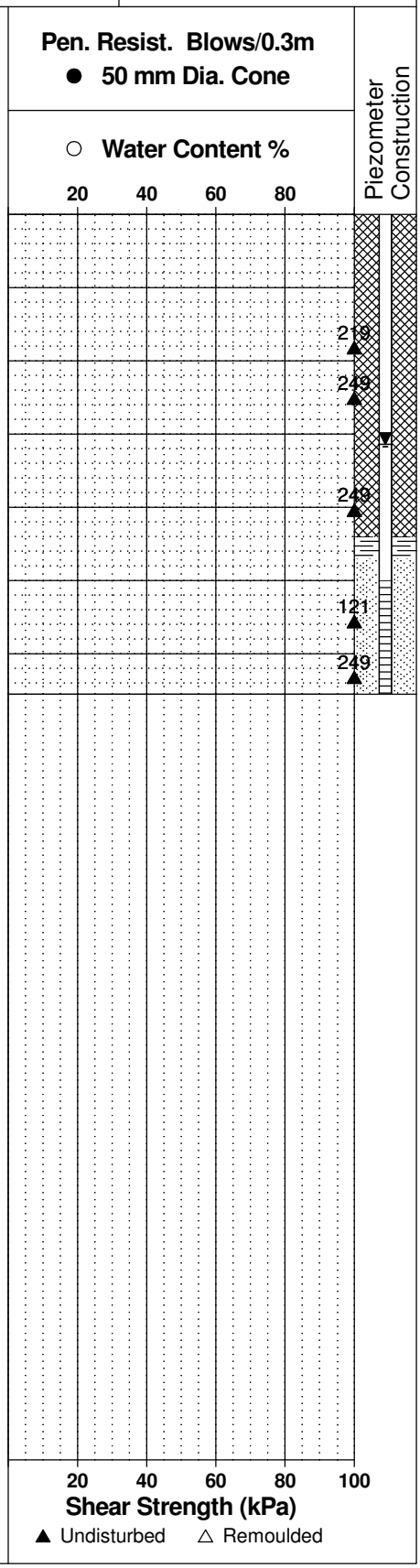
FILE NO. PG5966

REMARKS

HOLE NO. BH 2-21

BORINGS BY CME-55 Low Clearance Drill **DATE** September 16, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)
GROUND SURFACE						0	82.70
TOPSOIL 0.20		SS	1				
Reddish brown **SILTY SAND** 0.30		SS	2	75	6	1	81.70
		SS	3	75		2	80.70
Very stiff to hard, brown **SILTY CLAY**						3	79.70
		SS	4	79	6		
						4	78.70
- grey by 4.6m depth		SS	5	83	10	5	77.70
6.55						6	76.70
End of Borehole							
(GWL @ 3.14m - Sept. 23, 2021)							



patersongroup Consulting Engineers

154 Colonnade Road South, Ottawa, Ontario K2E 7J5

SOIL PROFILE AND TEST DATA

Geotechnical Investigation & Slope Stability Study
Prop. Residential Development - 2017 County Road 2
Edwardsburgh/Cardinal, Ontario

DATUM Geodetic

FILE NO. PG5966

REMARKS

HOLE NO. BH 3-21

BORINGS BY CME-55 Low Clearance Drill **DATE** September 16, 2021

SOIL DESCRIPTION	STRATA PLOT	SAMPLE TYPE	SAMPLE NUMBER	SAMPLE % RECOVERY	SAMPLE N VALUE or RQD	DEPTH (m)	ELEV. (m)	Pen. Resist. Blows/0.3m ● 50 mm Dia. Cone ○ Water Content %	Monitoring Well Construction
GROUND SURFACE									
TOPSOIL 0.15		AU	1			0	81.47		
		SS	2	75	14	1	80.47		
		SS	3	83	15	2	79.47		
		SS	4	83	13	3	78.47		
		SS	5	83	12	4	77.47		
Very stiff to hard, brown **SILTY CLAY**		SS	6	83	11	5	76.47		
		SS	7	83	13	6	75.47		
- grey by 5.2m depth		SS	8	83	8	7	74.47		
		SS	9	83	14	8	73.47		
		SS	10	83	5	9	72.47		
9.60									
End of Borehole									
(GWL @ 2.83m - Sept. 23, 2021)									

Pen. Resist. Blows/0.3m: ● 50 mm Dia. Cone; ○ Water Content %

20 40 60 80

249

20 40 60 80 100

Shear Strength (kPa)

▲ Undisturbed △ Remoulded

SYMBOLS AND TERMS

SOIL DESCRIPTION

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the strength of cohesionless soils is the relative density, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm.

Relative Density	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Consistency	Undrained Shear Strength (kPa)	'N' Value
Very Soft	<12	<2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

SYMBOLS AND TERMS (continued)

SOIL DESCRIPTION (continued)

Cohesive soils can also be classified according to their “sensitivity”. The sensitivity is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil.

Terminology used for describing soil strata based upon texture, or the proportion of individual particle sizes present is provided on the Textural Soil Classification Chart at the end of this information package.

ROCK DESCRIPTION

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NXL size core. However, it can be used on smaller core sizes, such as BX, if the bulk of the fractures caused by drilling stresses (called “mechanical breaks”) are easily distinguishable from the normal in situ fractures.

RQD %	ROCK QUALITY
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

SAMPLE TYPES

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube
PS	-	Piston sample
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size AXT, BXL, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.

SYMBOLS AND TERMS (continued)

GRAIN SIZE DISTRIBUTION

MC%	-	Natural moisture content or water content of sample, %
LL	-	Liquid Limit, % (water content above which soil behaves as a liquid)
PL	-	Plastic limit, % (water content above which soil behaves plastically)
PI	-	Plasticity index, % (difference between LL and PL)
Dxx	-	Grain size which xx% of the soil, by weight, is of finer grain sizes These grain size descriptions are not used below 0.075 mm grain size
D10	-	Grain size at which 10% of the soil is finer (effective grain size)
D60	-	Grain size at which 60% of the soil is finer
Cc	-	Concavity coefficient = $(D30)^2$ / (D10 x D60)
Cu	-	Uniformity coefficient = D60 / D10

Cc and Cu are used to assess the grading of sands and gravels:
Well-graded gravels have: $1 < Cc < 3$ and $Cu > 4$
Well-graded sands have: $1 < Cc < 3$ and $Cu > 6$
Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.
Cc and Cu are not applicable for the description of soils with more than 10% silt and clay
(more than 10% finer than 0.075 mm or the #200 sieve)

CONSOLIDATION TEST

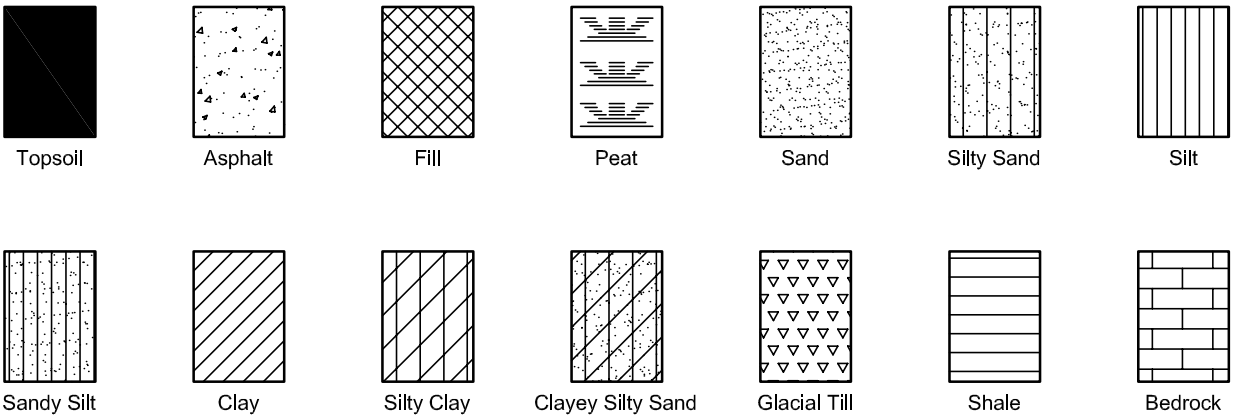
p'_o	-	Present effective overburden pressure at sample depth
p'_c	-	Preconsolidation pressure of (maximum past pressure on) sample
Ccr	-	Recompression index (in effect at pressures below p'_c)
Cc	-	Compression index (in effect at pressures above p'_c)
OC Ratio		Overconsolidaton ratio = p'_c / p'_o
Void Ratio		Initial sample void ratio = volume of voids / volume of solids
Wo	-	Initial water content (at start of consolidation test)

PERMEABILITY TEST

k	-	Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.

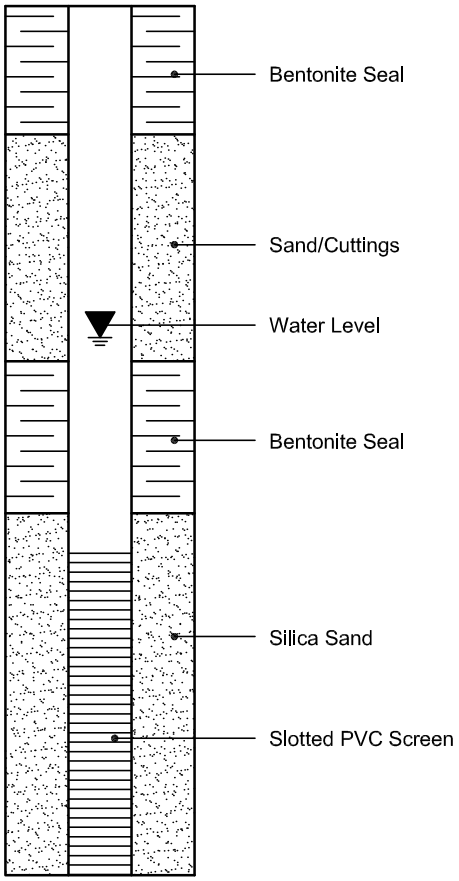
SYMBOLS AND TERMS (continued)

STRATA PLOT

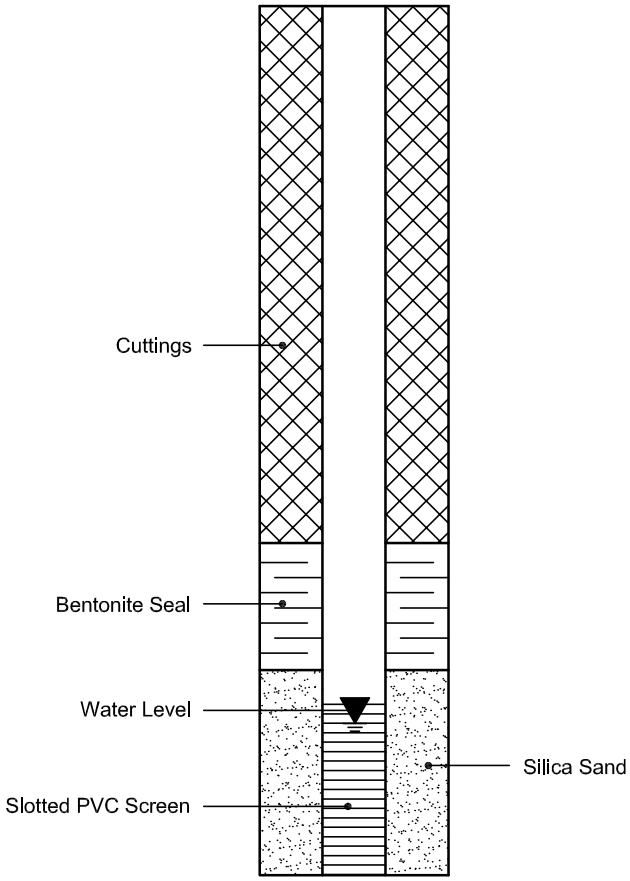


MONITORING WELL AND PIEZOMETER CONSTRUCTION

MONITORING WELL CONSTRUCTION



PIEZOMETER CONSTRUCTION



Certificate of Analysis

Report Date: 27-Sep-2021

Client: Paterson Group Consulting Engineers

Order Date: 20-Sep-2021

Client PO: 24534

Project Description: PG5966

	Client ID:	BH1-21/SS3	-	-	-
	Sample Date:	16-Sep-21 09:00	-	-	-
	Sample ID:	2139152-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	83.2	-	-	-
General Inorganics					
pH	0.05 pH Units	7.77	-	-	-
Resistivity	0.10 Ohm.m	66.5	-	-	-
Anions					
Chloride	5 ug/g dry	17	-	-	-
Sulphate	5 ug/g dry	6	-	-	-

APPENDIX 2

FIGURE 1 – KEY PLAN

FIGURES 2 AND 3 – SLOPE STABILITY ANALYSIS SECTIONS

PHOTOS 1 TO 7 – PHOTOGRAPHS FROM SITE VISIT

DRAWING PG5966-1 – TEST HOLE LOCATION PLAN

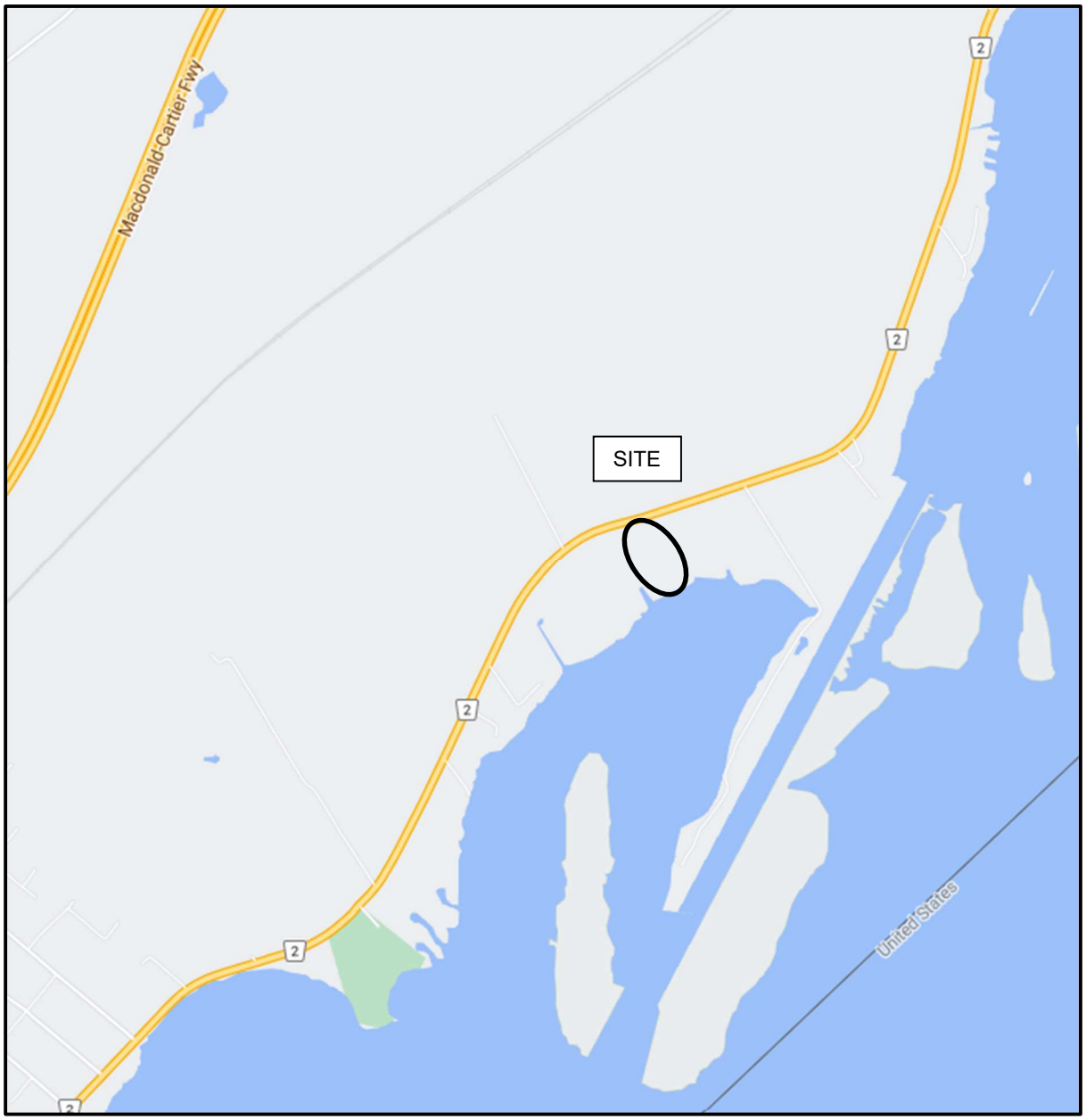


FIGURE 1

KEY PLAN

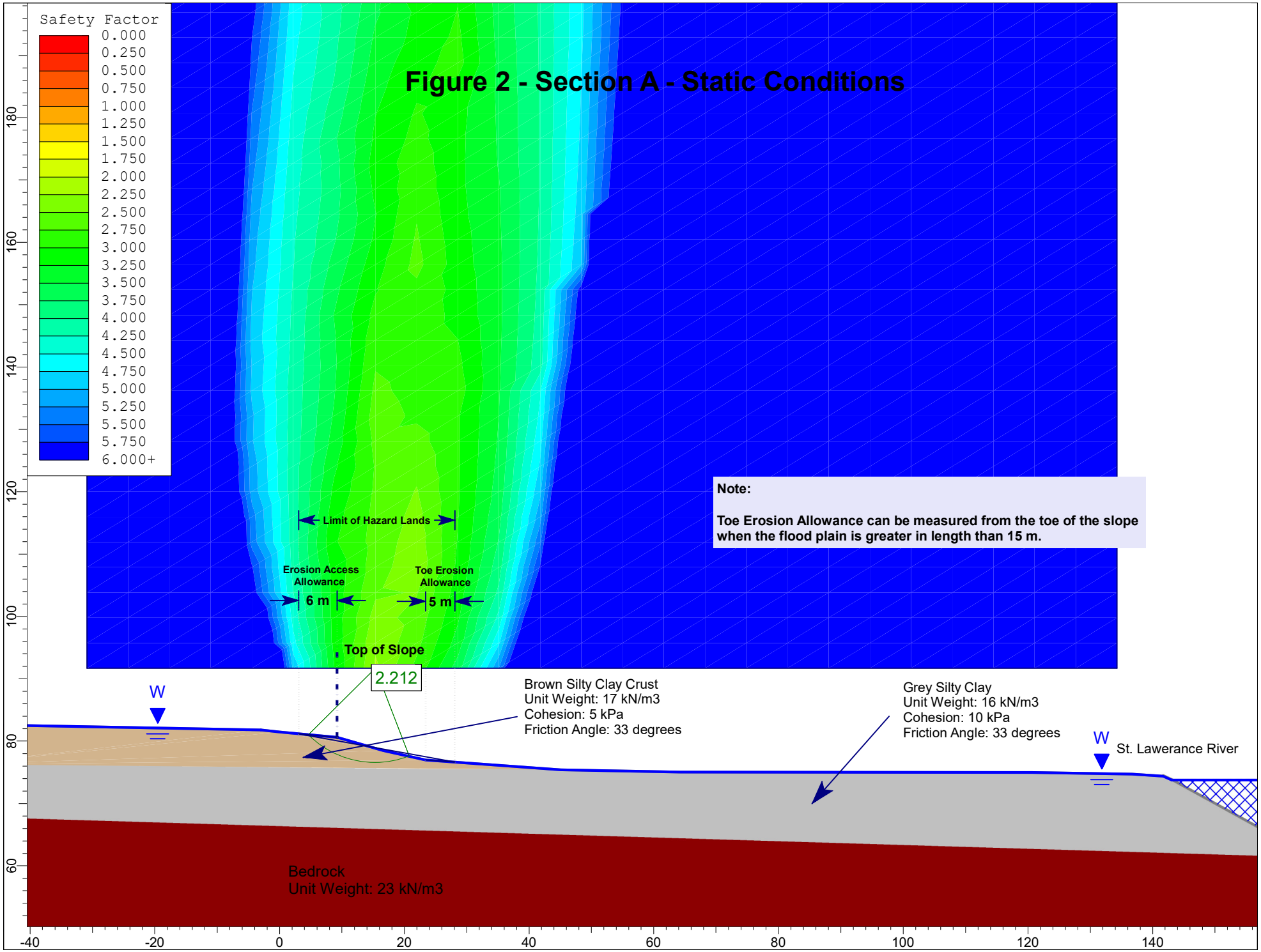


Figure 2 - Section A - Static Conditions
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
Note:
Toe Erosion Allowance can be measured from the toe of the slope when the flood plain is greater in length than 15 m.
Limit of Hazard Lands
Erosion Access Allowance
6 m
Toe Erosion Allowance
5 m
Top of Slope
2.212
W
Brown Silty Clay Crust
Unit Weight: 17 kN/m3
Cohesion: 5 kPa
Friction Angle: 33 degrees
Grey Silty Clay
Unit Weight: 16 kN/m3
Cohesion: 10 kPa
Friction Angle: 33 degrees
W
St. Lawerance River
Bedrock
Unit Weight: 23 kN/m3
180
160
140
120
100
80
60
-40
-20
0
20
40
60
80
100
120
140

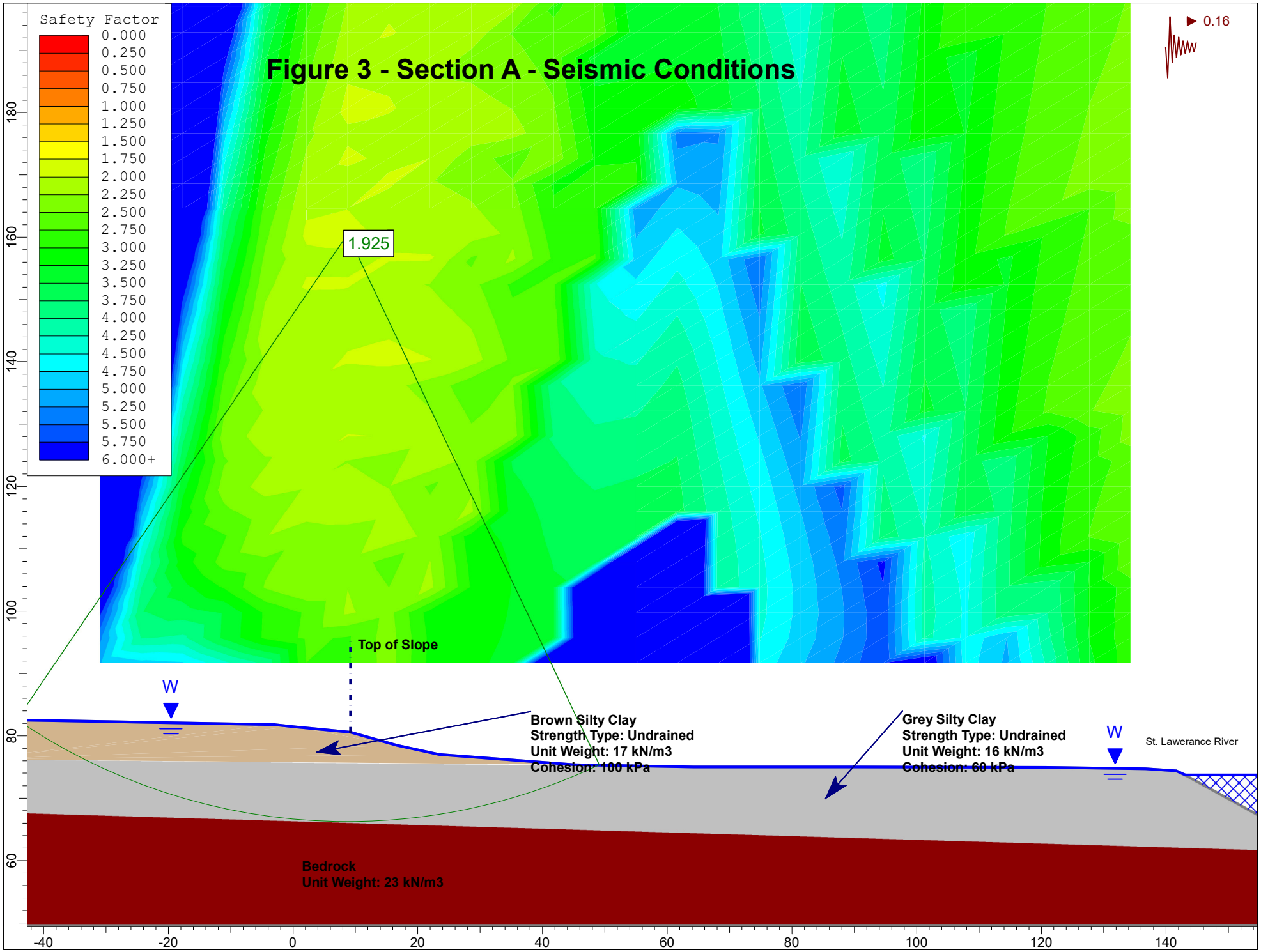


Figure 3 - Section A - Seismic Conditions
Safety Factor
0.000
0.250
0.500
0.750
1.000
1.250
1.500
1.750
2.000
2.250
2.500
2.750
3.000
3.250
3.500
3.750
4.000
4.250
4.500
4.750
5.000
5.250
5.500
5.750
6.000+
0.16
1.925
Top of Slope
W
Brown Silty Clay
Strength Type: Undrained
Unit Weight: 17 kN/m3
Cohesion: 100 kPa
Grey Silty Clay
Strength Type: Undrained
Unit Weight: 16 kN/m3
Cohesion: 60 kPa
W
St. Lawerance River
Bedrock
Unit Weight: 23 kN/m3
180
160
140
120
100
80
60
-40
-20
0
20
40
60
80
100
120
140

Photographs from Site Visit – September 16 and 23, 2021

Photo 1: Watercourse at the flood plain, photograph taken from the toe of slope looking south. The majority of the slope face and flood plain are heavily covered by vegetation.

Photo 2: Photograph taken from the flood plain showing the toe and face of slope within the central portion of the property.

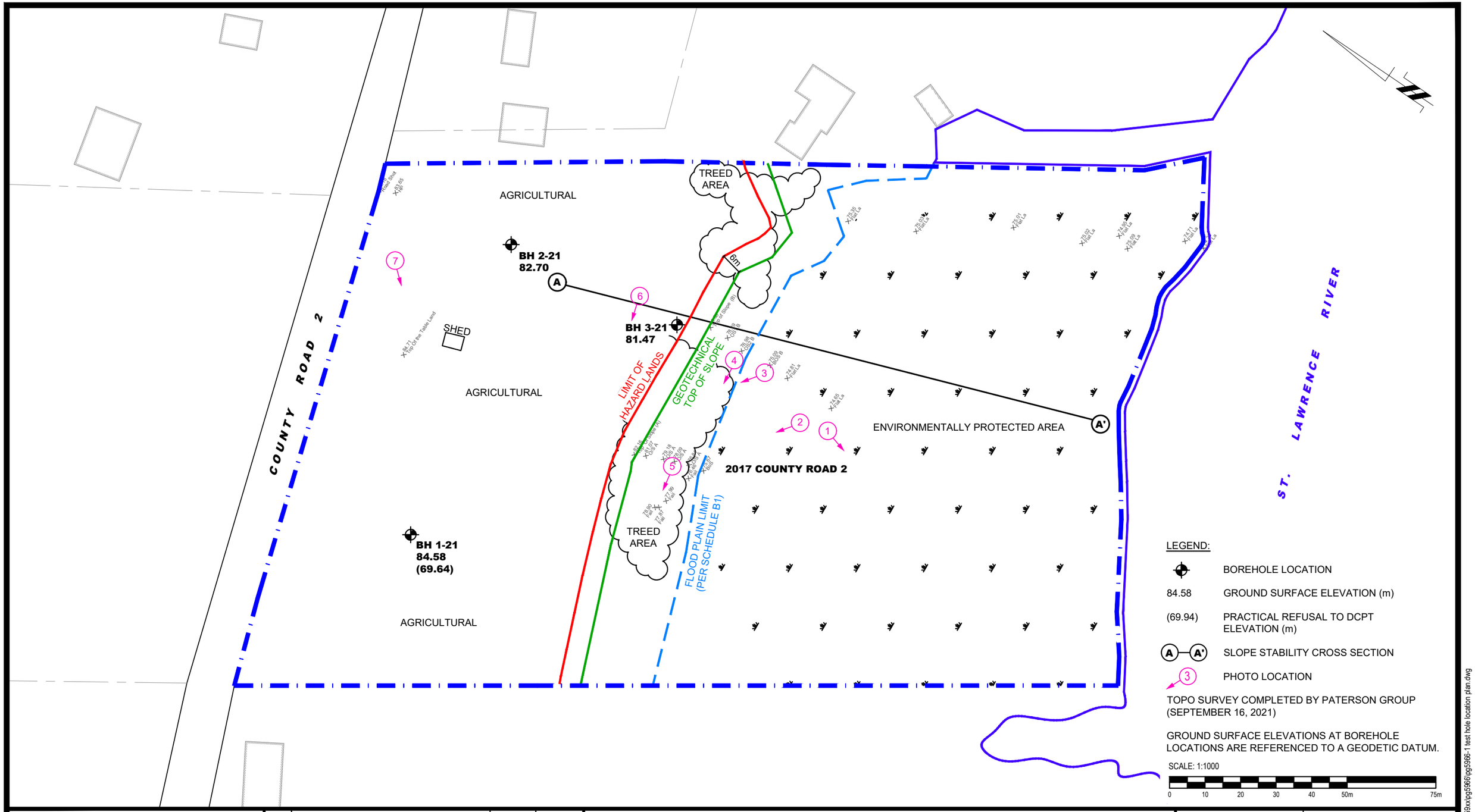
Photo 3: Photograph taken from the toe of the slope within the central portion of the site showing the face of slope. Most of the slope face and toe were observed to be densely covered by vegetation.

Photo 4: Photograph taken at the central portion of the site showing the face of the slope. Photograph taken from the side of the slope looking west.

Photo 5: Photograph taken from the face of the slope within the central portion of the site showing minor, localized slip failures.

Photo 6: Photograph taken from the top of slope, showing the top of slope on the east portion of the subject site.

Photo 7: Photograph taken from the north portion of the subject site showing the top of slope and the watercourse with respect to the subject site.



LEGEND:

- BOREHOLE LOCATION
- 84.58 GROUND SURFACE ELEVATION (m)
- (69.94) PRACTICAL REFUSAL TO DCPT ELEVATION (m)
- A—A' SLOPE STABILITY CROSS SECTION
- 3 PHOTO LOCATION

TOPO SURVEY COMPLETED BY PATERSON GROUP (SEPTEMBER 16, 2021)

GROUND SURFACE ELEVATIONS AT BOREHOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:1000

0 10 20 30 40 50m 75m

patersongroup
consulting engineers

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Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

MADISON MULDER ENTERPRISES INC.

GEOTECHNICAL INVESTIGATION & SLOPE STABILITY STUDY PROPOSED RESIDENTIAL DEVELOPMENT 2017 COUNTY ROAD 2

EDWARDSBURGH / CARDINAL, ONTARIO

Title:

TEST HOLE LOCATION PLAN

Scale: 1:1000	Date: 10/2021
Drawn by: JM	Report No.: PG5966-1
Checked by: NP	Dwg. No.: PG5966-1
Approved by: FAS	Revision No.:

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SCHEDULE “D”

ENVIRONMENTAL IMPACT STATEMENT
PREPARED BY KILGOUR AND ASSOCIATES LTD.
FEBRUARY 2021

Environmental Impact Statement for 2017 County Road 2, Edwardsburgh-Cardinal, Ontario

Final Report

February 9, 2022

Submitted To:

Madison Mulder Enterprises Inc.

KILGOUR & ASSOCIATES LTD.
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EXECUTIVE SUMMARY

This Environmental Impact Statement (EIS) was prepared by Kilgour & Associates Ltd. (KAL) in support of an application for severance of the property at 2017 County Road 2 in Edwardsburgh-Cardinal, Ontario ("the Site"). In the Township of Edwardsburgh-Cardinal, an EIS is required when development or site alteration is proposed in or adjacent to natural heritage features. The purposes of this EIS are to identify 1) natural heritage features on or adjacent to the Site, 2) potential impacts to the proposed development on those features, and 3) mitigation measures to minimize or eliminate those impacts. The requirement of an EIS for the proposed development was triggered by the potential presence of habitat for species at risk (SAR) on and/or adjacent to the Site and the presence of a Provincially Significant Wetland (PSW) along the south edge of the Site, along the St. Lawrence River.

The Site is zoned as Limited Services Residential (RLS) and Environmental Protection (EP-w), with the Johnstown Creek Marsh Complex PSW extending along the south edge of the Site along the St. Lawrence River. The proposed severance will establish two parcels, with the intent to support one single-family residence and supporting infrastructure (e.g., driveway, septic system) on each parcel. The PSW on the Site will not be subject to severance and will remain part of the retained parcel. Appropriate setbacks include 15 m from the PSW edge (as delineated by the Province) and 6 m from the geotechnical top of the slope, based on geotechnical investigations of slope stability. Across much of the Site, the geotechnical setback is situated beyond the limits of the PSW setback, resulting in a combined setback from the PSW of a minimum of 15 m at the east edge of the Site to a maximum setback of 33 m on the west side of the Site.

Proposed future development of the Site has potential to interact with 12 SAR, including five species of birds, two species of bats, three fish species, Blanding's Turtle, and Butternut (a tree species). Significant negative impacts to at-risk bird and bat species can be avoided by following appropriate vegetation clearing windows. The timing of nesting for grassland birds in the region spans April 8 to August 30 (Government of Canada, 2018); the bat roosting season extends from April to September, inclusive. Vegetation should not be cut during this period unless a qualified biologist deems that birds and bats have completed nesting and roosting for the season, respectively. The proposed severance and rezoning, and future development of the Site, is not expected to directly impact surface water or fish habitat, as appropriate setbacks and mitigation measures during development would further prevent impacts to these aquatic SAR and other fish species. Blanding's Turtles have potential to occur in the marsh on-Site, and in similar wetlands on adjacent properties and in the St. Lawrence River. However, the proposed severance and rezoning, and future development of the Site, is not expected to directly impact potential habitat areas for Blanding's Turtle. To further minimize the potential for impacts to turtles, exclusion fencing along the top of the slope is recommended during vegetation clearing and development to prevent turtles from accessing upland areas.

This EIS provides a set of mitigation measures for employment in the design and construction of the proposed development, such as the use of standard erosion and sediment control measures, specific mitigation measures to prevent impacts to SAR, and appropriate development setbacks from the PSW and steep slope on-Site. Our assessment within this report of the potential for impacts to the natural heritage system is based on the implementation of these mitigation measures. It is our professional opinion that the proposed development could proceed without significant negative impacts on natural features or their ecological functions if all mitigation measures provided within this report are followed.

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1.0 INTRODUCTION

This report is an Environmental Impact Statement (EIS) prepared by Kilgour & Associates Ltd. (KAL; Appendix A) on behalf of Annable Designs Co. Ltd. in support of a lot severance application for 2017 County Road 2 in the Township of Edwardsburgh-Cardinal, Ontario ("the Site"). The lot severance application would establish a severed parcel in the northwest corner of the Site.

In the Township of Edwardsburgh-Cardinal, severances are considered a form of development, as defined in Section 7.1 of the Official Plan (2019). An EIS is required when development or site alteration is proposed in or adjacent to natural heritage features (Township of Edwardsburgh-Cardinal, 2019). The purposes of an EIS are to:

- Identify natural heritage features on or adjacent to the Site;
- Assess potential impacts of the proposed development to existing features; and
- Recommend mitigation measures to minimize or eliminate identified impacts.

The Township requires an EIS for a property severance in advance of specific development plans to determine an appropriate development envelope, such that future development is unlikely to have significant impacts to natural heritage system elements.

Figure 1 Location of the Site

2.0 ENVIROMENTAL POLICY CONTEXT

Natural heritage policies and legislation relevant to this EIS are outlined below.

2.1 The Provincial Policy Statement, 2020

The Provincial Policy Statement (PPS) was issued under Section 3 of the *Planning Act* (Government of Ontario, 1990a). The current PPS came into effect May 1, 2020 (Government of Ontario, 2020). Natural features are afforded protections under Section 2.1 of the PPS. Protections may include maintenance, restoration, and improved function of diversity, connectivity, ecological function, and biodiversity of natural heritage systems. These protections restrict development and site alteration in significant natural areas (e.g., woodlands, wetlands, wildlife habitat) unless it can be demonstrated that there will be no negative effects on the features and ecological functions of those natural areas. Technical guidance for implementing the natural heritage policies of the PPS is found within the second edition of the *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005* (NHRM: Ministry of Natural Resources (MNR), 2010). This manual recommends the approach and technical criteria for protecting natural heritage features and areas in Ontario.

2.2 Township of Edwardsburgh-Cardinal Official Plan, 2019

The Township of Edwardsburgh-Cardinal Official Plan (2019) provides direction for future growth and is a policy framework to guide physical development within the Township for the next 20 years.

2.3 *Species at Risk Act*, 2002

The federal *Species at Risk Act* (SARA; Government of Canada, 2002) is administered by Environment and Climate Change Canada (ECCC) and provides direction to protect and ensure the survival of wildlife species in Canada. The purpose of the SARA is to prevent populations of wildlife from becoming Extirpated, Endangered, or Threatened, provide recovery Endangered or Threatened species, and to manage other species to prevent them from becoming Endangered or Threatened.

All species listed on Schedule 1 of SARA are afforded protection on federal lands. Aquatic species and species of migratory birds protected by the *Migratory Birds Convention Act* (MBCA; 1994) and listed as Endangered, Threatened, or Extirpated under Schedule 1 of SARA are protected wherever they occur in Canada, regardless of land ownership.

2.4 *Endangered Species Act*, 2007

The provincial *Endangered Species Act* (ESA; Government of Ontario, 2007) is administered by the Ministry of Environment, Conservation, and Parks (MECP) and provides protection for species at risk (SAR) and their habitat. The ESA states that it is illegal to harm the habitat of species listed as Extirpated, Endangered, and Threatened. It is also illegal to kill, harm, harass, possess, transport, buy or sell Extirpated, Endangered, and Threatened species, whether it is living or dead. Species listed as Endangered, Threatened, or Extirpated and their habitats (e.g., areas essential for breeding, rearing, feeding, hibernation, and migration) are automatically afforded legal protection under the ESA.

2.5 *Fisheries Act*, 1985

The federal *Fisheries Act* (Government of Canada, 1985) is administered by Fisheries and Oceans Canada (DFO) and provides protections to fish, fish habitat, and fisheries. Specifically, the *Fisheries Act* in its current version provides:

- Protection for all fish and fish habitat
- Prohibition against the "harmful alteration, disruption or destruction of fish habitat"
- Prohibition against causing "the death of fish by means other than fishing"

Projects with a scope that does not fall within DFO's defined standards and codes of practice require submission of a request for review to DFO.

2.6 *Migratory Birds Convention Act*, 1994

Nesting migratory birds are protected under the MBCA (Government of Canada, 1994). No work is permitted that would result in the destruction of active nests (nests with eggs or young birds) or the wounding or killing of bird species protected under the MBCA and/or associated regulations (e.g., SARA). The "incidental take" of migratory birds and the disturbance, destruction, or taking of the nest of a migratory bird is prohibited. "Incidental take" is the killing or harming of migratory birds due to actions that are not primarily focused on taking migratory birds (e.g., economic development) and no permits exist for the incidental take of migratory birds or their nest/eggs as a result of activities that are not focused on taking migratory birds. These prohibitions apply throughout the year. The Government of Canada has compiled nesting calendars that apply across Canada that can be used to greatly reduce the risk of harming/destroying active nests by ensuring works that may impact nests are performing outside of the nesting period.

2.7 *Fish and Wildlife Conservation Act*, 1997

The provincial *Fish and Wildlife Conservation Act* (FWCA; Government of Ontario, 1997) governs the hunting and trapping of a variety of wildlife including mammals, birds, reptiles, amphibians, and fish in Ontario, thereby facilitating the protection of wildlife and their habitat. The FWCA outlines the prohibition of hunting or trapping specially protected species and the requirement for provincially issued licenses for the hunting or trapping of "furbearing" or "game" animals. Examples of specifically protected animals include, for example, Southern Flying Squirrel (*Glaucomys volans*), Northern Harrier (*Circus cyaneus*), American Kestrel (*Falco sparverius*), Blue Jay (*Cyanocitta cristata*), Midland Painted Turtle (*Chrysemus picta marginata*), Northern Watersnake (*Nerodia sipedon*) and Gray Treefrog (*Hyla versicolor*). In particular, raptors that are not protected under the MBCA (including Peregrine Falcon) are protected under the FWCA.

2.8 *Conservation Authorities Act*, 1990

Conservation Authorities were created to address erosion, flooding, and drought concerns regionally by managing at the watershed level. Conservation Authorities were given the ability to regulate under Section 28 of the *Conservation Authorities Act* (Government of Ontario, 1990b). The Act provides mechanisms to regulate works and site alterations that have potential to affect erosion, flooding, land conservation, and

alterations to waterbodies within their jurisdiction. It is the obligation of all Conservation Authorities to implement Ontario Regulations 42/06 and 146/06 to 182/06 *Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses* under Section 28 of the Conservation Authorities Act for relevant works.

3.0 PROPERTY IDENTIFICATION

The Site is approximately 4.13 hectares (ha) in size and is located at 2017 County Road 2 in Edwardsburgh-Cardinal, Ontario (Concession 20, Lot 1; UTM Zone 18 465031.27 m E, 4956453.9 m N). The zoning of the property is Limited Service Residential (RLS) and Environmental Protection (EP-w; Township of Edwardsburgh-Cardinal, 2012). The Site is currently undeveloped. It is characterized as a cultural meadow, comprising unmown grasses and forbs, sloping down to the Johnstown Creek Marsh Complex, a Provincially Significant Wetland (PSW) situated along the north bank of the St. Lawrence River.

The Site is bordered by:

- County Road 2 and rural properties to the north;
- Rural properties to the east;
- Johnstown Creek Marsh Complex PSW and the St. Lawrence River to the south; and
- Rural properties to the west.

4.0 METHODOLOGY

4.1 Desktop and Background Data Review

4.1.1 Background Review

Background information was obtained from online databases and geographic information system mapping applications to review relevant information. Aerial imagery was used to identify existing features and confirm information found in the background review. Background information was obtained from available resources, which include:

- Natural Heritage Information Centre (NHIC; Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF), 2021a)
- Land Information Ontario (MNDMNRF, 2021b)
- Species at Risk in Ontario (SARO; Ministry of Environment, Conservation and Parks (MECP, 2021);
- Species at Risk Public Registry (Government of Canada, 2021);
- Aquatic Species at Risk Map (DFO, 2019);
- Bumble Bee Sightings (Bumble Bee Watch, 2021);

- Atlas of the Breeding Birds of Ontario (ABBO; Bird Studies Canada et al., 2009);
- Ontario Reptile and Amphibian Atlas (ORAA; Ontario Nature, 2019);
- eBird (Cornell Lab of Ornithology, 2021);
- iNaturalist (California Academy of Sciences and National Geographic Society, 2021);
- *Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Ontario* (Humphrey and Fotherby, 2019);
- *Recovery Strategy for the Eastern Small-footed Myotis* (Myotis leibii*) in Ontario* (Humphrey, 2017);
- Fish ON-Line (MNDMNRF, 2021c);
- *Geotechnical Investigation: Proposed Residential Development 2017 County Road 2, Edwardsburgh-Cardinal, Ontario* (Paterson Group Inc., 2021).

4.1.2 Agency Consultation

The review of existing information included a preliminary SAR screening for species listed under the federal SARA and provincial ESA. The screening identified SAR having some potential to occur on or near the Site. The screening was completed following the *Draft Client's Guide to Preliminary Screening for Species at Risk* (MECP, 2019). The results of the screening were sent to MECP on July 22, 2021, to confirm the information collected (Appendix B). A response had not yet been received at the time of writing this report, though it is considered unlikely that MECP would indicate potential for SAR beyond those already considered in this EIS.

The Site is located within the jurisdictions of the Township of Edwardsburgh-Cardinal and South Nation Conservation (SNC). Both entities provided comments on the severance proposal as part of a pre-consultation exercise prior to undertaking this EIS. Both the Township and SNC required the EIS to establish appropriate setbacks from the Johnstown Creek Marsh Complex PSW on-Site and to determine the development areas on the severed and retained parcels. The Township identified that there are considerable differences between the EP-w boundaries in the zoning bylaw and the wetland boundaries in the Township's Official Plan; therefore, a rezoning application would be required, incorporating recommended setbacks. SNC noted that the full property falls within SNC's regulated area, and in addition to developing appropriate setbacks, the EIS shall also develop mitigation measures to ensure no negative impacts to the wetland. Follow-up correspondence with SNC (i.e., correspondence during draft EIS preparation and comments on the previous version of this EIS) requested additional consideration of appropriate setbacks and the supporting rationale to be included in this EIS.

4.2 Field Survey

KAL completed a site visit on July 21, 2021, to document existing ecological conditions on the Site and to confirm the results of the background review. The site visit involved surveying the Site with a particular focus on characterizing vegetation types and extent, delineating the northern boundary of the Johnstown Creek

Marsh Complex PSW, and determining the potential for SAR or habitat suitable for SAR to be present on the Site.

The existing vegetation communities on the Site were delineated using the standard Ecological Land Classification (ELC) methods for Ontario (Lee et al., 1998). ELC provides a consistent approach to identify, describe, and map vegetation communities or physiographic features on the landscape based on dominant plant species and soil composition. ELC provides a standardized description of each vegetation community to capture the natural diversity and variability of communities within a Site. ELC allows insight into available habitat and species that may be present in each community, including potential habitat suitable for SAR. Observed vegetation communities were mapped to the most detailed level of ELC based on the dominant plant species present.

Field surveys of Site trees were conducted to specifically note Butternut trees (*Juglans cinerea*; ESA-Endangered; SARA – Endangered) if presence and/or habitat suitable for Butternut was observed. Trees and snags with visible nests, cavities, and dead leaf clusters ideal for bat roosting were also noted during the site visit.

Incidental observations of wildlife species observed on the Site were also recorded during the site visit.

5.0 RESULTS

5.1 Landforms, Soils and Geology

The Site comprises a relatively level meadow immediately south of County Road 2. Soils in the meadow area were characterized by a thick (approximately 30 cm) layer of loam, overlaying sand and clay. Geotechnical test holes showed a thin layer of topsoil underlain by silty clay, and suggested that the long-term groundwater table is approximately 4 to 5 m below the surface (Paterson Group Inc., 2021)

The meadow area slopes steeply down to a marsh along the north bank of the St. Lawrence River. Near the central portion of the Site, the slope was measured as 6 m high, with a 2H:1V slope, where H represents horizontal distance and V represents vertical rise (Paterson Group, 2021). The slope face was covered by dense vegetation. While the toe of the slope did not present signs of active erosion, localized slip failures were noted on the slope face (Paterson Group Inc., 2021). At the toe of the slope, the soil was characterized as a layer of dark, organic material to approximately 15 cm, over a layer of stiff clay with some wetland indicators (i.e., mottles and gleys).

Soils in the broader vicinity of the Site are classified as Manotick Sandy Loam, comprising sandy loam underlain by clay at depths of approximately 1 m or less (Richards et al., 1949). Internal drainage of soils in the general area tends to be variable but generally good overall (Richards et al., 1949). Lands in the vicinity are described as generally undulating to rolling (Richards et al., 1949).

5.2 Surface Water, Groundwater, and Fish Habitat

The Johnstown Creek Marsh Complex PSW is situated on the south side of the Site, extending from near the toe of the steep slope on-Site to the margin of the St. Lawrence River. The wetland area on-Site was characterized as a homogeneous cattail marsh. The St. Lawrence River is situated south of the marsh and supports a variety of fish species in the region, including Northern Pike, Rock Bass, Smallmouth Bass,

Figure 2 Existing natural features within the Site

Legend

Geotechnical Top of Slope

ELC Codes

CUM1-1

MAS2-1

(wetland boundary as delineated by KAL, 2021)

Provincially Significant Wetland

Site

N

0 50 m

Project: MLDR 1245
Created By: RH
Checked By: KM
Universal Transverse Mercator - Zone 18 (N)
Printed on: 2022-02-08

KILGOUR & Associates

Pumpkinseed, and Greater Redhorse, as well as SAR fish, such as American Eel, Cutlip Minnow and Pugnose Shiner (DFO, 2019; California Academy of Sciences and National Geographic Society, 2021; MNDMNRF, 2021a; MNDMNRF, 2021b).

5.3 Vegetation Cover (Ecological Land Classification)

The Site is characterized by an open cultural meadow dominated by exotic species and a marsh. Brush piles were noted on-Site where trees had previously been cleared. Two distinct landcovers or ELC communities (ecosites) were delineated on the Site (Figure 2).

5.3.1 Dry-Moist Old Field Meadow Type (CUM1-1)

A cultural meadow (Dry-Moist Old Field Meadow) comprised the north side of the Site, extending from County Road 2 downslope to the wetland and St. Lawrence River. The meadow at the top of the slope was dominated by Lamb's-quarters (*Chenopodium album*), Prickly Lettuce (*Lactuca serriola*), and Horseweed (*Conyza canadensis*), with occasional Canada Goldenrod (*Solidago canadensis*), Curly Dock (*Rumex crispus*) and Smooth Brome (*Bromus inermis*) (Figure 3). The relatively steep slope was characterized as a continuation of cultural meadow, with increased shrub cover, comprising predominantly Staghorn Sumac (*Rhus typhina*). The slope supported a variety of native and exotic species, including Common Evening-primrose (*Oenothera biennis*), Canada Goldenrod, Smooth Brome and Virginia Creeper (*Parthenocissus quinquefolia*) (Figure 4). A small shed exists towards the centre of the meadow.

Figure 3 Cultural meadow, dominated by Lamb's-quarters

Figure 4 Steep south-facing slope down to the Johnstown Creek Marsh Complex and St. Lawrence River

5.3.2 Cattail Mineral Shallow Marsh Type (MAS2-1)

The portion of the Johnstown Creek Marsh Complex PSW that occurs on the Site was characterized as a homogeneous marsh, dominated by Common Cattail (*Typha latifolia*) (Figure 5). The margin was relatively degraded and dominated by invasive species, such as Hedge Bindweed (*Calystegia sepium*). Other transitional edge species included Red-osier Dogwood (*Cornus sericea*), Spotted Touch-me-not (*Impatiens capensis*), Bluejoint Reedgrass (*Calamagrostis canadensis*), Purple Loosestrife (*Lythrum salicaria*) and Water Smartweed (*Persicaria amphibia*) (Figure 6). The field delineation of the boundary of this wetland was overall similar to that mapped by the Province, with the Provincial boundary representing a more conservative delineation relative to conditions observed in the field (MNDMNRF, 2021a; Figure 2).

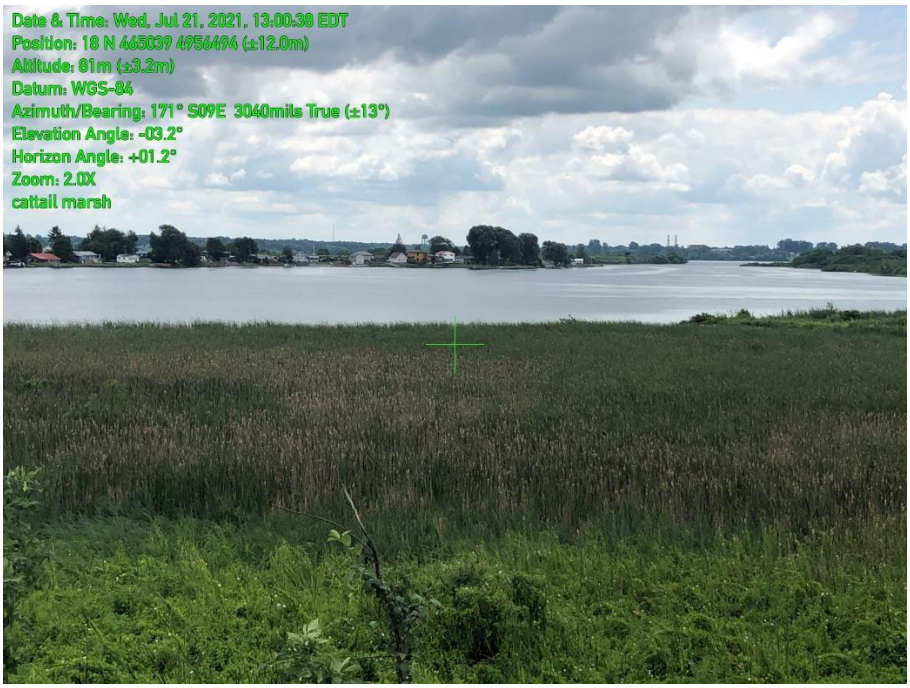

Figure 5 Provincially Significant Wetland, dominated by Common Cattail

Figure 6 Transitional edge of Marsh community, dominated by exotic species

5.4 Incidental Wildlife Observations

Wildlife species incidentally observed during the Site visit on July 21, 2021 are shown in Table 1.

Table 1 List of wildlife species incidentally observed on the Site

Common Name	Scientific Name
American Crow	*Corvus brachyrhynchos*
American Goldfinch	*Spinus tristis*
American Robin	*Turdus migratorius*
[1]Bald Eagle	*Haliaeetus leucocephalus*
[2]Bank Swallow	*Riparia riparia*
[2]Barn Swallow	*Hirundo rustica*
Caspian Tern	*Hydroprogne caspia*
Cedar Waxwing	*Bombycilla cedrorum*
Chipping Sparrow	*Spizella passerina*
Common Yellowthroat	*Geothlypis trichas*
Gray Catbird	*Dumetella carolinensis*
Great Blue Heron	*Ardea herodias*
Great-crested Flycatcher	*Myiarchus crinitus*
House Wren	*Troglodytes aedon*
Killdeer	*Charadrius vociferus*
Mourning Dove	*Zenaida macroura*
Osprey	*Pandion haliaetus*
Red-winged Blackbird	*Agelaius phoenicus*
Ring-billed Gull	*Larus delawarensis*
Rooster	*Gallus gallus domesticus*
Ruby-throated Hummingbird	*Archilochus colubris*
Song Sparrow	*Melospiza melodia*
Turkey Vulture	*Cathartes aura*
White-breasted Nuthatch	*Sitta carolinensis*

[1]Listed as Special Concern under the *Endangered Species Act*
[2]Listed as Threatened under the *Endangered Species Act*

5.5 Species at Risk

An assessment of species listed under SARA and ESA was completed to identify species having some potential to occur on or near the Site, including Extirpated, Endangered, Threatened and Special Concern species. Species listed as Extirpated, Endangered, and Threatened are afforded species and habitat protection under ESA on non-federal lands.

The SAR assessment evaluated whether the Site would or could provide suitable habitat for SAR and whether they have potential to interact with future development of the Site under the proposed severance. An assessment of the potential for SAR and their potential habitat was completed based on the results of the field visit, ELC, and a desktop review that considered known species ranges, historic observation records, and

preferred habitat requirements of these species (Appendix C). A total of 28 SAR were identified with some potential to occur in the broader vicinity of the Site (Appendix C). Twenty-one SAR had a moderate to high potential to occur on the subject Site and/or interact with the project (Table 2). Those with a moderate potential are known to occur within 10 km of the Site, and suitable habitat for the species exists on the Site. SAR with a high potential are those that are known to occur on or adjacent to the Site (i.e., were observed by KAL during field surveys), with suitable habitat for the species on the Site. All other SAR with potential to occur in the region based on their documented ranges were assessed as having a low, negligible, or no potential to occur on the Site due to lack of occurrence records and/or suitable habitat (Appendix C).

Table 2 Species at risk with moderate or high potential to interact with the project

Common Name	Taxonomic Name	Status under *Endangered Species Act*	Status under *Species at Risk Act* (Schedule 1)	Potential to Interact with Development of the Site
Birds				
Bald Eagle	*Haliaeetus leucocephalus*	Special Concern	Not at Risk	High
Bank Swallow	*Riparia riparia*	Threatened	Threatened	High
Barn Swallow	*Hirundo rustica*	Threatened	Threatened	High
Bobolink	*Dolichonyx oryzivorus*	Threatened	Threatened	Moderate
Common Nighthawk	*Chordeiles minor*	Special Concern	Threatened	Moderate
Eastern Meadowlark	*Sturnella magna*	Threatened	Threatened	Moderate
Henslow's Sparrow	*Ammodramus henslowii*	Endangered	Endangered	Moderate
Mammals				
Little Brown Myotis	*Myotis lucifugus*	Endangered	Endangered	Moderate
Tri-coloured Bat	*Perimyotis subflavus*	Endangered	Endangered	Moderate
Amphibians				
Western Chorus Frog	*Pseudacris triseriata*	No status	Threatened (Great Lakes-St. Lawrence population)	Moderate
Reptiles				

Common Name	Taxonomic Name	Status under *Endangered Species Act*	Status under *Species at Risk Act* (Schedule 1)	Potential to Interact with Development of the Site
Blanding's Turtle	*Emydoidea blandingii*	Threatened	Threatened	Moderate
Eastern Musk Turtle	*Sternotherus odoratus*	Special Concern	Special Concern	Moderate
Midland Painted Turtle	*Chrysemus picta marginata*	No Status	Special Concern	Moderate
Milksnake	*Lampropeltis triangulum*	Not Listed	Special Concern	Moderate
Northern Map Turtle	*Graptemys geographica*	Special Concern	Special Concern	Moderate
Snapping Turtle	*Chelydra serpentina*	Special Concern	Special Concern	Moderate
Fish				
American Eel	*Anguilla rostrata*	Endangered	Endangered	Moderate
Cutlip Minnow	*Exoglossum maxillingua*	Threatened	Special Concern	Moderate
Pugnose Shiner	*Notropis anogenus*	Threatened	Threatened	Moderate
Insects				
Yellow-banded Bumble Bee	*Bombus terricola*	Special Concern	Special Concern	Moderate
Vascular Plants				
Butternut	*Juglans cinerea*	Endangered	Endangered	Moderate

SAR presented in Table 2 that are not listed or are listed as Special Concern under the ESA are not considered further as SAR in this report because they do not receive individual or habitat protection under the ESA (whereas Threatened and Endangered species do). However, individuals of these species are protected under other regulations addressing wildlife conservation generally, such as the FWCA, the MBCA, and the PPS. In addition, species listed as Special Concern under the ESA may receive habitat protection if they are observed in habitats that meet the criteria for designation as Significant Wildlife Habitat for Special Concern Species (MNRF, 2015a).

6.0 DESCRIPTION OF THE PROPOSED PROJECT

The proposed project will sever a parcel from the northwest corner of the Site, extending from County Road 2 to the boundary of the EP-w zone (PSW boundary; Figure 7). The severed parcel will be 1.03 ha, while the retained parcel will comprise the remaining 2.40 ha. Rezoning is proposed for both the retained and severed lots, with proposed new zoning of Rural (RU) for the upland area of both parcels. Development of one single-family residence is proposed for each parcel. Following guidance from SNC, no shoreline infrastructure (dock, pathways, hard or soft landscaping) will be considered as part of future development. Despite the weedy, degraded conditions of the slope and wetland edge, no improvements are proposed, as additional disturbance in the area may result in increased erosion and slope stability considerations.

As part of the Site rezoning, the EP-w zone boundary is proposed to be consistent with the wetland boundary. Development of both parcels will adhere to a 15 m setback from the PSW boundary (or greater in some places, see below), as mapped by the Province (Figure 7). Note that the PSW boundary as mapped by the Province is extends slightly more to the north than the boundary determined by KAL in the field (Figure 1), the latter of which is more accurate; however, based on guidance from the Client and Township, the Province's PSW will be followed when determining appropriate development setbacks. The Province's boundary is more conservative, and basing a 15 m setback from this boundary is anticipated to be sufficient to accommodate runoff nutrient attenuation, provided the slope remains well-vegetated and undisturbed. The steep slope that extends across the Site also provides a physical barrier between the PSW and the remainder of the Site, potentially reducing interaction between species such as turtles and future development. The majority of the Site was characterized as a dry-moist old field meadow and supported widespread exotic species, suggesting the Site is not prime wildlife habitat. The north edge of the wetland was field-delineated as part of the Site visit (July 21, 2021; Figure 1); at the time of the Site visit, the wetland edge was characterized by an extensive area of dry cattail marsh, with a fringe of non-native, weedy species near the toe of the slope. The field delineated boundary fell south of the Provincial delineation, suggesting that establishing a setback from the Province's PSW boundary represents a conservative buffer between future development and the wetland habitats, particularly open water areas.

Based on a slope stability assessment, a setback of 6 m is also recommended from the top of the steep slope on-Site (Paterson Group, 2021). Across much of the Site, the geotechnical setback is situated beyond the limits of the PSW setback, resulting in a combined setback from the PSW of a minimum of 15 m at the east edge of the Site to a maximum setback of 33 m on the west side of the Site. Consistent with the requirements of the Township of Edwardsburgh-Cardinal, the development envelope will also encompass a 6 m setback from the property lines and a 20 m setback from County Road 2.

7.0 IMPACT ASSESSMENT AND MITIGATION

7.1 Surface Water, Groundwater, and Fish Habitat

The proposed severance, rezoning, and future development of the Site are not expected to directly impact surface water, groundwater, or fish habitat. The entire Johnstown Creek Marsh Complex PSW area on the Site will not be subject to severance or development and will remain as part of the retained parcel. As part of the rezoning application, the EP-w zone is proposed to be consistent with the Provincial wetland boundary. As the Provincial boundary represents a more conservative wetland delineation than the field exercise based

on current conditions, the 15 m setback from the PSW will be established using the Provincial boundary. A 6 m setback from the top of the slope on-Site will also be followed, based on geotechnical considerations. Therefore, the slope itself will not be developed, and no fill will be placed on the slope face. Following geotechnical recommendations, no vegetation clearing is to take place on the slope face itself, as the existing vegetation cover on the slope provides additional stability to the slope and reduces surficial erosion due to surface water runoff.

The full property falls within South Nation Conservation's regulated area adjacent to a wetland; therefore, any development, including grading, placement of fill and proposed structures will require a permit, and further restrictions may apply.

The project should implement standard erosion and sediment control (ESC) measures to limit impacts to the Johnstown Creek Marsh Complex PSW adjacent to the Site and other surface water features. An ESC plan should be developed to the satisfaction of South Nation Conservation and is anticipated to include:

- A multi-faceted approach to provide ESC.
- Silt fence paired with sturdy construction fence along the project perimeter (i.e., along the setback from the top of the slope and the wetland). This fencing can also act as a wildlife exclusion measure for smaller and less mobile animals that may occupy the adjacent wetland habitat such as amphibians and turtles.
- Regularly inspecting and maintaining the ESC measures during all phases of the project.

Figure 7 Proposed severance plan

Legend

- Development Envelope
- Severed Lands
- Geotechnical Top of Slope
- Limit of Hazard Lands
- 15m Setback from wetland edge
- Floodplain Limit
- Site

N

0 50 m

Project: MLDR 1245
Created By: RH
Checked By: KM
Universal Transverse Mercator - Zone 18 (N)
Printed on: 2022-02-01

KILGOUR & Associates

- Retention of existing vegetation and stabilization of exposed soils with native vegetation where possible.
- Keeping the ESC measures in place until all disturbed ground has been permanently stabilized.
- Using biodegradable erosion and sediment control materials where possible and removing all exposed non-biodegradable erosion and sediment control materials once the Site is stabilized.
- Limiting the duration of soil exposure and phasing project works.
- Limiting the size of disturbed areas by minimizing nonessential clearing and grading.
- Minimizing the total slope length and the gradient of disturbed areas.
- Refueling of machinery should occur >30 m from surface water features and all machinery will remain on the project-side of silt and construction fence.
- Maintaining overland sheet flow and avoiding concentrated flows.
- Storing/stockpiling materials >30 m away from the wetland and other surface water features.
- Regularly inspecting the PSW for signs of sedimentation during all phases of work and taking corrective action if required.
- Developing a response plan to be implemented immediately in the event of a spill of a deleterious substance.
- Keeping an emergency spill kit on the Site.
- Stopping work and containing deleterious substances to prevent dispersal.
- Reporting any spills of sewage, oil, fuel, or other deleterious material whether near or directly into a surface water feature.

7.2 Vegetation

No rare or unique vegetation communities or at-risk vegetation species were observed on the Site. Trees that had been observed on aerial imagery had been cleared prior to the 2021 growing season; however, trees exist on adjacent properties along the property lines to the east and west. Additional tree clearing to accommodate future development is not expected. If trees are to be removed to support future development of the proposed property, we recommend the following general protection measures during construction to limit impacts to trees:

- Tree removal on the Site should be limited to that which is necessary to accommodate construction.
- To minimize impacts to retained trees during development:

- Erect a fence beyond the critical root zone (CRZ; i.e., 10x the diameter at breast height) of trees. The fence should be highly visible (orange construction fence) and paired with erosion control fencing. Pruning of branches of branches is recommended in areas of potential conflict with construction equipment;
- Do not place any material or equipment within the CRZ of trees;
- Do not attach any signs, notices, or posters to any trees;
- Do not raise or lower the existing grade within the CRZ of trees without approval;
- Tunnel or bore when digging within the CRZ of a tree;
- Do not damage the root system, trunk, or branches of any remaining trees; and
- Ensure that exhaust fumes from all equipment are not directed toward any tree's canopy.

Both the steep slope and the wetland margin on the Site were characterized as degraded and dominated by weedy, exotic species. We recommend that to the extent feasible, plantings of native vegetation be added to the wetland margin and the slope to re-naturalize the area and potentially improve slope stability.

7.3 Species at Risk

Twelve SAR ranked as Threatened or Endangered under the ESA have a moderate to high potential to interact with future development on the Site (i.e., may be present during development), based on previous observation records and the presence of potentially suitable habitat. The purpose of the site visit was to confirm the presence of potential habitat for SAR; during the site visit, three SAR were observed, two of which are listed as Threatened under the ESA (Bank Swallow and Barn Swallow).

The general wildlife mitigation measures provided in Section 7.4 below do not provide species-specific mitigation, but they do generally protect the SAR assessed as having a moderate to high potential to interact with future development. Additional mitigation to address specific SAR that may occur on the Site includes the following measures.

Bank Swallows were observed foraging over open meadow habitat on the Site on July 21, 2021. Bank Swallows nest in vertical or eroding silt or sand banks, sand pit walls or human made sand piles; such features were not observed on-Site. In contrast, the slope along the south side of the Site is well-vegetated and is dominated by a layer of organic soil and therefore is not suitable for nesting. Development of the retained and severed parcels as single-family residences would retain open foraging habitat on and near the Site for Bank Swallow, including open areas over the adjacent Johnstown Creek Marsh Complex and the St. Lawrence River. As such, the project is not expected to have significant negative impacts on Bank Swallow.

Barn Swallows were also observed foraging over the open meadow on the Site. They could use the shed on-Site, as well as other suitable buildings on adjacent properties, for nesting. Barn Swallow nests and the surrounding 200 m are considered protected habitat (MECP, 2018). Removing or impacting a Barn Swallow nest would require notifying the MECP and construction of compensatory nesting structures. No nests were observed on or in the shed on the Site. However, to ensure no impacts to Barn Swallow, exclusion netting

should be installed on the interior of the shed outside of the breeding bird period (between April 8 and August 28; Government of Canada, 2018) to prevent Barn Swallow nesting (MNRF, 2017). The netting should be inspected by a qualified biologist to ensure its functionality. Alternatively, a qualified biologist should perform a survey of the shed within five days prior to its removal. If a barn swallow nest is detected, the rules set out under the ESA for altering a structure that is habitat for Barn Swallow must be followed (MECP, 2021b). This includes the following:

- Register the work and the affected species (i.e., Barn Swallow) with MECP before the work begins
- Minimize the effects of development activities on Barn Swallow
- Create, maintain, and monitor new habitat for Barn Swallow
- Prepare and maintain records that relate to the activity and the habitat.

Similar to Bank Swallow, development of the retained and severed parcels as single-family residences would retain open foraging habitat on and near the Site for Barn Swallow, including open areas over the adjacent Johnstown Creek Marsh Complex and the St. Lawrence River. As such, the project is not expected to have significant negative impacts on Barn Swallow.

Bobolink, Eastern Meadowlark and Henslow's Sparrow are typically found in grasslands and hayfields, where they feed on insects and seeds near the ground. There is some potential for these species to occur in the cultural meadow area on-Site when it is left un-mowed, though none were observed during the field visit. The meadow is considered unlikely to become habitat for these species if it is continuously maintained. Note, however, that the MBCA protects the nests and young of migratory breeding birds. The timing of nesting for grassland birds in the region spans April 8 to August 28 (Government of Canada, 2018). Vegetation should not be cut during this period unless a qualified biologist deems that birds have completed nesting for the season.

Little Brown Myotis and Tri-coloured Bat may use the open cultural meadow as foraging habitat and may roost in the existing shed on-Site as well as in trees on adjacent properties. To prevent impacts to bats, no clearing of trees on-Site should take place between April to September (inclusive) without a qualified biologist first confirming the absence of bats (MNRF, 2015b).

Blanding's Turtle have potential to occur in the marsh on-Site, and in similar wetlands on adjacent properties and in the St. Lawrence River. Potential incursions into protected habitat would require notifying the MECP and securing necessary permits and approvals. However, no such incursions are proposed under the current severance. The proposed severance and rezoning, and future development of the Site, is not expected to directly impact surface water or the wetland area (i.e., potential habitat areas for Blanding's Turtle). As part of the rezoning application, the EP-w zone is proposed to be consistent with the wetland boundary delineated in the field, and both the retained and severed parcels will include a 15 m setback from this wetland boundary. To further minimize the potential for impacts to turtles, installation of exclusion fencing along the top of the slope is proposed prior to vegetation clearing to prevent turtles from accessing upland areas during site development. The installation of silt fence in this location as recommended in Section 7.1 above would also function as a turtle exclusion fence.

American Eel, Cutlip Minnow and Pugnose Shiner have potential to occur in the St. Lawrence River in the vicinity of the Site. The proposed severance and rezoning, and future development of the Site, is not expected to directly impact surface water or fish habitat. The mitigation measures provided in Section 7.1 combined with a 15 m setback from the PSW would prevent impacts to these aquatic SAR and other fish species found in the St. Lawrence River.

As an Endangered Species, both individual Butternut trees and their habitats are protected. If detected, a Butternut Health Assessment (BHA) is required to assess the health of the tree and explore implications for development in the area. The site visit conducted by KAL on July 21, 2021 included a search for Butternut trees, and none were detected on-Site.

7.4 General Wildlife Mitigation

The following mitigation measures shall be implemented during future construction to generally protect wildlife:

- Areas shall not be altered or cleared during sensitive times of year for wildlife (breeding season; early spring to early summer) unless mitigation measures are implemented and/or the habitat has been inspected by a qualified Biologist.
    - Clearing of trees or vegetation should not take place April 1 to September 30 inclusive unless a qualified Biologist has determined that no bird nesting or bat roosting is occurring within five days prior to the clearing.
        - The MBCA protects the nests and young of migratory breeding birds in Canada. The timing of nesting for birds in the area spans April 8 to August 30 (Government of Canada, 2018).
        - The breeding and roosting period for bats is recognized as April 1 to September 30 (MNRF, 2015b).
- Install erosion control fence and inspect/maintain it periodically and after each rain event to ensure their integrity and continued function.
- Check the entire work site for wildlife prior to beginning work each day.
- Do not harm, feed, or unnecessarily harass wildlife.
- Manage waste to prevent attracting wildlife to the work site. Effective mitigation measures include litter prevention and keeping all trash secured in wildlife-proof containers and promptly removing it from the work site, especially during warm weather.
- Drive slowly and avoid hitting wildlife.
- Manage stockpiles and equipment at the work site to prevent wildlife from being attracted to artificial habitat. Cover and contain any piles of soil, fill, brush, rocks and other loose materials and

cap ends of pipes where necessary to keep wildlife out. Ensure that trailers, bins, boxes, and vacant buildings are secured at the end of each workday to prevent access by wildlife.

8.0 CONCLUSION

Based on our professional opinion, we do not expect severance and potential future development of the newly severed parcel to result in negative impacts to existing natural features or ecological functions if the recommended mitigation measures are implemented.

9.0 CLOSURE

This report was prepared for exclusive use by Madison Mulder Enterprises Inc. and may be distributed only by Madison Mulder Enterprises Inc. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.

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Senior Biologist

Katherine Black, MSc
Senior Review

Bruce Kilgour, PhD
Project Director

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Appendix A Qualifications of Report Authors

Kesia Miyashita, MSc

Ms. Miyashita has over six years of experience in environmental consulting and more than ten seasons of field experience in ecosystems in Alberta and British Columbia. During her career in environmental consulting, Ms. Miyashita has completed environmental assessments for a variety of major infrastructure projects and urban developments. Her expertise is in vascular and non-vascular plant ecology, with experience in both terrestrial and wetland ecosystems; she has performed vegetation community inventories, rare plant surveys, and weed surveys in a variety of natural environments, including native forest, urban nature preserves, grasslands, and wetlands. Ms. Miyashita joined Kilgour & Associates Ltd. in May of 2021 and has since contributed to numerous Environmental Impact Statements and tree conservation reports, delineation of natural heritage features and SAR surveys. Ms. Miyashita is a Professional Biologist with the Alberta Society of Professional Biologists and a Qualified Wetland Science Practitioner in the province of Alberta.

Katherine Black, MSc

Ms. Black is a Biologist with over six years of comprehensive field, laboratory, and report-writing experience in biology. She has worked in a variety of research settings, including technical laboratories, greenhouses, construction sites, and remote fly-in field sites. Ms. Black's background is predominantly in terrestrial ecology; she has performed vegetation and wildlife surveys in a variety of natural and disturbed environments, including wetland, tundra, field, and forest environments. She has also worked on projects in aquatic ecology, ecohydrology, and biostatistics. Ms. Black joined Kilgour & Associates Ltd. in January of 2019 and has since contributed to numerous Environmental Impact Statements, Tree Conservation Reports, Headwater Drainage Feature Assessments, Integrated Environmental Reviews, Constraints Analyses, Existing Conditions Reports, delineation of natural heritage features, SAR surveys and monitoring, erosion and sediment control inspections, water quality monitoring, fish dissections, and sorting and identification of aquatic macroinvertebrates. Ms. Black is certified in the Ontario Wetland Evaluation System protocol, Ontario Reptile and Amphibian Survey methods, and Butternut Health Assessment (BHA #731).

Bruce Kilgour, PhD

Dr. Kilgour has led Kilgour & Associates Ltd. since 2008. Over his 30+ year career he has applied his knowledge and experience of natural environment systems to the full life-cycle of industrial and government projects. He is experienced in the delivery of Environmental Impact Statements in support of land developments (housing, land severance, landfill expansion). He is also experienced in Environmental Assessments under Municipal Class and Federal processes in support of proposed infrastructure and industrial facilities including dams, hydro-electric facilities, piers, roads, and other linear corridors. As part of those EIS/EA processes, he has procured, on behalf of proponents, required environmental permits and approvals, often involving the development of environmental mitigation, restoration and/or compensation strategies related to species at risk (SAR) and fish and fish habitat (i.e., HADD).

Appendix B MECP Species at Risk Correspondence

July 22, 2021 **Our File: MULD 1245**

Carolyn Hann
Management Biologist
Permissions and Compliance Section
Ontario Ministry of Environment, Conservation and Parks
10-1 Campus Drive
Kemptville, ON
K0G 1J0

Dear Ms. Hann;

Subject: Species at risk information request for 2017 County Road 2, Township of Edwardsburgh-Cardinal

1.0 INTRODUCTION

This letter provided by Kilgour & Associates Ltd. (KAL) is a request for information relating to the potential presence of species at risk (SAR) for a proposed severance located at 2017 County Road 2 in Edwardsburgh-Cardinal, Ontario (i.e., "the site"). This letter includes a desktop review of SAR occurrence records using the resources and guidelines outlined in the draft document, *Client's Guide to Preliminary Screening for Species at Risk* (Ministry of the Environment, Conservation and Parks (MECP), 2019). We (KAL) are seeking confirmation from MECP regarding the list of SAR that may occur on or near the project site. Potential impacts to SAR will be assessed via an Environmental Impact Study that we will be preparing for our client. If impacts to SAR are anticipated, we will recommend that our client notifies MECP and engages in consultation to further consider potential impacts, avoidance and/or mitigation measures, and whether the project may require an authorization under the *Endangered Species Act* (ESA).

1.1 Site Overview

The site is approximately 4.13 ha in size and is located at 2017 County Road 2 in Edwardsburgh-Cardinal, ON (Figure 1). The zoning of the property is Limited Service Residential (RLS) and Environmental Protection (EP-w). The site is currently undeveloped. It is characterized as a cultural meadow, comprising unmown grasses and forbs, sloping down to a provincially significant wetland (PSW) area situated along the north bank of the St. Lawrence River. The severance application focuses on the area immediately south of County Road 2 and severance will not include the PSW.

The site is bordered by:

- County Road 2 and rural properties to the north;
- Rural properties to the east;
- Provincially Significant Wetland and the St. Lawrence River to the south; and
- rural properties to the west.

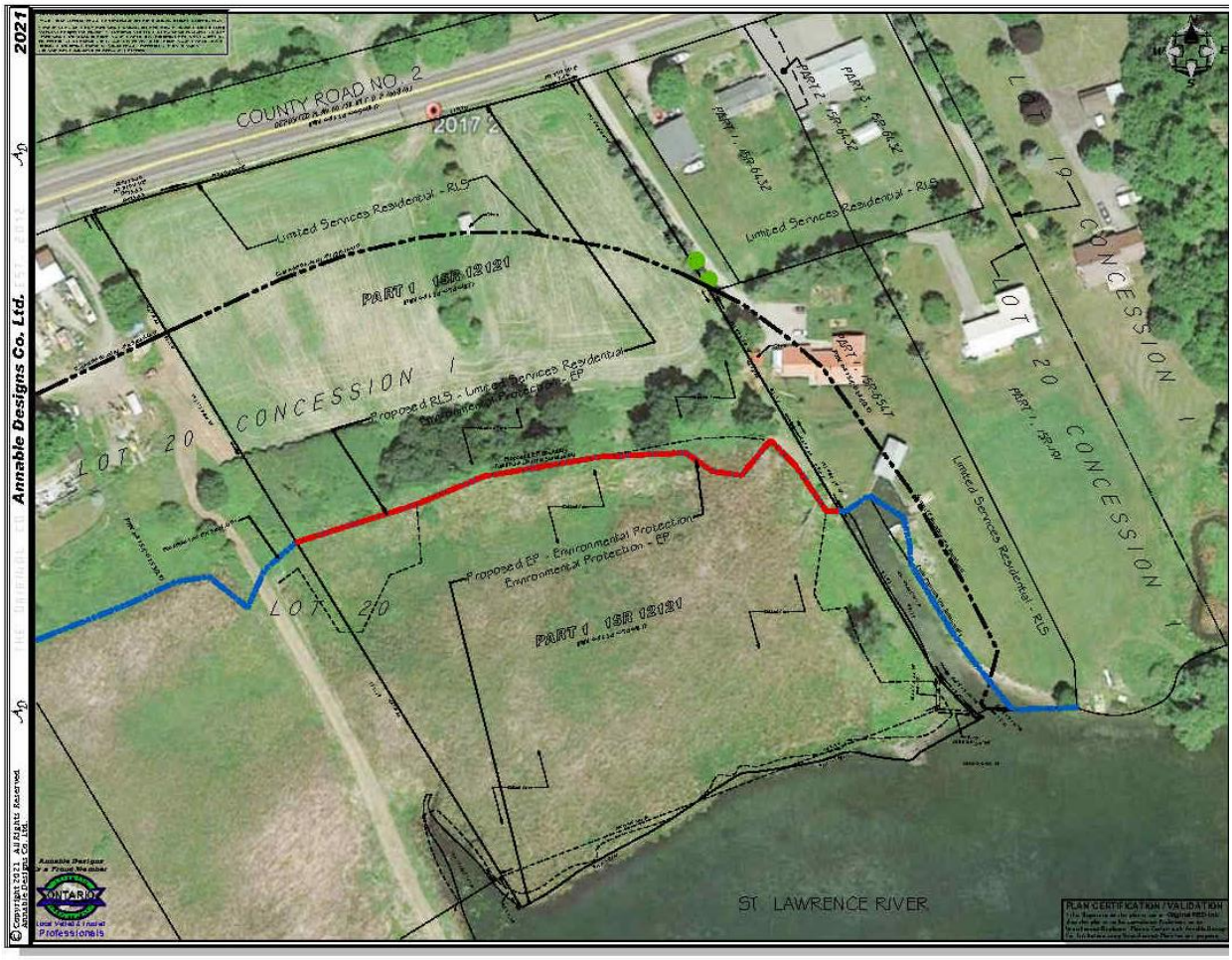

Figure 1 Location and existing conditions of the site

2.0 SPECIES AT RISK RESOURCES REVIEW AND RESULTS

We reviewed the following online resources to determine SAR occurrences on and/or nearby the site.

- Aquatic Species at Risk Map (DFO, 2019)

- Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF)
    - Natural Heritage Information Centre (MNRF, 2021a)
    - Land Information Ontario Provincially Tracked Species Grid Detail (MNRF, 2021b)
    - *Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Ontario* (Humphrey & Fotherby, 2019)
    - *Recovery Strategy for the Eastern Small-footed Myotis (*Myotis leibii*) in Ontario* (Humphrey, 2017)
- Species at Risk in Ontario (MECP, 2021)
- Species at Risk Public Registry (Government of Canada, 2021)
- Atlas of the Breeding Birds of Ontario 2001-2005 (Bird Studies Canada et al., 2009)
- Herp Atlas (Ontario Nature, 2019)
- iNaturalist (California Academy of Sciences and National Geographic Society, 2021)
- eBird (Cornell Lab of Ornithology, 2021)
- Bumble Bee Sightings Map (Bumble Bee Watch, 2021)

The results of the SAR desktop review are indicated in Table 1. Note that occurrence data in Table 1 from the Natural Heritage Information Centre (MNRF, 2021a), Land Information Ontario (MNRF, 2021b), eBird (Cornell Lab of Ornithology, 2021), and iNaturalist (California Academy of Sciences and National Geographic Society, 2021) are occurrences within ~5 km of the site. SAR occurrence data from the Atlas of the Breeding Birds of Ontario (Bird Studies Canada et al., 2009) and Herp Atlas (Ontario Nature, 2019) are based on the 10 x 10 km Atlas square that the site falls in (18VQ65).

Table 1 List of species at risk with potential to occur on or near the project site based on our desktop review

Species Name (*Latin name*)	Information Source
Amphibians	
Western Chorus Frog (*Pseudacris triseriata*)	Ontario Nature, 2019; MNRF, 2021a
Birds	

Species Name (*Latin name*)	Information Source
Bald Eagle (*Haliaeetus leucocephalus*)	Cornell Lab of Ornithology, 2021
Bank Swallow (*Riparia riparia*)	Bird Studies Canada et al., 2009; MNRF, 2021a; MNRF, 2021b
Barn Swallow (*Hirundo rustica*)	Bird Studies Canada et al., 2009
Bobolink (*Dolichonyx oryzivorus*)	Bird Studies Canada et al., 2009; MNRF, 2021a; MNRF, 2021b
Canada Warbler (*Cardellina canadensis*)	Bird Studies Canada et al., 2009; MNRF, 2021a
Chimney Swift (*Chaetura pelagica*)	Bird Studies Canada et al., 2009
Common Nighthawk (*Chordeiles minor*)	Cornell Lab of Ornithology, 2021
Eastern Meadowlark (*Sturnella magna*)	Bird Studies Canada et al., 2009; MNRF, 2021a; MNRF, 2021b
Eastern Wood-pewee (*Contopus virens*)	Bird Studies Canada et al., 2009
Henslow's Sparrow (*Ammodramus henslowii*)	MNRF, 2021a; MNRF, 2021b
Peregrine Falcon (*Falco peregrinus*)	MNRF, 2021a
Wood Thrush (*Hylocichla mustelina*)	Bird Studies Canada et al., 2009; MNRF, 2021a
Fish	
American Eel (*Anguilla rostrata*)	MNRF, 2021a
Cutlip Minnow (*Exoglossum maxillingua*)	DFO, 2019; MNRF, 2021a; MNRF, 2021b
Pugnose Shiner (*Notropis anogenus*)	DFO, 2019; MNRF, 2021a; MNRF, 2021b
Insects	
Transverse Lady Beetle (*Coccinella transversalis*)	MNRF, 2021a
Yellow-banded Bumble Bee (*Bombus terricola*)	MNRF, 2021a
Reptiles	
Blanding's Turtle (*Emydoidea blandingii*)	California Academy of Sciences and National Geographic Society, 2021; MNRF, 2021a; MNRF, 2021b
Eastern Milksnake (*Lampropeltis triangulum*)	California Academy of Sciences and National Geographic Society, 2021
Eastern Musk-turtle (*Sternotherus odoratus*)	California Academy of Sciences and National Geographic Society, 2021
Midland Painted Turtle (*Chrysemys picta marginata*)	Ontario Nature, 2019; MNRF, 2021a
Northern Map Turtle (*Graptemys geographica*)	California Academy of Sciences and National Geographic Society, 2021; MNRF, 2021a
Snapping Turtle (*Chelydra serpentina*)	Ontario Nature, 2019; MNRF, 2021a; MNRF, 2021b
Plants	

Species Name (*Latin name*)	Information Source
Butternut (*Juglans cinerea*)	MNRF, 2021a
Fungus	
Black Foam Lichen (*Anzia colpodes*)	MNRF, 2021b

The local conservation authority (South Nation Conservation Authority) does not have a SAR geodatabase and no additional SAR information was found in their relevant watershed/subwatershed reports.

We note that observation records on eBird (Cornell Lab of Ornithology, 2021) and iNaturalist (California Academy of Sciences and National Geographic Society, 2021) are crowd-sourced and rely heavily on data submitted by volunteer citizen scientists that are not necessarily vetted by experts. As such, observation records from these sources are considered non-confirmed by KAL but are included in this preliminary SAR screening based on guidelines set forth by MECP (2019).

3.0 CLOSURE

Thank you for considering this SAR information request for 2017 County Road 2, Edwardsburgh-Cardinal, ON. We look forward to any comments you may have. Questions relating to the contents of this letter can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.

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Appendix C Regional Species at Risk Screening

Species Name (*Taxonomic Name*)	Status under *Endangered Species Act* (ESA)	Status under Schedule 1 of the *Species at Risk Act* (SARA)	Observation Record Sources (within 10 km of the Site)	Habitat Description	Habitat on the Site	Potential to Interact with Development of the Site (None, Negligible, Low, Moderate, or High)[1]
Birds						
Bald Eagle (*Haliaeetus leucocephalus*)	**Special Concern**	**Not at Risk**	Cornell Lab of Ornithology, 2021; KAL, 2021	Nest in mature forests near open water. In large trees such as pine and poplar.	The Site does not appear to contain typical nesting habitat, although areas near the St. Lawrence River may be used for foraging	High
Bank Swallow (*Riparia riparia*)	**Threatened**	**Threatened**	Bird Studies Canada et al., 2009; MNDMNRF, 2021a; MNDMNRF, 2021b; KAL, 2021	Colonial nester; burrows in eroding silt or sand banks, sand pit walls, and human-made sand piles. Often found on banks of rivers and lakes.	The Site does not appear to contain typical nesting habitat, although open areas on-site and areas adjacent to the river may be used for foraging.	High
Barn Swallow (*Hirundo rustica*)	**Threatened**	**Threatened**	Bird Studies Canada et al., 2009; KAL, 2021	Nests on barns and other structures. Forages in open areas for flying insects. Lives in close association with humans and prefers to nest on structures such as open barns, under bridges, and in culverts.	The shed on-Site may provide suitable nesting habitat, and open areas on-Site may be used for foraging.	High
Black Tern (*Chlidonias niger*)	**Special Concern**	**No Status**	n/a	Build floating nests in loose colonies in shallow marshes, especially in cattails.	The Site does not appear to provide typical habitat.	Negligible
Bobolink (*Dolichonyx oryzivorus*)	**Threatened**	**Threatened**	Bird Studies Canada et al. 2009; MNDMNRF, 2021a; MNDMNRF, 2021b	Periodically mown, dry meadow for nesting. Habitat (meadow) should be >10 ha, and preferably >30 ha before Bobolink are attracted to the area. Not near tall trees.	Open cultural meadow on-Site may provide suitable habitat.	Moderate
Canada Warbler (*Cardellina canadensis*)	**Special Concern**	**Threatened**	Bird Studies Canada et al., 2009; MNDMNRF, 2021a	Prefers wet forests with dense shrub layers. Nests located on or near the ground on mossy logs or roots, along stream banks or on hummocks.	The Site does not appear to contain suitable habitat.	Low
Cerulean Warbler (*Setophaga cerulea)*	**Threatened**	**Threatened**	n/a	Prefers mature deciduous forests.	The Site does not appear to contain suitable habitat	Negligible

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Chimney Swift (*Chaetura pelagica*)	**Threatened**	**Threatened**	Bird Studies Canada et al., 2009	Nests in traditional-style open brick chimneys (and rarely in hollow trees). Tends to stay close to water.	The Site does not appear to contain suitable nesting habitat	Low
Common Nighthawk (*Chordeiles minor*)	**Special Concern**	**Threatened**	Cornell Lab of Ornithology, 2021	Nests in a wide variety of open sites, including beaches, fields, and gravel rooftops with little to no ground vegetation. They also nest in cultivated fields, orchards, urban parks, mine tailings and along gravel roads/railways but tend to occupy more natural sites.	Open cultural meadow on-Site may provide suitable habitat.	Moderate
Eastern Meadowlark (*Sturnella magna*)	**Threatened**	**Threatened**	Bird Studies Canada et al., 2009; MNDMNRF, 2021a; MNDMNRF, 2021b	Periodically mown, dry meadow for nesting. Habitat (meadow) should be >10 ha, and preferably >30 ha before Eastern Meadowlark are attracted to the area. Not near tall trees.	Open cultural meadow on-Site may provide suitable habitat.	Moderate
Eastern Whip-poor-will (*Antrostomus vociferus*)	**Threatened**	**Threatened**	n/a	Suitable breeding habitats generally include open and half treed areas and often exhibit a scattered distribution of treed and open space. Lays eggs directly on the forest floor. Roosts are typically located in forest habitat on a low branch or directly on the ground.	The Site does not appear to contain typical habitat	Negligible
Eastern Wood-pewee (*Contopus virens*)	**Special Concern**	**Special Concern**	Bird Studies Canada et al. 2009	Woodland species often found in the mid-canopy layer near clearings and edges of deciduous and mixed forests.	The Site does not appear to contain suitable habitat	Low
Evening Grosbeak (*Coccothraustes vespertinus*)	**Special Concern**	**Special Concern**	n/a	Nests in trees or large shrubs; prefers mature coniferous forests but will also use deciduous forests, parklands, and orchards.	The Site does not appear to contain suitable habitat.	Negligible

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Golden Eagle (*Aquila chrysaetos*)	**Endangered**	**No Status**	n/a	Nests in remote, undisturbed areas, usually building their nests on ledges on a steep cliff/riverbank or large trees if needed. Most hunting is done near open areas such as large bogs or tundra.	The Site does not appear to contain suitable habitat	Negligible
Golden-winged Warbler (*Vermivora chrysoptera*)	**Special Concern**	**Threatened**	n/a	Ground-nests in areas of young shrubs surrounded by mature forest. Often found in areas that have recently been disturbed such as field edges, hydro or utility right-of-ways, or logged areas.	The Site does not appear to contain suitable habitat.	Negligible
Grasshopper Sparrow (*Ammodramus savannarum*)	**Special Concern**	**Special Concern**	n/a	Lives in open grassland areas with well-drained sandy soil. Will also nest in hayfields and pastures, as well as alvars, prairies, and occasionally grain crops such as barley. It prefers areas that are sparsely vegetated, and its nests are well hidden in the field, woven from grasses in a small cup-like shape.	The Site does not appear to contain suitable habitat.	Negligible
Henslow's Sparrow (*Ammodramus henslowii*)	**Endangered**	**Endangered**	MNDMNRF, 2021a; MNDMNRF, 2021b	Prefers extensive, dense, tall grasslands where it can easily conceal its small ground nest. Tends to avoid fields that have been grazed or are crowded with trees and shrubs.	Open cultural meadow on-Site may provide suitable habitat.	Moderate
Horned Grebe (*Podiceps auritus*)	**Special Concern**	**No Status**	n/a	Nest in small ponds, marshes, and shallow bays that contain areas of open water and emergent vegetation.	The Site does not appear to contain suitable habitat.	Negligible
Least Bittern (*Ixobrychus exilis*)	**Threatened**	**Threatened**	n/a	Found in a variety of wetland habitats, but strongly prefers cattail marshes with a mix of open pools and channels.	The Site does not appear to contain suitable habitat.	Negligible
Loggerhead Shrike (*Lanius ludovicianus*)	**Endangered**	**Endangered**	n/a	Prefers pasture or other grasslands with scattered low trees and shrubs. Lives in fields or alvars (areas of exposed bedrock) with short grass, which makes it easier to spot prey.	The Site does not appear to contain suitable habitat.	Negligible
Olive-sided Flycatcher (*Contopus cooperi*)	**Special Concern**	**Threatened**	n/a	Found along natural forest edges and openings. Will use forests that have been logged or burned if there are ample tall snags and trees to use for foraging perches.	The Site does not appear to contain suitable habitat.	Negligible

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Peregrine Falcon (*Falco peregrinus*)	**Special Concern**	**Special Concern**	MNDMNRF, 2021a	Nests on tall, steep cliff ledges close to large bodies of water. Urban peregrines raise their young on ledges of tall buildings, even in busy downtown areas.	The Site does not appear to contain typical nesting habitat, although areas near the St. Lawrence River may be used for foraging.	Low
Red Knot (*Calidris canutus rufa*)	**Endangered**	**Endangered**	n/a	Prefer open beaches, mudflats, and coastal lagoons where they feast on molluscs, crustaceans, and other invertebrates.	The Site does not appear to contain suitable habitat.	Negligible
Red-headed Woodpecker (*Melanerpes erythrocephalus*)	**Special Concern**	**Threatened**	n/a	Lives in open woodland and woodland edges and is often found in parks, golf courses, and cemeteries. These areas typically have many dead trees, which the birds use for nesting and perching.	The Site does not appear to contain suitable habitat.	Negligible
Rusty Blackbird (*Euphagus carolinus*)	**Special Concern**	**Special Concern**	n/a	Prefers wet wooded or shrubby areas. Nests at edges of boreal wetlands and coniferous forests. These areas include bogs, marshes, and beaver ponds.	The Site does not appear to contain suitable habitat.	Negligible
Short-eared Owl (*Asio flammeus*)	**Special Concern**	**Special Concern**	n/a	Lives in open areas such as grasslands, marshes, and tundra where it nests on the ground and hunts for small mammals.	The Site does not appear to contain suitable habitat.	Negligible
Wood Thrush (*Hylocichla mustelina*)	**Special Concern**	**Threatened**	Bird Studies Canada et al., 2009; MNDMNRF, 2021a	Lives in mature deciduous and mixed (conifer-deciduous) forests. They seek moist stands of trees with well-developed undergrowth and tall trees for singing and perching. Usually build nests in Sugar Maple or American Beech.	The Site does not appear to contain suitable habitat.	Low
Yellow Rail (*Coturnicops noveboracensis*)	**Special Concern**	**Special Concern**	n/a	Lives deep in the reeds, sedges, and marshes of shallow wetlands, where they nest on the ground. The marshy areas used by Yellow Rails have an overlying dry mat of dead vegetation that is used to make roofs for nests.	The Site does not appear to contain suitable habitat	Negligible
Mammals						

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Algonquin Wolf (*Canis* sp.)	**Threatened**	**Special Concern**	n/a	Not restricted to a specific habitat type but typically occurs in deciduous and mixed forest landscapes.	This species only occurs in Algonquin Provincial Park and surrounding townships, along with other areas in central Ontario including in and around Killarney Provincial Park, Kawartha Highlands Signature Site, and Queen Elizabeth II Wildlands (MECP, 2019a).	None
Eastern Cougar (*Puma concolor*)	**Endangered**	**No Status**	n/a	Lives in large, undisturbed forests or other natural areas where there is little human activity.	The Site does not appear to contain suitable habitat.	Negligible
Eastern Small-footed Myotis (*Myotis leibii*)	**Endangered**	**Not Listed**	n/a	In the spring and summer, Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. Overwinters in caves and abandoned mines.	The Site does not appear to contain suitable habitat.	Negligible
Gray Fox (*Urocyon cinereoargenteus*)	**Threatened**	**Threatened**	n/a	Lives in deciduous forests and marshes. Their dens are usually found in dense shrubs close to a water source, but they will also use rocky areas, hollow trees, and underground burrows dug by other animals.	The range of this species has recently been reduced to west of Lake Superior in the Rainy River District and on Pelee Island in west Lake Eerie (MECP, 2020a).	None
Little Brown Myotis (*Myotis lucifugus*)	**Endangered**	**Endangered**	n/a	During the day they roost in trees and buildings. They often select attics, abandoned buildings, and barns for summer colonies where they can raise their young. They can squeeze through very tiny spaces (as small as six millimetres across) allowing them access to many different roosting areas.	The shed on-Site may provide roosting sites, and open areas may provide suitable foraging habitat.	Moderate

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Northern Myotis / Northern Long-eared Bat (*Myotis septentrionalis*)	**Endangered**	**Endangered**	n/a	Associated with boreal forests, choosing to roost under loose bark and in the cavities of trees.	The Site does not appear to contain suitable habitat.	Negligible
Tri-coloured Bat / Eastern Pipistrelle (*Perimyotis subflavus*)	**Endangered**	**Endangered**	n/a	Roosts mainly in trees during summer; overwinters in caves and mines along with other species, but often uses deeper parts of the hibernaculum.	Trees on neighbouring properties may provide roosting sites, and open areas on-Site may provide suitable foraging habitat.	Moderate
Amphibians						
Western Chorus Frog (*Pseudacris triseriata*)	**No Status**	Great Lakes-St. Lawrence population: **Threatened**	n/a	Inhabits forest openings around woodland ponds but can also be found in or near damp meadows, marshes, bottomland swamps, and temporary ponds in open country, or even urban areas.	Marsh wetland on-Site may provide suitable habitat.	Moderate
Arthropods						
Bogbean Buckmoth (*Hemileuca* sp. 1)	**Endangered**	**Endangered**	n/a	Restricted to open, chalky, low shrub fens containing large amounts of bogbean, an emergent wetland flowering plant.	The Site does not appear to contain suitable habitat.	Negligible
Gypsy Cuckoo Bumble Bee (*Bombus bohemicus*)	**Endangered**	**Endangered**	n/a	Live in diverse habitats including open meadows, mixed farmlands, urban areas, boreal forest, and montane meadows. Host nests occur in abandoned underground rodent burrows and rotten logs.	Currently only known to occur in Pinery Provincial Park (MECP, 2019b).	None
Macropis Cuckoo Bee *(Epeoloides pilosulus)*	**Not listed**	**Endangered**	n/a	Found in habitats supporting both Macropis bees and their food plant, Yellow Loosestrife (*Lysimachi*a).	Has not been observed in Ontario in over 45 years (COSEWIC, 2011).	None

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Monarch (*Danaus plexippus*)	**Special Concern**	**Special Concern**	n/a	Milkweeds are the sole food plant for Monarch caterpillars. These plants predominantly grow in open and periodically disturbed habitats such as roadsides, fields, wetlands, prairies, and open forests.	The Site does not appear to contain suitable habitat.	Negligible
Mottled Duskywing (*Erynnis martialis*)	**Endangered**	**No Status**	n/a	Requires host plants such as the New Jersey Tea and Prairie Redroot. These plants grow in dry, well-drained soils or alvar habitat within oak woodland, pine woodland, roadsides, riverbanks, shady hillsides, and tall grass prairies.	The Site does not appear to contain suitable habitat	Negligible
Nine-spotted Lady Beetle (*Coccinella novemnotata*)	**Endangered**	**No Status**	n/a	Occurs within agricultural areas, suburban gardens, parks, coniferous forests, deciduous forests, prairie grasslands, meadows, riparian areas, and isolated natural areas.	There have been no records of this species in Ontario since the mid-1990s (MECP, 2019c).	None
Rapids Clubtail *(Gomphus quadricolor)*	**Endangered**	**Endangered**	n/a	Inhabits a wide variety of riverine habitats ranging in size from the St. Lawrence River to small creeks. Larvae are typically found in microhabitats with slow to moderate flow and fine sand or silt substrates where they burrow into the stream bed. Adults disperse from the river after emerging and feed in the forest canopy and other riparian vegetation.	Riverine habitats along the St. Lawrence River may provide suitable habitat.	Low
Rusty-patched Bumble Bee (*Bombus affinis*)	**Endangered**	**Endangered**	n/a	Can be found in open habitat such as mixed farmland, urban settings, savannah, open woods, and sand dunes.	The range of this species is limited to southwestern Ontario (MECP, 2019e).	None
Transverse Lady Beetle (*Coccinella transversoguttata*)	**Endangered**	**Special Concern**	n/a	Able to live in a wide range of habitats, including agricultural areas, suburban gardens, parks, coniferous forests, deciduous forests, prairie grasslands, meadows, and riparian areas.	There have been no records of the species in Ontario since 1990 (MECP, 2020b).	None
West Virginia White butterfly (*Pieris virginiensis*)	**Special Concern**	**No Status**	n/a	Lives in moist, deciduous woodlots. Requires a supply of toothwort, a small, spring-blooming plant that is a member of the mustard family, since it is the only food source for larvae.	The Site does not appear to contain suitable habitat.	Negligible

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Yellow-banded Bumble Bee (*Bombus terricola*)	**Special Concern**	**Special Concern**	MNDMNRF, 2021a	This species is a forage habitat generalist, able to use a variety of nectaring plants and environmental conditions. Can be found in mixed woodlands, particularly for nesting and overwintering, as well as a variety of open habitat such as native grasslands, farmlands, and urban areas.	Open areas on-Site may provide suitable habitat.	Moderate
Lichens						
Black-foam Lichen (*Anzia colpodes*)	**No Status**	**Threatened**	n/a	Grows on the trunks of mature deciduous trees growing on level or sloped land where high humidity is supplied by nearby wetlands, lakes, or streams. The most common host is Red Maple but it also occurs on White Ash, Sugar Maple, Red Oak, and very occasionally on other species.	Assumed to no longer occur in Ontario (COSEWIC, 2015).	None
Flooded Jellyskin (*Leptogium rivulare*)	**No Status**	**Threatened**	n/a	Grows in seasonally flooded habitats, typically on the bark of deciduous trees, on rocks along the margins of seasonal ponds, and on rocks along shorelines and stream/riverbeds.	The Site does not appear to contain suitable habitat	Negligible
Pale-bellied Frost Lichen (*Physconia subpallida*)	**Endangered**	**Endangered**	n/a	Typically grows on the bark of hardwood trees such as White Ash, Black Walnut, and American Elm. Can also be found growing on fence posts and boulders.	The Site does not appear to contain suitable habitat.	Negligible.
Reptiles						

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Blanding's Turtle (*Emydoidea blandingii*)	**Threatened**	**Threatened**	California Academy of Sciences and National Geographic Society, 2021; MNDMNRF, 2021a; MNDMNRF, 2021b	Quiet lakes, streams, and wetlands with abundant emergent vegetation. Also frequently occurs in adjacent upland forests.	Marsh wetland on-Site may provide suitable habitat.	Moderate
Eastern Musk Turtle / Stinkpot (*Sternotherus odoratus*)	**Special Concern**	**Special Concern**	California Academy of Sciences and National Geographic Society, 2021	Found in ponds, lakes, marshes, and rivers that are generally slow-moving, have abundant emergent vegetation, and muddy bottoms that they burrow into for winter hibernation.	Marsh wetland on-Site may provide suitable habitat.	Moderate
Eastern Ribbonsnake *(Thamnophis sauritus)*	**Special Concern**	**Threatened**	n/a	The Eastern Ribbonsnake is semi-aquatic. It is most frequently found along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting.	Marsh wetland on-Site may provide suitable habitat,	Low
Midland Painted Turtle (*Chrysemys picta marginata*)	**No Status**	**Special Concern**	Ontario Nature, 2019; MNDMNRF, 2021a	Inhabits waterbodies, such as ponds, marshes, lakes and slow-moving creeks that have a soft bottom and provide abundant basking sites and aquatic vegetation. Often bask on shorelines or on logs and rocks that protrude from the water.	Marsh wetland on-Site may provide suitable habitat.	Moderate
Milksnake (*Lampropeltis triangulum*)	**Not Listed**	**Special Concern**	California Academy of Sciences and National Geographic Society, 2021	Found in variety of open, scrubby or edge habitats, including pastures.	Open cultural meadow on-Site may provide suitable habitat.	Moderate
Northern Map Turtle (*Graptemys geographica*)	**Special Concern**	**Special Concern**	California Academy of Sciences and National Geographic Society, 2021; MNDMNRF, 2021a	Lives in rivers and lakeshores where it basks on emergent rocks and fallen trees throughout the spring and summer. In winter, they hibernate on the bottom of deep, slow-moving sections of river.	Marsh wetland on-Site adjacent to St. Lawrence River may provide suitable habitat.	Moderate

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Snapping Turtle (*Chelydra serpentina*)	**Special Concern**	**Special Concern**	Ontario Nature, 2019; MNDMNRF, 2021a; MNDMNRF, 2021b	Spend most of their lives in the water. Prefer shallow waters so they can hide under the soft mud and leaf litter with only their noses exposed to the surface to breathe.	Marsh wetland on-Site may provide suitable habitat.	Moderate
Spiny Softshell (*Apalone spinifera*)	**Endangered**	**Threatened**	n/a	Found primarily in rivers and lakes but also in creeks, ditches, and ponds near rivers. Habitat requirements are open sand or gravel nesting areas, shallow muddy or sandy areas to bury in, deep pools for hibernation, areas for basking, and suitable habitat for crayfish and other food species.	Marsh wetland on-Site may provide suitable habitat.	Low
Spotted Turtle (*Clemmys guttata*)	**Endangered**	**Endangered**	n/a	Semi-aquatic and prefers ponds, marshes, bogs, and even ditches with slow-moving, unpolluted water and an abundant supply of aquatic vegetation.	Marsh wetland on-Site may provide suitable habitat.	Low
Wood Turtle (*Glyptemys insculpta*)	**Endangered**	**Threatened**	n/a	Prefers clear rivers, streams, or creeks with a slight current and sandy or gravelly bottom. Wooded areas are essential habitat but they are found in other habitats such as wet meadows, swamps, and fields.	Marsh wetland on-Site, adjacent to the St. Lawrence River may provide suitable habitat,	Low
Vascular Plants						
American Chestnut (*Castanea dentata*)	**Endangered**	**Endangered**	n/a	Typical habitat is upland deciduous forests on sandy acidic soils. Occurs with Red Oak, Black Cherry, Sugar Maple, and beech.	The Site does not appear to provide suitable habitat.	Negligible
American Ginseng (*Panax quinquefolius*)	**Endangered**	**Endangered**	n/a	Grows in rich, moist, but well-drained, and relatively mature, deciduous woods dominated by Sugar Maple, White Ash, and American Basswood.	The Site does not appear to provide suitable habitat.	Negligible

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Butternut (*Juglans cinerea*)	**Endangered**	**Endangered**	MNDMNRF, 2021a	Commonly found in riparian habitats but is also found on rich, moist, well-drained loams and well-drained gravels, especially those of limestone origin.	Open, riparian areas on-Site may provide suitable habitat.	Moderate
Eastern Prairie Fringed-orchid (*Platanthera leucophaea*)	**Endangered**	**Endangered**	n/a	Populations are found in three main habitat types: fens, tallgrass prairie, and moist old fields.	The Site does not appear to provide suitable habitat.	Negligible
Fish						
American Eel (*Anguilla rostrata*)	**Endangered**	**Endangered**	MNDMNRF, 2021a	Primarily nocturnal, hiding in soft substrate or submerged vegetation during the day.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Moderate
Bridle Shiner (*Notropis bifrenatus*)	**Special Concern**	**Special Concern**	n/a	Prefers clear water with abundant vegetation over silty or sandy substrate.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low
Channel Darter (*Percina copelandi*)	**Special Concern**	**Threatened**	n/a	Prefers clean streams and lakes with moderate current over sandy or rocky substrate.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low
Cutlip Minnow (Exoglossum maxillingua)	**Threatened**	**Special Concern**	DFO, 2019; MNDMNRF, 2021a; MNDMNRF, 2021b	Warmer rivers and creeks with clear, slow-moving water and a rocky/gravel bottom.	St. Lawrence River in close proximity to Site may provide suitable habitat,	Moderate
Lake Sturgeon (*Acipenser fulvescens*)	**Endangered**	**No Status**	n/a	Only found in large lakes and rivers. Forages in cool water, 4-9 m deep over soft substrate; spawns in shallower, fast-flowing areas over rocks or gravel.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low
Northern Brook Lamprey (*Ichthyomyzon fossor*)	**Special Concern**	**Special Concern**	n/a	Inhabits clear, coolwater streams. The larval stage requires soft substrates such as silt and sand for burrowing which are often found in the slow-moving portions of a stream. Adults are found in areas associated with spawning, including fast flowing riffles comprised of rock or gravel.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low
Northern Sunfish (*Lepomis peltastes*)	**Special Concern**	**No Status**	n/a	Lives in shallow vegetated areas of quiet, slow flowing rivers and streams, as well as warm lakes and ponds with sandy banks or rocky bottoms.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low

Species Name (*Taxonomic Name*)	Status under *Endangered Species Act* (ESA)	Status under Schedule 1 of the *Species at Risk Act* (SARA)	Observation Record Sources (within 10 km of the Site)	Habitat Description	Habitat on the Site	Potential to Interact with Development of the Site (None, Negligible, Low, Moderate, or High)[1]
Pugnose Shiner (Notropis anogenus)	**Threatened**	**Threatened**	DFO, 2019; MNDMNRF, 2021a; MNDMNRF, 2021b	Lakes and calm rivers and creeks with clear water and bottoms with sand, mud or organic matter.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Moderate
River Redhorse (*Moxostoma carinatum*)	**Special Concern**	**Special Concern**	n/a	Prefers fast-flowing, clear rivers over rocky substrate.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low
Silver Lamprey (*Ichthyomyzon unicuspis*)	**Special Concern**	**Special Concern**	n/a	Requires clear water where they can find fish hosts, relatively clean stream beds of sand and organic debris for larvae to live in, and unrestricted migration routes for spawning. Larvae live 4-7 years in burrows (prefer soft substrates); filter-feed on plankton.	St. Lawrence River in close proximity to Site may provide suitable habitat.	Low

[1]**None**: the range of the species does not overlap with the Site, the species is documented as no longer occurring in the ecoregion, or it is extremely unlikely for the species to occupy the Site due to access barriers.
Negligible: No observation records exist for within 10 km of the Site and the Site does not contain suitable habitat. The species has potential for unpredictable presence on/use of the Site.
Low: No observation records exist for within 10 km of the Site but suitable habitat exists on the Site, or suitable habitat does not exist on the Site but observation records exist for within 10 km.
Moderate: The species is known to occur within 10 km of the Site and suitable habitat exists on the Site.
High: The species is known to occur on or adjacent to the Site and suitable or confirmed habitat exists on the Site.

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SCHEDULE “E”

STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENT
PREPARED BY MATRIX HERITAGE INC.
NOVEMBER 2021

ORIGINAL REPORT

Stage 1, 2, and 3 Archaeological Assessment:
2017 County Rd. #2
Part 1 15R 12121, PIN 68154-0346 (LT)
Part Lot 20, Concession 1
Geographic Township of Edwardsburg,
The United Counties of Leeds and Grenville, Ontario

Prepared For
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November 2021
Submitted for review TBD, 2021

PIF: Stage 1 and 2 P369-0159-2021
Stage 3 P369-0160-2021

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Ben Mortimer (License Number P369)

Report: MH1042-REP.01

1.0 Executive Summary

Matrix Heritage on behalf of Madison Mulder Enterprises Inc. (Mulder), undertook Stage 1, 2, and 3 Archaeological Assessments of 2017 County Road 2, legally described as Part 1 15R 12121, PIN 68154-0346 (LT), located on Part Lot 20 of Concession 1, in the Geographic Township of Edwardsburg, in the United Counties of Leeds and Greenville, Ontario (Map 1). The objectives of the investigation were to assess the archaeological potential of the property in accordance with the Planning Act. Mulder is planning to develop the property for residential use (Map 2). This archaeological assessment was required by the United Counties of Leeds and Grenville as part of a Consent Application process under the Planning Act. The assessment is in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011).

The Stage 1 archaeological assessment included a review of the updated Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) archaeological site databases, a review of relevant environmental, historical, and archaeological literature, and primary historical research including: historical maps, land registry records, and aerial photographs.

The Stage 1 assessment determined that the subject property has pre-contact Aboriginal archaeological potential based on the proximity to the St. Lawrence River, which the study area fronts on. The study area exhibits historical Euro-Canadian archaeological potential based on the land registry records which indicate that the study area was granted by the Crown starting in 1797, and was continuously occupied from the late 18th century to the mid-1940s by the Adams family and later by others. Accordingly, Stage 2 assessment was required.

The Stage 2 archaeological assessment involved a pedestrian survey at 5 metre intervals of the area where ploughing was possible. Subsurface testing occurred in areas that could not be ploughed, which consisted of hand excavated test pits at 5 metre intervals. The field portion was undertaken on August 6, 2021. Weather conditions were hot, sunny, and humid with a temperature of 26° Celsius. Permission to access the property was provided by the owner.

During the pedestrian survey of the field in the northern portion of the study area a cluster of artifacts was identified and collected from a concentrated location measuring approximately 42 x 27 m (Map 3). A total of 291 artifacts were recovered from 31 findspots indicating a date range of mid-late 19th century. The artifacts in the scatter relate to a 19th century domestic Euro-Canadian occupation registered with the MHSTCI as the P. Adams Site (BeFu-17). As more than 20 artifacts pre-dating 1900 were found, under Standard 1.c. of Section 2.2 of the Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011) this site is considered to have significant Cultural Heritage Value or Interest (CHVI) and Stage 3 assessment was required (MHSTCI 2011).

The Stage 3 archaeological assessment of the P. Adams Site (BeFu-17) was undertaken over seven days on August 16, 18, 19, 20, and August 25-27, 2021. Test unit excavation was undertaken on a 5 m grid. This pattern was expanded until artifact counts in each unit were low enough to confirm the boundaries of the site, the Stage 2 artifact scatter was encapsulated in the grid, and sufficient evidence to fully understand the CHVI of the site was obtained. A total of 40 1x1 m units were excavated on the grid with 8 infill units placed to explore areas of interest amounting to 20% of the on-grid units. While many artifacts were recovered indicating the presence of a mid to late-19th century occupation related to the Adams family and later occupants, no intact culturally significant deposits were found. All areas of the site have been disturbed by modern domestic and farming activities as evidenced by the recovery of deeply redeposited modern items (plastics, wire nails, etc.) throughout the site, down to subsoil (Map 4). Given the lack of 19th century integrity for the site due

to the ongoing occupation and use of the property into the 1990s, the Stage 3 assessment has thoroughly documented the site and no further archaeological assessment is required as the site does not meet any of the criteria for a Stage 4 recommendation as described in Section 3.4 or 3.4.2 (MHSCTI 2011).

Based on the results of this investigation it is recommended:

1. No further archaeological study is required for the subject property as delineated in Map 1.

2.0 Table of Contents

3.0 Project Personnel

Licensee	Ben Mortimer, MA (P369)
Field Director	Andrea Jackson (P1032)
Field Crew	Richard Beckley Mallory Champagne Josh England Caleigh Hartery Carina Hochgeshurz Robert Johnson Shamus Merkley
Report Preparation	Andrea Jackson (P1032) Mercedes Hunter
Artifact Processing	Mercedes Hunter Andrea Jackson (P1032)
Artifact Inventory	Mercedes Hunter Andrea Jackson (P1032)
Archival Research	Andrea Jackson (P1032)
GIS and Mapping	Ben Mortimer, MA (P369)
Report Review	Ben Mortimer, MA (P369)

4.0 Project Context

4.1 Development Context

Matrix Heritage, on behalf of Madison Mulder Enterprises Inc. (Mulder), undertook Stage 1, 2, and 3 archaeological assessments of 2019 County Road 2, legally described as Part 1 15R 12121, PIN 68154-0346 (LT), located on Part Lot 20 of Concession 1in the Geographic Township of Edwardsburgh in the United Counties of Leeds and Grenville, Ontario (Map 1). The objectives of the investigation were to assess the archaeological potential of the property in accordance with the Planning Act. Mulder is planning to develop the property for residential use (Map 2). This archaeological assessment was required by the United Counties of Leeds and Grenville as part of a Consent Application process under the Planning Act. The assessment is in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011).

At the time of the archaeological assessment, the study area was under the ownership of Mulder. Permission to access the study property was granted by Mulder prior to the commencement of any field work; no limits were placed on this access.

4.2 Historical Context

4.2.1 Historic Documentation

The study area is in the geographic township of Edwardsburgh, United Counties of Leeds and Grenville. There are a few publications of the early history of the United Counties of Leeds and Grenville and the Geographic Township of Edwardsburgh. Notable references include *Leeds and Grenville: Their First 200 Years* (McKenzie, 1967); *Edwardsburgh Township History* (Edwardsburgh Historians 1995) and a useful historical resource *History of Leeds and Grenville Ontario From 1749-1879* (Leavitt, 1879).

4.2.2 Pre-Contact Period

The St. Lawrence Valley, in the Edwardsburgh Township area, was not hospitable to human occupation until the retreat of glaciers and the draining of the Champlain Sea, some 10,000 years ago. The Laurentide Ice Sheet of the Wisconsinian glacier blanketed the Ottawa area until about 11,000 B.P. At this time, the receding glacial terminus was north of the Ottawa Valley, and water from the Atlantic Ocean flooded the region to create the Champlain Sea. The Champlain Sea encompassed the lowlands of Quebec on the north shore of the Ottawa River and most of Ontario east of Petawawa, including the Ottawa Valley and Rideau Lakes. However, by 10,000 B.P. the Champlain Sea was receding and within 1,000 years was gone from Eastern Ontario (Watson 1990:9).

By circa 11,000 B.P., when the St. Lawrence area was emerging from glaciations and being flooded by the Champlain Sea, northeastern North America was home to what are commonly referred to as the Paleo-Indian people. For Ontario the Paleo-Indian period is divided into the Early Paleo-Indian period (11,000 - 10,400 B.P.) and the Late Paleo-Indian period (10,500-9,400 B.P.), based on changes in tool technology (Ellis and Deller 1990). The Paleo people, who had moved into hospitable areas of southwest Ontario (Ellis and Deller 1990), likely consisted of small groups of exogamous hunter-gatherers relying on a variety of plants and animals who ranged over large territories (Jamieson 1999). The few possible Paleo-Indian period artifacts found, as surface finds or poorly documented finds, in the broader region are from the Rideau Lakes area (Watson 1990) and

Thompson's Island near Cornwall (Ritchie 1969:18). In the Kingston area, a mid-section of a Late Paleo-Indian period Plano point was recovered from excavations on the north of Colonel By Lake (Cataraqui River) (Kennett and Earl 2000). In comparison, little evidence exists for Paleo-Indian occupations in the immediate area, as can be expected given the environmental changes the region underwent, and the recent exposure of the area from glaciations and sea.

As the climate continued to warm, the ice sheet receded further allowing areas of eastern Ontario to be travelled and occupied in what is known as the Archaic Period (9,500 – 2,900 B.P.). This period is generally characterized by increasing populations, developments in lithic technology (e.g., ground stone tools), and emerging trade networks. Archaic populations remained hunter-gatherers with an increasing emphasis on fishing. Accidental finds account for the majority of knowledge of the Archaic period in Kingston. These include a Laurentian Archaic (ca. 5,000 B.P.) ground slate point recovered from a garden on the eastern edge of the Little Cataraqui Creek (Stewart et al. 1989:15), and in 1949 while grading their yard a resident near Collin's Bay came across two Late Archaic burials. The Collins Bay Burial site (BbGd-13) was excavated in 1952 by William Ritchie, State Archaeologist for the New York State Museum and Science Service (Ritchie 1955). Excavations in 2004 for a new dormitory on the Royal Military College property, on Point Frederick, yielded evidence of a multi-component site that produced five isolated projectile points spanning the period from the Archaic to Late Woodland, as well as historic period artifacts (Gromoff et al. 2004). Sites further to the east include the Ault Park site (BgFr-1) 12 km west of Cornwall near Long Sault (Spence, et al. 1990:163), and the Lamoureaux site (BiFs-2) in the floodplain of the South Nation River (Clermont 1999).

The Woodland Period is characterized by the introduction of ceramics. Populations continued to participate in extensive trade networks that extended across much of North America. Social structure appears to have become increasingly complex with some status differentiation recognized in burials. Towards the end of this period domesticated plants were gradually introduced to the region. This coincided with other changes including the development of semi-permanent villages. The Woodland period is commonly divided into the Early Woodland (1000 – 300 B.C.), Middle Woodland (400 B.C. to A.D. 1000), and the Late Woodland (A.D. 900 – European Contact) periods.

The Early Woodland is typically noted via lithic point styles (i.e., Meadowood bifaces) and pottery types (i.e., Vinette I). Early Woodland sites in the region include the Ault Park site (BgFr-1), and the Long Sault Mound (Spence et al. 1990:141). In 1992, an isolated Early Woodland projectile point (BbGc-22) was recovered in the course of an archaeological assessment of the Greenwood Park subdivision, east of Highway 15, west of Butternut Creek, and north of CFB Kingston (Archaeological Services Inc. 2010:34). The Middle Woodland period is identified primarily via changes in pottery style (e.g., the addition of decoration). Some of the best documented Middle Woodland Period sites from the region includes, again, the Ault Park site (BgFr-1), where the Middle Woodland component is dominate (Spence et al. 1990:163). Further to the west are the Arbor Ridge Site (BbGd-10), the Belle Island site (BbGc-6), and the Kingston Outer Station site (BbGc-2).

The identification of pottery traditions or complexes (Laurel, Point Peninsula, Saugeen) within the Northeast Middle Woodland, the identifiers for the temporal and social organizational changes signifying the Late Woodland Period, subsequent phases within in the Late Woodland, and the overall 'simple' culture history model assumed for Ontario at this time (e.g. Ritchie 1969; Wright 1966, 2004) are much debated in light of newer evidence and improved interpretive models (Engelbrecht 1999; Ferris 1999; Hart 2011; Hart and Brumbach 2003, 2005, 2009; Hart and Englebrecht 2011; Martin 2008; Mortimer 2012). Thus, the shift into the period held as the Late Woodland is not well defined. There are general trends for increasingly sedentary populations, the gradual introduction of agriculture, and changing pottery and lithic styles. However, nearing the time of contact, Ontario was populated with somewhat distinct regional populations that broadly shared

many traits. In the southwest, in good cropland areas, groups were practicing corn-bean-squash agriculture in semi-permanent, often palisaded villages which are commonly assigned to Iroquoian peoples (Wright 2004:1297–1304). On the shield and in other non-arable environments, including portions of the Ottawa Valley, there seems to remain a less sedentary lifestyle often associated with the Algonquian groups noted in the region at contact (Wright 2004:1485–1486).

In the vicinity of the study area, the latter portion of the Late Woodland period is highlighted by the development of the St. Lawrence Iroquois, which has been divided into six clusters along the St. Lawrence River (Jamieson 1990:387). In the region are many St. Lawrence Iroquoian sites, such as the *Maynard-McKeown* site (BeFv-1), Roebuck site, Aultsville, Grays Creek, Summerstown Station, and others (Jamieson 1990:387).

By 1600, most of the Lake Ontario north shore communities had moved northward from Lake Ontario. Those who had lived in the St. Lawrence valley likely amalgamated in the 16th century with contemporary Huron or Iroquois communities. While this movement of communities likely took place over many generations, the major impetus was the conflict between the Five Nations Iroquois of New York State and the Huron Confederacy.

4.2.3 Contact Period

European contact with Indigenous peoples along the St. Lawrence River began with the visits of Jacques Cartier in 1534. On his initial journey in 1535, Cartier was only able to travel and map as far as what is now Montreal, due to the impassable Lachine Rapids. The St. Lawrence River earned its name as Cartier first travelled the area on the 10th of August which is the feast day of St. Lawrence. The following year, he travelled upriver as far as Montreal where he encountered the permanent St. Lawrence Iroquois settlements of Stadacona and Hochelaga near present day Quebec City and Montreal, respectively. Cartier's accounts of the St. Lawrence Iroquois are the only that exist of these people at the time of contact, as by the time of Samuel de Champlain's 1603 voyage, these people had disappeared and instead *Algonquian* speaking peoples occupied the area (Jamieson 1990:385). Trading between the French and Natives was minimal in the 16th century as the French saw that the country had little to offer Europe, and trade in furs was not viable until the end of the 16th century. It was not until 1599, when the king of France authorized the colonization of New France, and Champlain's 1603 voyage that permanent French-Native relations were established (Heidenreich 1990:480–483). Following these initial expeditions, the St. Lawrence served as the main artery for European exploration and trade into the interior of North America.

4.2.4 Post-Contact Period

Although the French exerted some influence in the study area through the 17th and 18th centuries, with permanent settlements established to the east and west on the Island of Montreal and Cataraqui (present day Kingston), permanent European settlement did not occur until the end of the 18th century. Despite having gained control of Canada at the end of the Seven Years' War (1754–1763), the British did not express interest in establishing settlements until the end of the American Revolution, when United Empire Loyalists left the newly established Republic. The Governor of Quebec, General Frederick Haldimand, made lands available for settlement for the Loyalists in what would become Upper Canada. In 1783, Captain William Redford Crawford negotiated an agreement that surrendered lands that extended west along the north shore of the St. Lawrence River and Lake Ontario from the Mississauga, whom the British believed to be the sole First Nation peoples in the area, to the British crown. This became known as the 'Crawford Purchase'. In 1784, Major Samuel Holland, Surveyor General for Canada surveyed the new lands.

The original plan of settlement was to extend the *seigneurial* system of the old Province of Quebec westward from the seigneury of Longeuil (the most westerly of established seigneuries in Quebec). Two ranges of townships were laid out. The first nine townships west of Longeuil were known as the Royal Townships and extended to Cataraqui (Kingston). The next five townships, known as the Cataraqui Townships extended to the Bay of Quinte. Townships were divided into concessions and laid out into 200 acre lots. The original townships were numbered as they were to be a part of the Quebec seigneurial system. Not long after settling in these new townships, the Loyalists petitioned the Crown to establish a British form of land tenure and law, as there was a good deal of resistance to French custom and law in the newly settled areas (Craig 1963:4-9).

The area had been part of the Montreal District until 1788, when Lord Dorchester, Sir Guy Carleton formed four new districts west of Montreal. From east to west these were Lunenburg, Mecklenburg, Nassau, and Hesse, reflecting the German origins of the Royal family and the many Germans among the Loyalists. The future counties of Leeds and Grenville became affiliated with the most eastern district of Lunenburg, which extended from the eastern edge of Lancaster Township, the first of the Royal Townships, to just below present-day Kingston (Harkness, 1846). By 1788, the numbered Royal Townships were named for some of the fifteen children of King George III (1760-1820). Royal Township #6 was renamed the Township of Edwardsburgh after George III's son, Edward, Duke of Kent.

With the Canada Act of 1791 that divided Quebec into Upper and Lower Canada, Colonel John Graves Simcoe, first Lieutenant-Governor of Upper Canada, established the original 19 counties. In 1850, Leeds County merged with Grenville County to create the United Counties of Leeds and Grenville.

Upon their arrival, Loyalists drew their lots for their free land grants. The 1783 Royal Instructions granted 100 acres to every "Master of a Family", plus an additional 50 acres for each other member. Military claimants were granted from 200 acres for a private, rising from there up to 5,000 acres for a field officer. In 1789, the Dorchester Resolution allowed for the disbursement of 200 acres to be extended to the sons and daughters of the original United Empire Loyalists. Lots fronting on the St. Lawrence were granted first and were usually not more than 200 acres, meaning higher ranking officers would select their further grants in the rear of the townships, often quite distant from their first. Likewise, the grants to children of Loyalists were in the rear of townships or townships further inland (Moorman 1997:11-20). As a result, the entire riverfront within the newly surveyed Townships of Lancaster, Charlottenburgh, Cornwall, Osnabruck, Williamsburg, Matilda, Edwardsburgh, Augusta, and Elizabethtown (the Royal Townships) was settled almost simultaneously, while the rear lots of the township and other townships were granted but not always settled. Generally, Scots were placed in the eastern townships and the western townships were comprised of mostly German immigrants.

Settlement of Leeds and Grenville began with Loyalist immigration in the late eighteenth century (Leavitt 1879; McKenzie 1967). Sir John Johnson was the first Loyalist to receive land grants in this area, which included ~1000 acres on the east bank of the Gananoque River. However, he never resided in the region. In 1784, Major Edward Jessup and Captain Justus Sherwood arrived in the region, having escaped prison sentences in the revolutionary war (Lockwood 1996). These two men surveyed parts of the first townships of Grenville, Edwardsburgh, Augusta, and Elizabethtown. By 1789 a town site settlement was laid out on the riverfront of Edwardsburgh Township and was named after John Johnston as Johnstown.
In 1792 John Graves Simcoe, the 1st Lieutenant Governor of Upper Canada established himself in Johnstown and constructed a courthouse in town for the Court of Quarter Sessions to be able to hold their meetings there. By the early 1800s a sawmill, gristmill, general store, and an inn and tavern

was established within the town limits. According to the 1807 census records there were also 36 houses within Johnstown.

In the early to mid-1800s the town's economic prosperity began to dwindle and many businesses, including the saw and grist mills, were sold. The inhabitants of Johnstown increasingly became more reliant on the nearby town of Prescott for their everyday services, including their post office. Having said this, several new businesses opened in the latter half of the 19th century after the mill was rebought and became operational again under the name of Wharton's Mill. These new businesses included a pottery shop, blacksmithing shop, a tavern called Finnegan's Tavern, a motel, several hot houses, as well as a tourist camp called St. Lawrence Resort Camp. The Grand Trunk Railway arrived in the area circa 1855 during the first construction period of the line between Montreal and Brockville (1852-1855), with a station at the village of Cardinal named Edwardsburg Station.

Johnstown continued to flourish throughout the early 1900s after the grain elevator (now Port of Johnstown) was constructed in the 1920s while the construction of Highway 2 significantly increased traffic in the area. With the creation of the St. Lawrence Seaway in the late 1950s, newer, larger locks were built to ship larger amounts of cargo from the Great Lakes. In 1958, the flooding from the Moses-Saunders Power Dam provided the water necessary to regulate the St. Lawrence River and afford passage for the navigation of large vessels and permanently submerged ten communities.

4.2.5 Study Area Specific History

The study area falls in the western half of the eastern half of Lot 20, Concession 1 (Map 1). The Crown patent to the 100 acres of the eastern portion of Lot 20, Concession 1, was granted to Lieutenant Gideon Adams on July 16, 1797 (OLR). Much of the familial history was provided from previous genealogical research by Matrix's Project Archaeologist Andrea Jackson, direct descendant of Gideon Adams with the addition of Land Registry, census data (Statistics Canada 1842, 1861, 1871, 1881, 1891, 1901, 1911), and historical mapping (Map 5).

Gideon Adams was born in 1755 in Stratford, Connecticut to Dr. Samuel Adams, a surgeon-physician, and his wife Martha Curtis. Due to their loyalist support of the crown, the family moved from Connecticut to Vermont as revolutionary sentiment started to grow in New England. Dr. Adams eventually had all his substantial lands and property seized by the revolutionaries. In 1776, he led a group of Loyalists to Quebec and joined the British Army in Montreal. Eventually five of Samuel's sons enlisted under him including the eldest, Gideon, who became a Lieutenant in Jessup's Corps of the Loyal Rangers. Due to their military service in the American Revolutionary War, the loyalist soldiers, including the men of the Adams family, were granted substantial parcels of land, most along the first concession of the new Townships of Edwardsburg, Augusta, and Elizabethtown along the St. Lawrence River. Gideon was granted 2,000 acres, most of which was in Edwardsburg. In 1781, he married Mary Ann Snyder, the daughter of another Loyalist, and established a farm on Lot 19. Around 1805 Gideon moved to South Gower where he served as a magistrate leaving the farm to his sons Samuel and Gideon Jr. His military life continued as he served in the Grenville Militia as a major during the War of 1812. Gideon died in Edwardsburg in 1834.

In 1853 Samuel, the eldest son of Gideon Adams, moved to Renfrew Country and officially quitted his claim, to his brother Gideon Adams Jr., to the 50 acres of the western half of the eastern half of Lot 20 for the price of £50. Five years later, in July of 1858, Gideon Jr. sold the land to his son Philemon for £250. Gideon Jr. had married Nancy Ann Curry, the daughter of the family's neighbour, and former Loyalist veteran officer, Ephraim Curry. The couple had acquired even more land when Nancy applied under her father's name after the War of 1812. Gideon Jr. died in 1871 at the age of 85.

Philemon Adams was born in 1821, the third child of Gideon Jr. and Nancy Ann. He married Elizabeth Shaver sometime before 1844. Although Philemon did not acquire the subject property until 1858, it is possible he and his family had been living on the land since his marriage. The 1851 census records list Philemon as 32 years old living with his wife and family in a one storey frame house. Philemon died on Christmas Eve 1860 at the age of forty, leaving Elizabeth to raise a young family of five children. It is unclear as to his cause of death at that relatively young age. Interestingly, it seems the data for the 1861 census must have been collected before the end of the previous year as Philemon is listed on it with his family (Library and Archives Canada 1861). By this time their home is described as a one and a half storey frame house. Further, the Belden map of 1863 has slightly out of date information as it shows Philemon as the owner of the house and property (Map 5). Philemon possibly died without a will, as his children Gideon and Ann were officially granted the land in 1870 with a crown patent due to their status as being descendants of Loyalists. Many descendants of the Adams and Curry Loyalist families still live and work the land in the immediate area today.

Soon after the official crown patent was granted in 1870, Philemon's children, Gideon and Ann, mortgaged the property to Thomas Perry only to discharge the mortgage by 1873. Two years later Gideon sold the property to Ashley Vancamp who in turn sold it to Samuel Simons for $4,000.00 in 1883. During the time of these transactions Gideon and his wife Ellen Warner lived in a home on Lot 31 and he worked nearby as a boat captain on the St. Lawrence River. Gideon drowned in 1915 at the age of 65 having slipped along the docks between boats not far from his home.

Samuel Simons was born in 1858 and appears in the 1881 census as a 23-year-old bachelor living with his parents. By the time of the 1891 census, Samuel was recorded as living with his Irish Catholic wife Catherine. They were likely married around the same time he purchased the property in 1883. By the time of the 1901 census, the couple had three children, Sarah aged six, Nellie aged five, and Milover aged one year. The census must have been recorded early in the year as Catherine Simons died in May of 1901 at the age of 36; the cause of death recorded as "pulmonary abscesses". By the time of the 1911 census, Samuel was listed as a widower with his three children Bernie, Nellie, and Milo. In this census the family's religion is recorded as Methodist whereas in the previous censuses they had been listed as Catholics. The Methodist movement was prominent in the area and with the loss of a young wife and mother perhaps the family was seeking comfort in a new religion.

In 1891, the property was granted to Nicholas Devereaux only to be granted back to Samuel Simons by Devereaux's estate in 1900. A similar set of transactions took place again in 1912, when Simons granted the land to Frank W. Rogers and the property was granted back to Simon's children Sarah Bernadette, Nellie, and Milo by the Rogers estate in 1919. It is unclear in the land registry records when Samuel transferred the land to his children.

Samuel Simons died in 1937 at the age of 79. The same year there was a "release of legacy" of the property (presumably prompted by Samuel's death) by Sarah Bernadette Simons to her siblings Ella Coletta and George Milo Simons, with a note of the price in the registry remarks of "Love and $1.00". In June of 1981 Ella Simons, on behalf of herself and her late brother George Milo, granted the property to her neighbours Edward and Mary Patrick for $1.00. Their increasingly dilapidated house remained on the property until its collapse and demolition the late 1980s.

4.3 Archaeological Context

4.3.1 Current Conditions

The study area consists of a 3.2 hectare roughly rectangularly shaped parcel on the south side of County Road 2 between Johnstown and Cardinal, Ontario. The parcel is south of the road, and fronts on the St. Lawrence River (Map 1 and 6). The northern portion of the property is an active and ploughed agricultural field (Figure 1, Figure 2) that slopes gently to a ridge of weeds and brush in the middle of the property (Figure 3), then drops steeply down to a marshy area along the river (Figure 4). There is an overgrown driveway accessing the field from County Road 2 leading to a small rocky and grassy patch with a steel shed (Figure 5). The central northern portion of the property slopes gently to the south and east (Figure 6). The footprint of a house foundation is visible in the crops on recent aerial photographs (Map 6) and a local informant noted that the house was fully demolished in the late 1980s. The farmer responsible for plough the lands prior to the Stage 2 assessment also noted that the foundations are so shallow as to prevent ploughing in the middle of the property and that they “clipped” the wall when ploughing the fields.

4.3.2 Physiography

The site area lies entirely within the Glengarry Till Plain (Chapman and Putnam 1984) (Map 7). This region between the Ottawa and St. Lawrence River watersheds is characterized by undulating low topographic relief. A variety of moraine ridges and drumlins are present with swamps and low-lying clayey areas interspersed.

The soil of the study area is Manotick Sandy Loam (Map 7), which is a light brown sandy loam underlain by a mottled yellowish brown sand loam over dark brown loam clay. This soil type is generally well drained, stone free, slightly acidic, and has a slightly undulating to rolling topography. Prior to clearing, pine trees dominated on the lighter knolls, while white birch and maple were found in areas where the clay is closer to the surface (Richards et al. 1949:67–68).

The surficial geology of the northern half of the property consists of massive well laminated clay silt while the southern half (the marsh area along the river) consists of organic deposits (Map 7).

4.3.3 Previous Archaeological Assessments

Archaeological work in the region has primarily consisted of cultural resource management studies related to specific properties or development projects. No known assessments have occurred on or adjacent to the study area. Archaeological assessments in the boarder area include a Stage 1 Archaeological Assessment of the Cedar Grove Site under the Province of Ontario’s Job Site (Paterson Group 2020). Under this project, 1,145 hectares in the Township of Edwardsburg Cardinal were assessed for archaeological potential. Other assessments include: a Stage 1 and 2 assessment of various integrity digs around Edwardsburg (Stantec 2015); a rezoning project for 2140 Dundas Street in Cardinal (Watson 2020); A Stage 1 and 2 archaeological assessment for a subdivision (Heritage Quest 2000), and a Stage 4 archaeological avoidance and protection plan for site BeFv-22 near Prescott (Intermesh Enterprises 2017).

4.3.4 Registered Archaeological Sites and Commemorative Plaques

A search of the Ontario Archaeological Sites Database indicated no registered sites located within a 1 km radius of the study area.

No commemorative plaques or monuments are located near the subject property.

4.4 Archaeological Potential

Potential for pre-contact Indigenous sites is based on physiographic variables that include distance from the nearest source of water, the nature of the nearest source/body of water, distinguishing features in the landscape (e.g., ridges, knolls, eskers, wetlands), the types of soils found within the area of assessment, and resource availability. The study area property exhibits potential for pre-contact Indigenous archaeological potential due to the well drained sandy soils, and most significantly, as it is located atop a ridge overlooking the St. Lawrence River.

Potential for historical Euro-Canadian sites is based on proximity to historical transportation routes, historical community buildings such as schools, churches, and businesses, and any known archaeological or culturally significant sites. The area exhibits potential for historical period archaeological sites as land registry records, census records, local information, and recent air photos indicate that there is a historic house foundation located on the site with a connection to some of the areas prominent historical families dating back to the late 18th century.

This study property demonstrates high potential for both pre-contact Indigenous and historical period archaeological sites.

5.0 Field Methods

5.1 Stage 2

The entire 3.7 ha property is considered to have archaeological potential according to the 2011 standards set out for consultant archaeologists by the MHSCTI (2011).

One third of the study area (1.2 ha or 32%) was suitable for ploughing and a pedestrian survey was conducted as per Section 2.1.1 (MHSTCI 2011) (Map 8) (Figure 7). This area was pedestrian surveyed at high potential 5 metre intervals. All surveyed fields had been ploughed prior to commencing fieldwork. Fields were adequately weathered and exhibited no new growth but still provided good surface visibility of at least 80%.

A small section of the study area (0.2 ha or 5%) consisted of significantly overgrown and rocky pastures/laneway and top of slope that could not be ploughed and were assessed with hand excavated test pits (Standard 1. a. and b. Section 2.1.2) (Map 8). As per Section 2.1.2, Standard 2. (MHSTCI 2011), this area was tested on a 5 m interval (Figure 8, Figure 9). All test pits were a minimum of 30 cm in diameter and were excavated 5 cm into subsoil and extended to within 1 m of structures (Section 2.1.2). All soil was screened using 6 mm mesh screens. All test pits were examined for cultural features and stratigraphy then backfilled upon completion. The test pitting survey resulted in four positive test pits (Figure 10) (Map 3).

At the time of the survey a portion of the property (0.1 ha or 3%) was observed as deeply disturbed through roadside ditching and the placement of a shed (Map 8) while the riverfront section was permanently wet march (1.8 ha or 49%) meeting the criteria for exclusion as per Standard 2.a.i and b. Section 2.1 (MHSTCI 2011). The sloping section between the field and the march is very steep, at an approximately 40-degree slope, and was also excluded from assessment (0.4 ha 11%). (Standard 2.a.iii. Section 2.1).

When artifacts were found during the pedestrian survey, they were flagged and survey of the area surrounding the find was intensified to 1 m transects perpendicular to the 5 m transects (Figure 11, Figure 12). Intensified survey extended 20 m in all directions from the find. As new finds were found in the intensified area, they too were flagged, and the area of 1 m transects expanded accordingly until such time as 20 m from the last find had been cleared (Section 2.1.1). During pedestrian survey, diagnostic or formal artifact types were all GPS located individually or by small (<50 cm diameter) cluster, collected, bagged, and labelled according to the findspot and a small assemblage was left in the field to assist in relocating the site as per Section 2.1.1 Standard 8 and 9 (MHSTCI 2011).

The provenience system used for this project is based upon the Matrix project number plus waypoint (WP). During survey, each find spot or positive test pit was assigned and recorded using a unique waypoint based on the project number e.g., MH1035-WP1.

All Stage 2 field activity and testing areas were mapped using a BadElf Survey GPS with WAAS and DGPS enabled, paired to an iPad with ArcGIS Field Map. Average accuracy at the time of survey was approximately 2 m horizontal. Study area boundaries were determined in the field using property boundaries digitized from a georeferenced survey plan of the parcel overlaid in ArcGIS Field Map. All survey data is compiled into ArcGIS and every survey point has a UTM Zone 18T NAD 83 coordinate.

Photographs were taken during fieldwork to document the current land conditions (see Map 8 for Stage 2 photo locations mapped by catalogue number) as per Standard 1.a., Section 7.8.6 (MHSTCI 2011).

Stage 2 field work took place on August 6, 2021. Weather conditions were sunny, hot, and humid. Permission to access the property was provided by Mulder prior to the commencement of any field work; no limits were placed on this access.

5.2 Stage 3 – P. Adams Site (BeFu-17)

A Stage 3 Controlled Surface Pickup (CSP) was not completed. Stage 3 excavations commenced only 10 days following the Stage 2 field work and therefore field condition had not changed in the intervening short duration. Furthermore, the Stage 2 pedestrian survey in the area where artifacts were found was completed using Stage 3 CSP methods as per Section 3.2.1 (MHSTCI 2011) including that each artifact or small cluster was mapped using high accuracy GPS.

The limits of the Stage 3 assessment area were determined through repetitive low yield units on the peripheries (Map 3). Unit yield categories for determining “low” yield units and thereby the limit of excavations were initially determined with field tallies of artifacts. To lend further rigour to the process, ESRI’s ArcMap Pro was employed in the post-excavation analysis to empirically determine quantitative categories of artifact yields using Jenks Natural Breaks classification method with four classes. This helped empirically determine the extent of the sites proper versus scattered artifacts around the periphery created from years of agricultural ploughing. Expansion of the Stage 3 5 m grid was considered complete when tallies along the edge of testing entered the low category. Notably, these tallies exaggerate the archaeological significance of many units as they include modern items gathered to document the lack of integrity.

The Stage 3 assessment of the P. Adams Site (BeFu-17) involved the excavation of 40 1 x 1 metre units across a 5-metre grid with an additional 8 1 x 1 m test units (20% of the total) placed to infill areas of interest, as it was not clearly evident that the site would warrant a Stage 4 recommendation at the start of the assessment (Map 3) (Section 3.2.3, Table 3.1). Infill test units were placed near high yield units to add to the artifact assemblage, on the periphery to better delimit the extents of the site, or near the foundation to better understand the site deposition around this feature. This strategy was used to determine the nature and chronology of the artifacts and the extent of the site. These excavations included the area around the stone house foundation (Figure 13, Figure 14) and encompassed the Stage 2 find area. During excavations it became clear, predominately from modern materials found down to the interface to subsoil, that the entire site area was lacking 19th century integrity, even in the ploughed field area.

Unless cultural features were encountered, all test units were stratigraphically hand excavated to a depth of 5 cm into subsoil, and all soil was screened using 6 mm mesh (Figure 15, Figure 16, Figure 17, Figure 18). Cultural features were not excavated but were recorded in plan view, covered in geotextile, and the unit was backfilled (Section 3.2.2 Standard 6).

Each unit was recorded on a digital standardized context sheet. All artifacts were collected by stratigraphic layer and their provenience recorded. All artifacts were returned to the lab facility for washing, sorting, inventory, analysis, and storage. All excavated units were backfilled upon completion.

Two site datums were established (Map 3): a fixed point within the archaeological site (Datum 1 at the northwest corner of unit 700E 400N at 18T 465006 4956547) and a permanent datum off site

(Datum 2 at grid coordinate 700E 425N at 18T 464996 4956569). NAD 83 UTM Zone 18N coordinates were determined using a Trimble Catalyst unit with real-time corrections paired to an iPad with ArcGIS Field Map. Average accuracy during the survey was approximately 2 cm (Standard 3 Section 3.2 (MHSTCI 2011)). The excavation grid was established with a Nikon DTM-322 total station. Excavation units and site features were total station surveyed or located using the Trimble Catalyst. All survey data is compiled into ArcGIS Pro and every survey point has a UTM Zone 18T NAD 83 coordinate. The site coordinates are listed in Table 1.

The provenience system used for this project is based on the Stage 3 Matrix Heritage project number (MH1042), plus the grid coordinates of the excavation unit, followed by lot number. If no lot number is noted in the provenience, it indicates that a single stratum was present over subsoil. Thus, the provenience of an artifact from Lot 1 in unit 300E 500N would be recorded as MH1038-300E 500N-1.

Site Extent	NAD 83 UTM Zone 18N
North	18T 464997 4956563
South	18T 465018 4956549
East	18T 465015 4956527
West	18T 464991 4956542
Center	18T 465006 4956547
Elevation	84 m

Table 1: P. Adam's Site Coordinates

Photographs were taken during Stage 3 fieldwork to document the current land conditions (see Maps 3 and 8 for photo locations by catalogue number) as per Standard 1.a., Section 7.8.6 (MHSTCI 2011). Additionally, a representative sample of all categories of diagnostic artifacts were photographed (Section 7.5.11, Standards 1-2). Artifact inventory, map inventory, and daily field notes (including sketch maps drawn in the field) are listed in Appendix B, C, and D.

Field work was carried out over seven days on August 16, 18 to 20, and August 25 to 27, 2021. Weather conditions were generally sunny and humid with hot temperatures that averaged in the high 20s and 30s Celsius, with one day of intermittent light rain that did not negatively impact excavation or artifact recovery. Permission to access the property was provided by Mulder prior to the commencement of any field work; no limits were placed on this access.

6.0 Record of Finds

6.1 Stage 2

All artifacts from the Stage 2 Archaeological Assessment are contained in a single banker's box, held at Matrix Heritage's lab facility for long term storage. All artifact dates are sourced from the Parks Canada Archaeological Resources Database (Parks Canada 2012) unless otherwise noted. Artifact inventory, map inventory, and daily field notes (including sketch maps drawn in the field) are listed in Appendix A, B, C, and D.

The test pit survey revealed that stratigraphy across the site generally consisted of 25-30 cm brown sandy silt over light yellowish sandy subsoil that was sometimes mottled brown.

During the Stage 2 assessment a scatter of late-19th century Euro-Canadian material was encountered through both pedestrian and shovel test survey in the center of the property near and into the grassy patch near the shed (Map 3 and 8). The concentration measures approximately 42 x 27 m and has been registered in the Ontario Archaeological Sites Database as the "P. Adams Site" (BeFu-17), after the late 18th to mid 19th century landowners. As per Section 2.1.1 Standard 8 (MHSTCI 2011) a sufficient sample of diagnostic artifacts was collected to document and accurately date the site.

A total of 291 artifacts were recovered from 31 findspots (4 test pits and 27 pedestrian find spots) during the Stage 2 assessment of the P. Adams site (Map 3 and 8). The assemblage is typical of late 19th century domestic sites and is mostly made up of domestic items such as ceramics (n=134), glass (n=77), and metal (n=30). The ceramic assemblage is mostly made up of vitrified white earthenware (n=49, 1845+), porcelain (n=24), and refined white earthenware (n=29, 1830+). Interestingly fours pieces of pearlware (1775-1830) were identified, two with early palette painted designs (Figure 19). The porcelain fragments were mostly plain, moulded, or decorated with gilt bands or lithographs (Figure 20). Decorative types on refined white earthenwares include stamped designs in blue (1840-1890) blue transfer prints (Figure 21), and a teacup with a brown transfer printed Classical scene (Figure 22). The vitrified white earthenwares are undecorated or moulded with wheat pattern (1848+) (Figure 23) (Sussman 1985:7). Two plain clay smoking pipe bowl fragments and one plain pipe stem was found (Figure 24). Glass items include pane glass, solarized manganese tinted bottle glass and part of a pedestal for a dish or lamp (Figure 25), part of a cut glass serving dish (Figure 26), and shards of unidentified bottle glass in blue, green, and colourless glass including a the flared finish of a prescription lip that is the most common finish on druggist, drug store, and prescription bottles made between the mid-1870s and 1920s (Figure 27). Several cut (n=17) and a couple of wire nails (n=2) were also found along with a fragment of a slate board.

Generally, the artifacts in the scatter from the P. Adams Site relate to a mid-1800s, early 1900s domestic Euro-Canadian occupation. Analysis of the assemblage suggests a strong connection to a mid-to-late 1800s occupant due to the rarity of earlier 19th century materials, such as pearlware, or creamware. Only 29 sherds of refined white earthenware were uncovered, compared to 49 sherds of vitrified white earthenware and 24 sherds of post 1900s English porcelain. First introduced in the 1840s, ironstone took several decades to become a popular ware type in Ontario, not becoming widespread until the 1860s and by the 1870s it was often the dominant tableware in many Ontario households (Kenyon 1991:7-8).

Artifact inventory, photograph record, maps, and daily field notes (including sketch maps drawn in the field) are listed in Appendix A to D.

6.2 Stage 3 – P. Adams Site (BeFu-17)

6.2.1 Stratigraphy

Stratigraphy across the site shows variation due to the presence and demolition of the historical foundation. Units located within the historic foundations consisted generally of four lots: a plough zone over a medium brown sandy silt over a layer of light yellow sand that often sat on top of a destruction layer of rubble, bricks and mortar, which – where excavation to full depth was possible - overlies a poured concrete floor (Figure 28, Figure 29). A neighbour visiting the site confirmed that when the homestead was demolished in the 1980s, they covered the rubble with sand.

Units that were dug outside the foundations consisted of a medium brown plough zone overlying a lighter brown mottled layer (an interface to subsoil), and then a bright orange subsoil that is sometimes slightly mottled brown (Figure 30, Figure 31, Figure 32, Figure 33). The plough zone typically ranges in depth from 20 to 30 cm but extends to roughly 80 cm in several areas.

To better document the lack of integrity of 19th century deposits at the site, a GIS based analysis was undertaken. For each unit, artifacts from the earliest stratigraphic layer (excluding subsoil) were reviewed for “modern” artifacts. “Modern” items in the inventory were identified as items generally post-dating 1870, with a focus on post 1900. Caution was used to not include any items that may predate 1870 and as such, the modern criteria were limited. Artifacts were deemed modern based on material type (solarized or manganese tinted glass, aluminum foil, Bakelite or other early synthetics, Styrofoam, plastic), function (wire nails), primary diagnostic (machine made bottle, 20th century, Owen’s Machine, 1890 or later), and ceramic decoration (lithographed). The tallies of these lowest stratigraphic layer modern items were then mapped to provide a review of the spatial distribution of modern material encountered at depth. Even with the limited criteria for modern items, essentially every unit contains numerous modern items in the layer overlying subsoil (Map 4). This clearly documents that the ongoing occupation of the site into the 20th century and the demolition in the 1980s removed any 19th century archaeological integrity from the site.

6.2.2 Features

A single cultural feature was encountered at the P. Adams Site (BeFu-17) during the Stage 3 assessment, the aforementioned stone foundation. The foundation remains visible in aerial imagery of the property, and it has been modified and impacted by continuous occupation well into the 20th century, including concrete modifications such as a poured concrete floor. Presumably, this is the remnants of the house built by the Adams family after they acquired this portion of the property in 1797. Historical records and local informants suggest the house was inhabited until at least the early 1940s and was still standing in the 1980s.

Modern inclusions were found throughout the house foundations, indeed across the site (Map 4), and these include Styrofoam, rubber gaskets, plastic disposable cups, food wrappers and plastic bread tags (Figure 34, Figure 35). The house foundations were covered by rubble and sand, presumably after the house was demolished in the 1980s. The foundation is approximately 50 cm wide and composed of dry-laid limestone block with a later concrete basement floor (Figure 36, Figure 37, Figure 38, Figure 39). The units excavated in relation to the house structure showed the foundation stones had been placed directly on top of bedrock and the remaining walls are four to six courses high. Unit 695E 410N, located inside the house, clearly documents the modern nature of the deposits in the basement with a poured concrete floor overlaid with fill containing modern refuse.

The full extent of the foundation is not known as it appears to have been truncated, possibly through modern demolition. The probable outline of the structure is shown in Map 3 as oriented from the

presence of this feature in units 700E 410N, 699E 411N, 690E 410N, 690E 405N (southwestern corner), and 695E 405N. Based on the presence of the north and south walls, the foundation was 6.5 m north to south. East to west, the structure was at least 11 m long. Notably, the northern wall extends through unit 700E 410N, placing the northeast corner further east, however, the southern wall is not present in units 700E 405N nor 701E 404N, where it was anticipated. Unit 700E 405N produced a typical plough zone layer over a jumbled mortar and brick layer over subsoil, with no cultural features. Unit 701E 404N was found to have typical plough zone over a layer of clay fill over a layer of sand fill with modern artifacts capping subsoil. It is likely this sand fill was deposited during the demolition as previously noted. The lack of the foundation in this area, and modern infilling to subsoil, is suggestive that the eastern end of the southern foundation was either removed at that time or previously. While the foundation is an interesting remnant of the earlier occupations, there are no in-situ or contextual historical deposits remaining; the entire foundation area (interior and exterior) lack integrity as demonstrated by the pervasive nature of modern items as shown in Map 4.

6.2.3 Finds

A total of 5,668 artifacts were recovered from the Stage 3 excavations. A breakdown of the assemblage by material type is shown in Table 2.

Material	Quantity
Ceramic	931
Construction Mat / Compound	110
Flora	3
Fauna	316
Fuels and Industrial Mat.	53
Glass	2832
Leather and Textiles	53
Lithic / Minerals	11
Metal	1318
Synthetics	41
Total	**5668**

Table 2: Breakdown of the P. Adams Site assemblage by material type.

Most of the finds consist of ceramic, metal, and glass fragments. Ceramics are mostly domestic in origin, including various types of tablewares, as well as coarser utilitarian and kitchen wares. A variety of clay smoking pipe fragments are also represented. The vast majority of the metal category is represented by wire and cut nails, in addition to other structural hardware. Glass fragments are primarily windowpane glass, in addition to a variety of food and household-related bottles and containers. There is also an appreciable quantity of faunal material in the assemblage, mainly representative of a range of domesticated mammals, some of which show signs of heating (burnt or calcined) as well as butchering.

An analysis by functional groups allows for a better understanding of the site (Table 3). As is typical on 19th-century domestic sites, the assemblage is dominated by household and structural items.

Function	Quantity
Arms and Ammunition	1
Ecological (Fauna/Flora)	314
Food (Household/Domestic)	1174
Furnishing	53
Not Classified	845
Personal/Societal	103
Structural	3100
Tools and Equipment	61
Transportation Tools & Equipment	17
Total	**5668**

Table 3: Breakdown of the P. Adams Site assemblage by functional type.

a. Faunal

A total of 316 fragments of faunal material were recovered from the P. Adams Site. Of these, 34 were identified as mammal, while nine fragments of mollusc shell, one fish bone, and twenty-seven bird bone fragments were also recovered. Most of the mammal bone derives from large domesticates (e.g., cow, pig, horse) typically seen on 19th-century farmsteads. A total of 24 fragments showed signs of sawing from butchering and 25 fragments had been burned or calcined.

b. Household/Domestic

This broad category is the second largest represented at the P. Adams Site. It is dominated by ceramics (n=844) related to various eating and drinking functions. Ceramic artifacts are particularly useful because they can be readily dated based on the ware type and decoration. It should be cautioned that the time lag effect can impact the efficacy with which ceramics and glass objects can date sites. Research on late 19th-century domestic sites has shown that ceramic objects often date close to 20 years earlier than the time of an archaeological deposit. These numbers can vary widely depending on factors such as local economies (transportation and distribution networks) and socioeconomic status, which are difficult to quantity, but the potential effect of time lag should nonetheless be acknowledged (Adams 2002:66). Ware types and decorative patterns for the assemblage are summarized in Table 4.

Ceramic forms and function are often difficult to identify because of the fragmentary nature of the sherds; however, the largest category is represented by tableware forms used in the serving and consumption of food and drink. Ware types represented in this category are refined white earthenware (RWE), vitrified white earthenware (VWE) (Figure 40), porcelain, yellowware (Figure 41). Identified forms include bowls, plates, jugs/pitchers, mugs, saucers, and teacups, amongst a variety of unidentified flat and hollow wares. Utilitarian storage and kitchen wares are also present in the coarse earthenware category (Figure 42). These forms include crocks, milk pans, jugs, and a variety of unidentified wares.

The most common ware type is VWE (n=465), followed by Coarse Red Earthenware (n=217), RWE (n=63), and porcelain (n=62). The presence of a larger percentage of VWE is suggestive of a late 19th-century occupation, as the increase in popularity of vitrified earthenwares occurred over the latter half of the 19th century (Miller 1991:10). Decorative types on RWE and VWE in the assemblage are quite similar, with plain sherds representing the bulk of the assemblage (82.5% for RWE, 80% for VWE). It should be noted that these numbers are inflated because of the nature of the data set (sherd count): a vessel count would show a lower proportion of plain decoration. The high proportion

of plain vessels in the VWE category relates to the variety moulded designs that were popular on these wares (Majewski and O'Brien 1987).

Ware Type	Decorative Pattern	Quantity	Date Range
CEW	Plain	2	
	Undiagnostic	215	
Coarse Stoneware	Plain	2	1800-1910
	Undiagnostic	25	
Fine Earthenware	Undiagnostic	2	
Porcelain unspecified	lithograph unidentified	5	1890-
	Moulded	12	
	Plain	25	
	Scalloped rim	6	
	Unspecified Transfer	5	
	Undiagnostic	9	
RWE	cable	1	
	Edged ware	1	1830-1890
	Moulded	1	1830-
	Plain	52	1830-
	Stamped	1	1840-1890
	Unspecified Transfer	7	1830-
VWE	Banded	1	1845-
	Flown Transfer	2	1844-1880
	lithograph unidentified	4	1890
	Moulded	27	1845-
	Moulded unspecified	1	1845-
	Painted unspecified	1	1845-
	paneled moulded	3	1845-
	Plain	368	1845-
	Scalloped rim	3	
	Stamped	4	1840-1890
	Unspecified Transfer	12	1845-
	Wheat / Ceres	26	1848-
	Undiagnostic	11	
YWE	Banded	1	
	Plain	1	1827-1972
	Undiagnostic	8	
Grand Total		**844**	

Table 4: Summary of ware types and decorative patterns on ceramics from the P. Adams Site.

Note: CEW = Coarse Earthenware, Fine EW = Fine Eathenware, PWE = Pearlware, RWE = Refined White Earthenware, VWE = Vitrified White Earthenware, YWE = Yellowware

Transfer prints are the most common decorative type (11% for RWE, 2.5% for VWE) and are present in various colours including blue and black (Figure 43). Broadly speaking, transfer-printed wares were most popular in the years leading up to the mid-19th century, with a resurgence in the 1880s (Samford 1997:4). As for popular decorative types on VWE, the most common are moulded motifs (n=57) with 56% being moulded in a wheat/ceres motif (Figure 44). Finally, stamped, industrial slipped, and edged wares are present in smaller numbers (Figure 45, Figure 46, Figure 47). Several "Ironstone China" maker's marks were identified on various vessel fragments (Figure 48). Another partial mark, "Many For… B. Buck Man, Ogdensburg N.Y." was found. The fragments of porcelain are mostly plain, moulded, or decorated with gilt bands or lithographs (Figure 49, Figure 50, Figure 51, **Figure 52**).

Most of the remainder of the Household/Domestic group is composed of glass artifacts (n=307). Glass vessels can also be dated based on rapidly changing methods of manufacture in the 19th

century. They are often a more reliable indicator of the date of a site, because of their short use-life (and consequently shorter time lag) when compared to ceramics. The time lag for glass on late 19th century sites has been demonstrated to be in the order of 3-6 years (Adams 2002:66). This said, most glass fragments from archaeological contexts are difficult or impossible to date, given their fragmentation. Where present, bases and finishes (rim/lip area) are the most diagnostic for dating purposes.

The vast majority of the glass fragments in the P. Adams Site assemblage derives from modern bottles of unidentified function in a variety of colour including brown, dark olive green, yellow, red, blue/green (aqua), and clear (Figure 53, Figure 54). There are also several sherds with a distinct purple hue (Figure 55), which is the result of a manganese additive used to decolour glass between the period ca. 1880-1920 (Adams 1994:100). When exposed to sunlight, this manganese additive turns a distinct purple colour. There are also five examples of milk glass which were often moulded in different ridged or dotted motifs (Figure 56).

There are three examples of hand-tooled finishes (Figure 57). Hand-tooled finished were common beginning in the 1820s and continue for about the next century (Jones et al. 1989). A whole 1940s Dominion Glass iodine bottle was also found (Figure 55) along with several examples of crown finishes, machine made stippled bases, and threaded closures which all date from the early-mid 20th century or later. A unique aqua glass fruit jar sealer lid was also found and embossed with “The American Glass Co.” (Figure 58). The remainder of the Household/Domestic group is comprised of iron utensil handles, a table fork, and stainless steel threaded can lids (Figure 59). Several modern 21st century inclusions were also found, including fragments of plastic and Styrofoam cups, plastic food wrappers, a plastic bread tag, and a plastic bottle cap (Figure 35).

c. Personal/Societal

The items in this category represent some of the most intriguing from the site. Numerous pharmaceutical/toiletry bottles were found, accounting for 42 of the 103 artifacts. Many of these are most likely patent or proprietary “cure-all” medicines which were produced commercially and did not require prescriptions (as opposed to so-called ethical medicines prescribed by doctors) (Brighton 2008:142). Many have embossed commercial labels but are too fragmentary to identify, including “HAR”, “Jacobs”, and “Imper”. They were also different colours, including aqua and manganese tinted.

Health/hygiene items are also represented by several fragments of modern red plastic and Bakelite hair comb teeth and plastic hair pin. Clay smoking pipe stem and bowl fragments are the next most common artifact in this category (n=19) (Figure 60). Decorated pipes include an undiagnostic dotted design as well as another ridge and facet design and thistle motif. A single synthetic black composite pipe mouthpiece was found.

Numerous clothing-related items are present in the form of buttons (Figure 61), buckles (Figure 62), a copper alloy cufflink, a watch face, safety pin, jewelry, and shoe parts (Figure 62). The buckle fragments (n=3) are made of a copper alloy with embossed stars on the surface and leather on the underside, most likely used for clothing adornment. The 10 buttons are made of a variety of materials, including porcelain (Prosser – 1840+), bone, shell, pewter, and iron. They range in size from 10-17 mm. The small sizes suggest that the buttons were used for shirts, trousers, or undergarments, rather than outerwear such as coats. Many of the buttons are utilitarian and are undecorated or very minimally decorated (e.g., blue Prosser button). The watch face is modern and made of stainless steel (Figure 62), while shoe parts include small fragments of leather soles, 12 pewter eyelets and white cotton shoelaces. As for the jewelry, a modern, black plastic jewelry box

with a felt liner was found, along with a small pyramid shaped stainless steel bracelet link and an unidentified black tapered hoop that is potentially made of Bakelite or another type of synthetic (Figure 62). The piece is very smooth and moderately weighted. The thinner tapered top of the hoop is also broken and could have held a jewel or clasp for an earring.

Other personal items of note include several porcelain toy figurines including a moulded doll arm and a doll leg with a painted black boot and a roman numeral VII on the side of the leg as well as a porcelain tree trunk painted brown to resemble bark (Figure 63). Lastly, a tobacco tag made of tin and shaped like a heart was recovered and dates between 1877-1922 (Figure 64).

d. Structural

This category represents the largest functional group from the P. Adams Site, accounting for over 55% of the entire assemblage. Nails make up the bulk of the structural group, accounting for over a third (n= 1,056, 34%) of the category (n=3,100). They are represented by two different types, cut (n=547 [52%]), and wire (n=509 [48%]). The general progression of wrought to cut to wire nails is a valid trend, but the dates at which the different types appear is variable and highly regionally dependant ((Adams 2002). By the late 18th century, machines for cutting nails from large plates were in limited use; these early nails still required handmade heads. Several decades later, machines were produced which could cut and head nails as part of a single process (Adams 2002:67–68). Wire nails came to dominate the market in the late 19th century, though limited production began sometime around mid-century. It was not until the 1880s, however, that they began to be produced in appreciable quantities in North America (Adams 2002:69). Early patent dates and initial production certainly do not correlate with consumer use of particular types of nails. Other local factors might delay the adoption of new technologies, especially in more rural areas. Furthermore, time lag may be introduced through the re-use and recycling of nails from earlier structures. Thus, while there is a general chronological progression, accurate dating is difficult.

Nonetheless, the breakdown of the nail assemblage from the P. Adams Site is informative. The fact that only two types, cut and wire, are present likely indicates that major construction activities and renovations/repairs took place in the mid to late 19th century. A small number of other fasteners are also present, including cut spikes, roofing nails, screws, large staples, nuts and bolt, and washers.

The second most common object in the Structural group is pane glass, accounting for 58% of the category (n=1,796). Building materials including brick, drainage tile, plaster, and mortar. Miscellaneous scraps of metal, slag, rubber, textile samples, coal, asphalt, and wire are also present as are unidentifiable rectangular fragments of metal strapping. A limited number of unglazed terracotta pieces are also present, which likely represent flowerpots or earthenware tiles. Three porcelain doorknobs along with a stainless-steel Weiser door lock from the 21st century were found. An aqua coloured glass insulator from a power line from the 20th century was also found.

e. Furnishing

There are a total of 53 artifacts in the furnishing functional group, most of which are oil lamp chimney (n=45) fragments. Also included in this category are furniture springs, mirror fragments, a large furniture nail with an embossed copper alloy head.

f. Indigenous Artifacts

There were three Indigenous artifacts found dispersed across the site. All three artifacts were made of Onondaga Chert, two were thinning flakes while the third is a heavily reworked projectile point that cannot be accurately identified as a particular type (Figure 65).

g. Tools and Equipment

The tools and equipment category is diverse and includes seven railroad spikes, a spigot, eye bolts, hooks, agricultural equipment parts, a wagon wheel, a whetstone for sharpening metal tools, a jigsaw blade, and two horseshoe fragments.

7.0 Analysis and Conclusions

The Stage 1 assessment indicated that there was archaeological potential for the study area based on proximity to the St. Lawrence River and land registry records indicate that the Adams family lived on the property from its patent date in 1797 to the mid-1870s.

As such, a Stage 2 archaeological assessment was conducted on the study property. The Stage 2 assessment yielded a 19th century artifact scatter that that was likely associated with the Adams family who lived on the property until the 1870s. This site was registered with the MHSTCI as the P. Adams site (BeFu-17). A total of 219 artifacts were recovered from 31 findspots. No pre-contact Indigenous artifacts were found. Analysis shows that the recovered material relates to a domestic Euro-Canadian occupation dating to the late 19th-century into the early 20th-century. As more than 20 artifacts date the period of use to before 1900 as per Standard 1.c. of Section 2.2 (MHSTCI 2011) this site is considered to have CHVI and required Stage 3 assessment (MHSTCI 2011).

Stage 3 assessment of the P. Adams Site produced an assemblage of material typical of a rural late 19th-century, early 20th-century Euro-Canadian farmstead. Structural evidence in the form of a stone house foundation along with considerable numbers of cut nails, brick, mortar, and pane glass demonstrates that a building was constructed on the site sometime in the 19th century. Indeed a dry-laid limestone foundation is present and the amount of domestic refuse recovered at the site suggests this was a residence, rather than an outbuilding. Based on the documentary evidence the original house foundations were likely associated with the Adams family and were then continuously used at least into the 1940s, and based on the modern refuse recovered, perhaps until the destruction and demolition of the standing portions in the 1980s.

The land including the subject property was granted to Lieutenant Gideon Adams on July 16, 1797. In 1853 Samuel, the eldest son of Gideon Adams, moved to Renfrew Country and officially quitted his claim, to his brother Gideon Adams Jr., to the 50 acres of the western half of the eastern half of the property for the price of £50. Five years later, in July of 1858, Gideon Jr. sold the land to his son Philemon for £250. Philemon is presumed to be the P. Adams associated with the structure on the 1861 Walling map (Map 5).

Although Philemon did not acquire the subject property until 1858, it is possible he and his family had been living on the land previously. The 1851 census records list Philemon as 32 years old living with his wife and family in a one storey frame house. Philemon died on Christmas Eve of 1860 at the age of forty, leaving Elizabeth to raise a young family of five children. By 1861 their home is described as a one and a half storey frame house. Philemon possibly died without a will as his children Gideon and Ann were officially granted the land in 1870 with a crown patent due to their status as being descendants of Loyalists.

The artifacts in the scatter from the P. Adams Site relate to a continuous domestic Euro-Canadian occupation of the property beginning in the mid-1800s and extending well into the 1900s. Although the site has been registered as the P. Adams Site (BeFu-17), the collection largely post dates the Adams occupancy. While Philemon Adam's widow and children occupied the property until the 1870s, this site assemblage better represents the occupation of Samuel Simons and his family who acquired the land in 1883 and owned it off and on until the 1980s. The site also potentially includes the 10-year occupancy of Nicholas Devereaux and his family (1890-1900) and well as Frank Roger's occupancy of the property between 1912 and 1919.

Chronological evidence based on the material culture demonstrates that the occupation at the site spans primarily the later portion of the 19th century into the 20th century. The presence of a larger

percentage of VWE (n=465) in comparison to RWE (n=63) is suggestive of a late 19th-century occupation, as the increase in popularity of vitrified earthenwares occurred over the latter half of the 19th century (Miller 1991). Likewise, the near absence of pearlware (n=4) and creamware (n=1) preclude an early 19th-century date.

Moreover, inclusion of later ceramics like porcelain decorated with lustre, lithographs, and gilt banding also indicate a later occupation. There is also ample evidence to suggest a continuous occupation of the site after the turn of the 20th century; as a concrete basement was found within the house foundations along with modern intrusions like Styrofoam, plastic debris, throw pillows, and an icebox. As Map 4 illustrates, an analysis of modern items overlying subsoil further demonstrates the late date for the site occupancy and indeed there are no intact early or mid-19th century deposits at the site.

The archaeological evidence uncovered mostly represents an occupation peaking in the 1870s and continuing throughout the latter half of the 20th century. This correlates with the documentary evidence of the property being first occupied by the Adams family until the 1870s and subsequently the Simons family and their renters until the 1980s. The artifact assemblage indicates that most of the occupation occurred between 1870 and the mid-1900s with no intact early to mid-19th century deposits. Therefore, the site has no further Cultural Historic Value or Interest (CHVI) under Section 3.4.2, Standards 1. a. and b. of the Standards and Guidelines for Consultant Archaeologists, as most (80% or more) of the archaeologically documented occupation of the property postdates 1870 (MHSTCI 2011) and is therefor not associated with the first generation of settlement.

Three pre-contact Indigenous artifacts were encountered. While indicative of Indigenous use of the area, was recovered from contexts mixed with 19th century and 20th century artifacts. No potential pre-contact Indigenous features were identified. Neither the Onondaga flakes nor the biface are diagnostic. Thus, no evidence of a significant pre-contact Indigenous occupation was found within the study area. As no test units yield more than five Aboriginal artifacts and none of the items were diagnostic the finds do not meet the criteria for Stage 4 Excavation for small or diffuse lithic scatters as per Section 3.4.1 Standard 1 (MHSTCI 2011).

8.0 Recommendations

Based on the results of the Stage 1 to Stage 3 investigations at the P. Adams Site (BeFu-17), it is recommended:

1. No further archaeological study is required for the subject property as delineated in Map 1.

2. If during the process of development any archaeological resources or human remains of archaeological significance and or Indigenous interest are encountered, the Mohawk Council of Akwesasne and the Mohawks of the Bay of Quinte should be contacted immediately at:

   Mohawk Council of Akwesasne
   PO Box 90
   Akwesasne, Quebec H0M 1A0
   Telephone: (613)-575-2250

   Mohawks of the Bay of Quinte- Kenhteke Kanyen'kehá:ka
   24 Meadow Dr.
   Tyendinaga Mohawk Territory, ON, K0K 1X0
   Telephone: (613)-396-3424 or (613)-396-3627
   Email: consultation@mbq-tmt.org

9.0 Advice on Compliance with Legislation

a. This report is submitted to the *Minister of Tourism and Culture* as a condition of licencing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism and Culture, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

b. It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licenced archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest , and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

c. Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licenced consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

d. The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

10.0Closure

Matrix Heritage has prepared this report in a manner consistent with the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made. The sampling strategies incorporated in this study comply with those identified in the Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011) however; Archaeological Assessments may fail to identify all archaeological resources.

The present report applies only to the project described in the document. Use of this report for purposes other than those described herein or by person(s) other than Mulder or their agent(s) is not authorized without review by this firm for the applicability of our recommendations to the altered use of the report.

This report is pending Ministry approval.

We trust that this report meets your current needs. If you have any questions or we may be of further assistance, please contact the undersigned.

Matrix Heritage Inc.

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12.0Images

Figure 1: General view of ploughed field (MH1035-D003).

Figure 2: Ploughing conditions (MH1035-D012).

Figure 3: General area of the historic house foundation (MH1035-D034).

Figure 4: View of southern portion of study area; wet, marshy, cattails (MH1035-D004).

Figure 5: Test pitting grassy area (MH1035-D038).

Figure 6: View of the southern wet portion of the study area and the St. Lawrence River (MH1042-D003).

Figure 7: Field walking ploughed field in the eastern portion of the site (MH1035-D052).

Figure 8: Test pitting along southern edge of field (MH1035-D049).

Figure 9: Trees and brush in southern edge of the field (MH1035-D047).

Figure 10: Block of marble (MH1035-D042).

Figure 11: General view of find flags west of the grassy area (MH1035-D025).

Figure 12: General view of find flags west and south of the grassy area (MH1035-D026).

Figure 13: General area of the historic house foundation (MH1035-D032).

Figure 14: Sample of bricks and mortar on the surface where the house foundation is (MH1035-D033).

Figure 15: Excavations along the 700E line (MH1042-D007).

Figure 16: Excavating unit 700E 400N (MH1042-D014).

Figure 17: Excavating unit 700E 410N (MH1042-D011).

Figure 18: Excavating the western portion of the site (MH1042-D042).

Figure 19: Early Palette painted PWE from WP10 and WP11 (MH1042-D053).

Figure 20: Porcelain sherds with lithographed and moulded and gilt designs from WP22 (MH1042-D056).

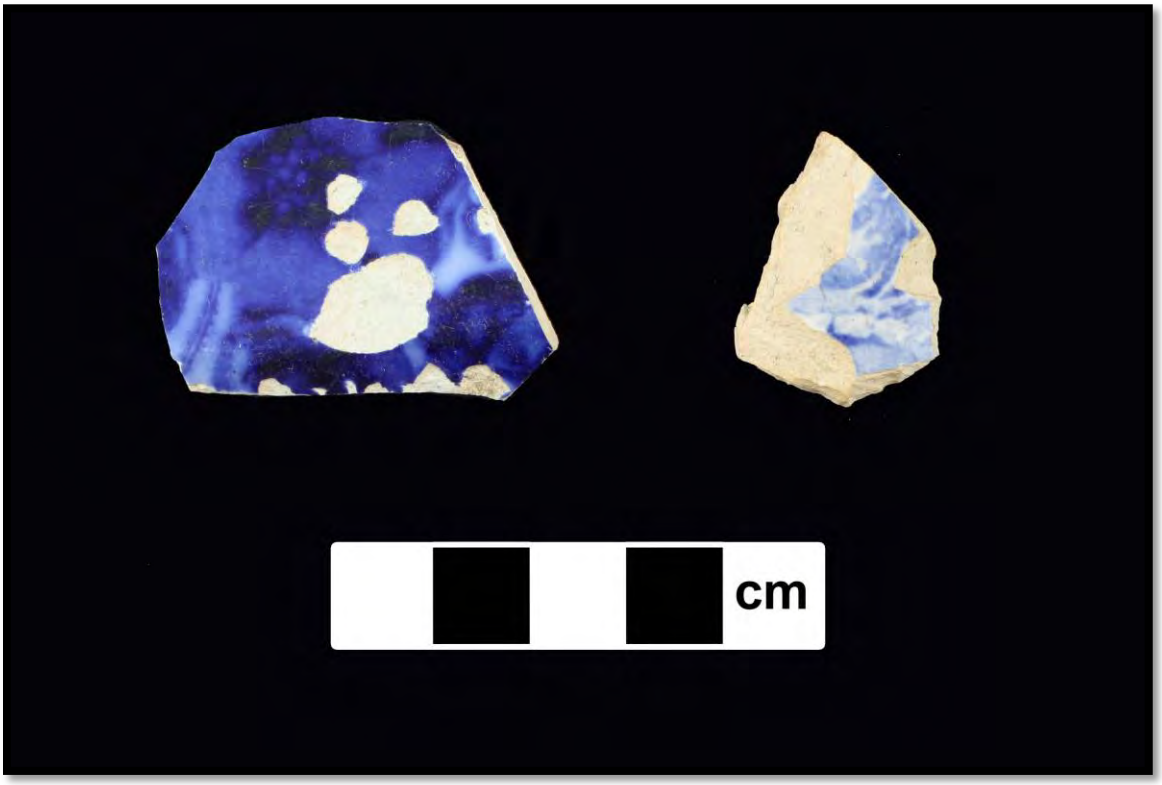


Figure 21: RWE sherds with blue transfer prints from WP25 and WP26 (MH1042-D061).

Figure 22: Brown transfer print on RWE teacup from WP29 (MH1042-D058).

Figure 23: VWE wheat pattern teacup from WP21 (MH1042-D055).

Figure 24: Clay smoking pipe bowl (WP 10) and stem (WP28) fragments (MH1042-D054).

Figure 25: Solarized glass pedestal for a dish or lamp from WP26 (MH1042-D060).

Figure 26: Cut glass tableware from WP26 (MH1042-D059).

Figure 27: Bottle finish from WP22 (MH1042-D057).

Figure 28: Metal box lid in the rubble inside the house foundation in unit 695E 410N (MH1042-D029)

Figure 29: Unit 695E 410N excavated to the floor inside the foundation, pillow in the wall (MH1042-D032).

Figure 30: East profile of unit 709E 389N (MH1042-D073).

Figure 31: South profile of unit 695E 415N (MH1042-D059).

Figure 32: Plan view of unit 695E 415N (MH1042-D058).

Figure 33: West profile of unit 715E 400N showing layer of asphalt (MH1042-D075).

Figure 34: Garbage from the rubble inside the house foundation in unit 695E 410N (MH1042-D030).

Figure 35: Examples of modern artifacts (stainless steel watch face (695E 405N 1), plastic hair clips (690E 400N 2, 690E 400N 1), and a plastic bread tag (698E 397N 2)) found during Stage 3 excavations (MH1042-D079).

Figure 36: East profile of unit 690E 410N, exterior west wall of the foundation (MH1042-D053).

Figure 37: North profile of unit 690E 405N, corner of foundation (MH1042-D056).

Figure 38: South profile of unit 699E 411N, exterior of northern wall (MH1042-D062).

Figure 39: South profile of unit 695E 405N, interior of southern foundation wall (MH1042-D068).

Figure 40: Examples of mug handles for VWE vessels (690E 400N 2, 700E 390N 1, 685E 405N 1) (MH1042-D080).

Figure 41: Fragments of yellowware vessels, plain (700E 390N 1, 705E 385N 1) and decorated with an industrial slip design (690E 415N 1) (MH1042-D081).

Figure 42: Fragment of a coarse red earthenware vessel with tin glaze (700E 380N 1) (MH1042-D082).

Figure 43: Transfer print decoration on VWE vessel fragments (690E 390N 1, 698E 397N 2, 700E 395N 1) (MH1042-D083).

Figure 44: Examples of moulded designs on VWE vessels, including floral motifs (700E 395N 1) and wheat pattern (700E 395N 1, 708E 393N 2, 700E 405N 1) (MH1042-D084).

Figure 45: Stamped decoration on VWE (693E 396N 1, 695E 390N 1) (MH1042-D085).

Figure 46: Industrial slipped designs on VWE (685E 390N 1) (MH1042-D086).

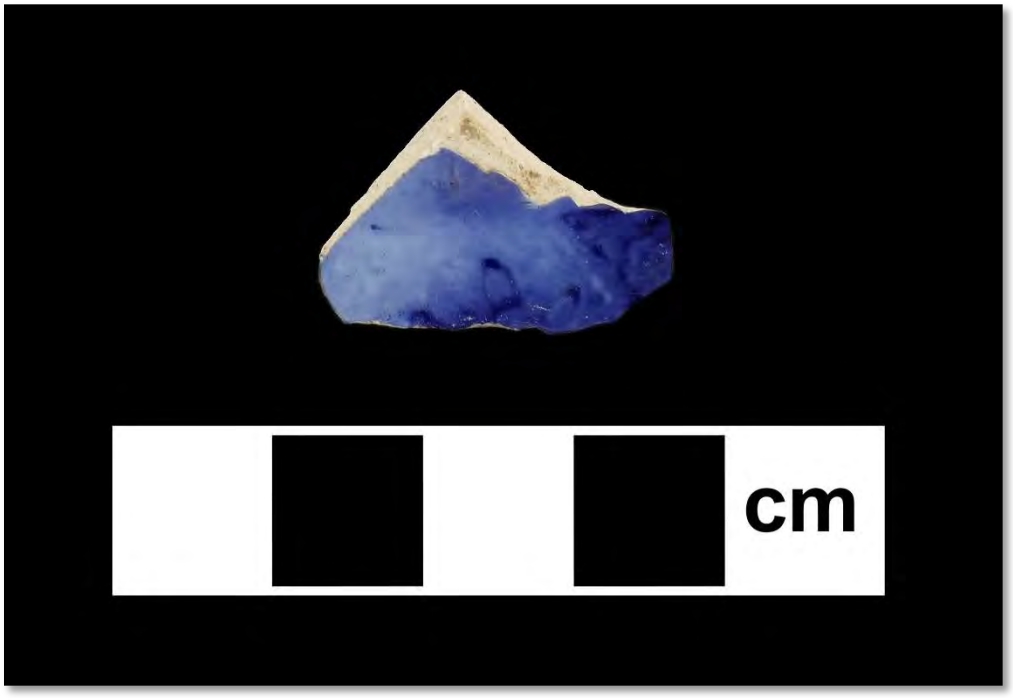


Figure 47: Blue flown transfer on VWE (700E 390N 1) (MH1042-D087).

Figure 48: Examples of maker's marks on VWE, including Ironstone China mark (685E 385N 1, 705E 395N 1, 700E 395N 1) (MH1042-D088).

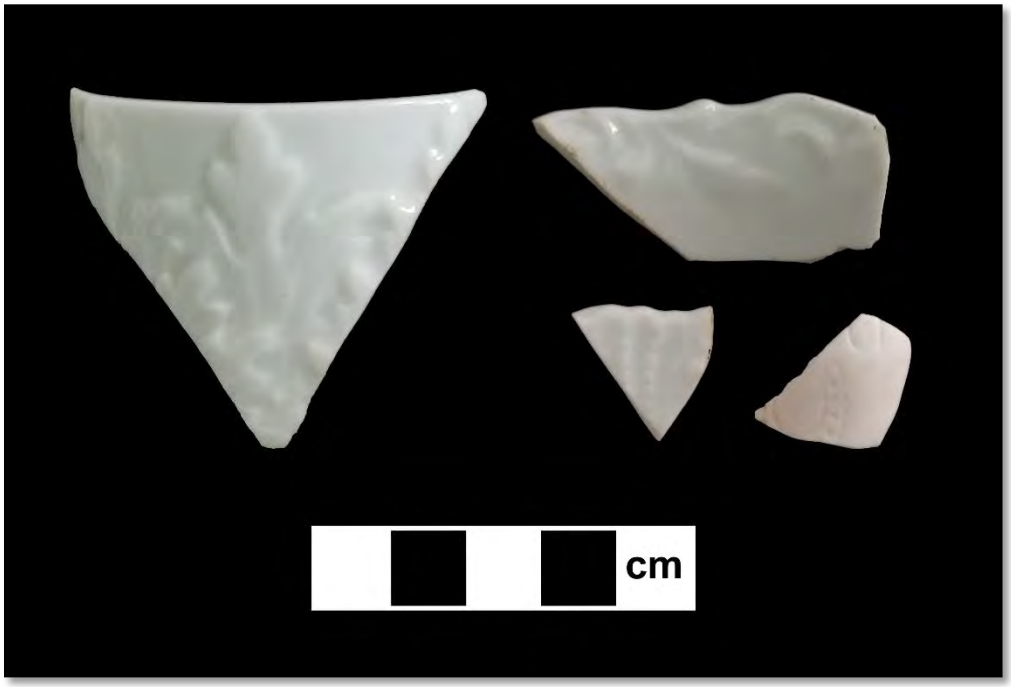


Figure 49: Moulded designs on porcelain (690E 390N 1, 698E 397N 1, 685E 410N 1, 695E 410N 1) (MH1042-D089).

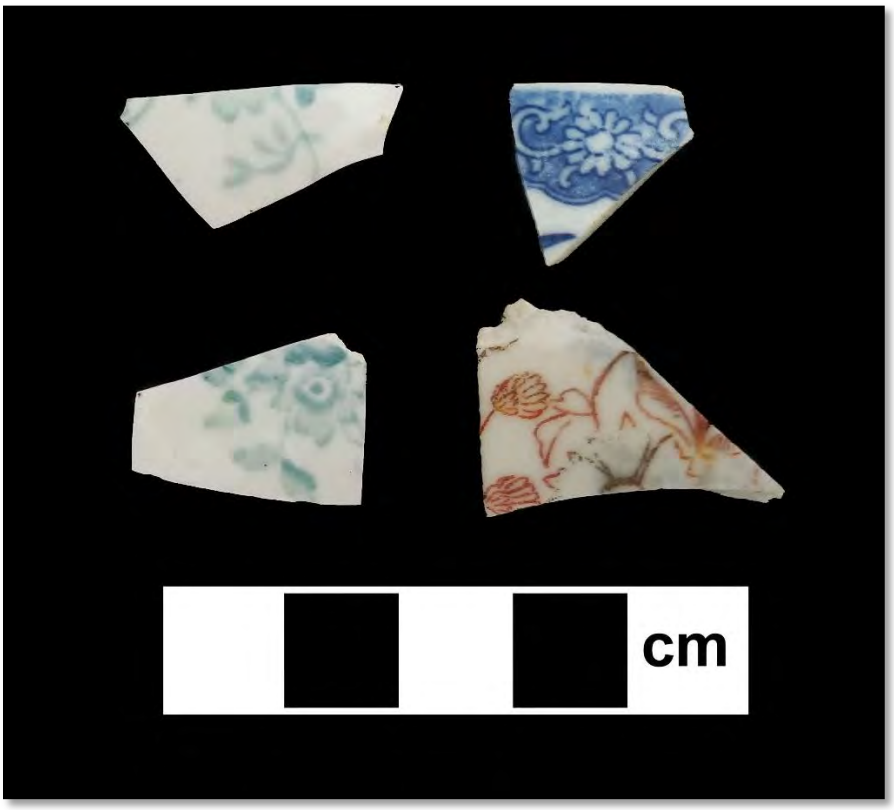


Figure 50: Transfer printed designs on porcelain (695E 395N 1, 700E 380N 1, 700E 385N 1) (MH1042-D090).

Figure 51: Lustre and gilded decoration on porcelain (698E 397N 1, 685E 385N 1, 705E 395N 4) (MH1042-D091).

Figure 52: Lithograph design on porcelain (705E 390N 1) (MH1042-D092).

Figure 53: Examples of glass artifacts, yellow (690E 390N 1), red (700E 400N 2), and moulded glassware (708E 393N 2, 700E 390N 1) (MH1042-D096).

Figure 54: Modern glass drinking vessel (695E 410N 4) (MH1042-D097).

Figure 55: Brown iodine bottle with plastic threaded cap (698E 397N 2) and solarized manganese tinted pharmaceutical bottle (705E 395N 3) (MH1042-D093).

Figure 56: Moulded milk glass (685E 385N 1, 690E 400N 1, 685E 405N 1) (MH1042-D094).

Figure 57: Manganese tinted glass bottle finish (700E 380N 1), hand finish (705E 395N 5), and threaded jar finish (700E 400N 2) (MH1042-D095).

Figure 58: Glass fruit jar sealer with "The American Glass Co." impressed around rim (695E 400N 1) (MH1042-D098).

Figure 59: Iron corroded utensil handles (698E 397N 2) (MH1042-D099).

Figure 60: Examples of clay smoking pipe bowls (695E 395N 1, 690E 410N 1, 715E 400N 2, 690E 390N 1), shank (685E 410N 1), spur (703E 382N 1), stems (698E 397N 2), and composite mouthpiece (700E 390N 1) (MH1042-D100).

Figure 61: Different buttons found during Stage 3 excavation, including porcelain Prosser (700E 405N 1, 690E 410N 1, 695E 415N 1), iron (700E 395N 1, 705E 395N 4), shell (690E 390N 1), and bone buttons (710E 400N 1) (MH1042-D101).

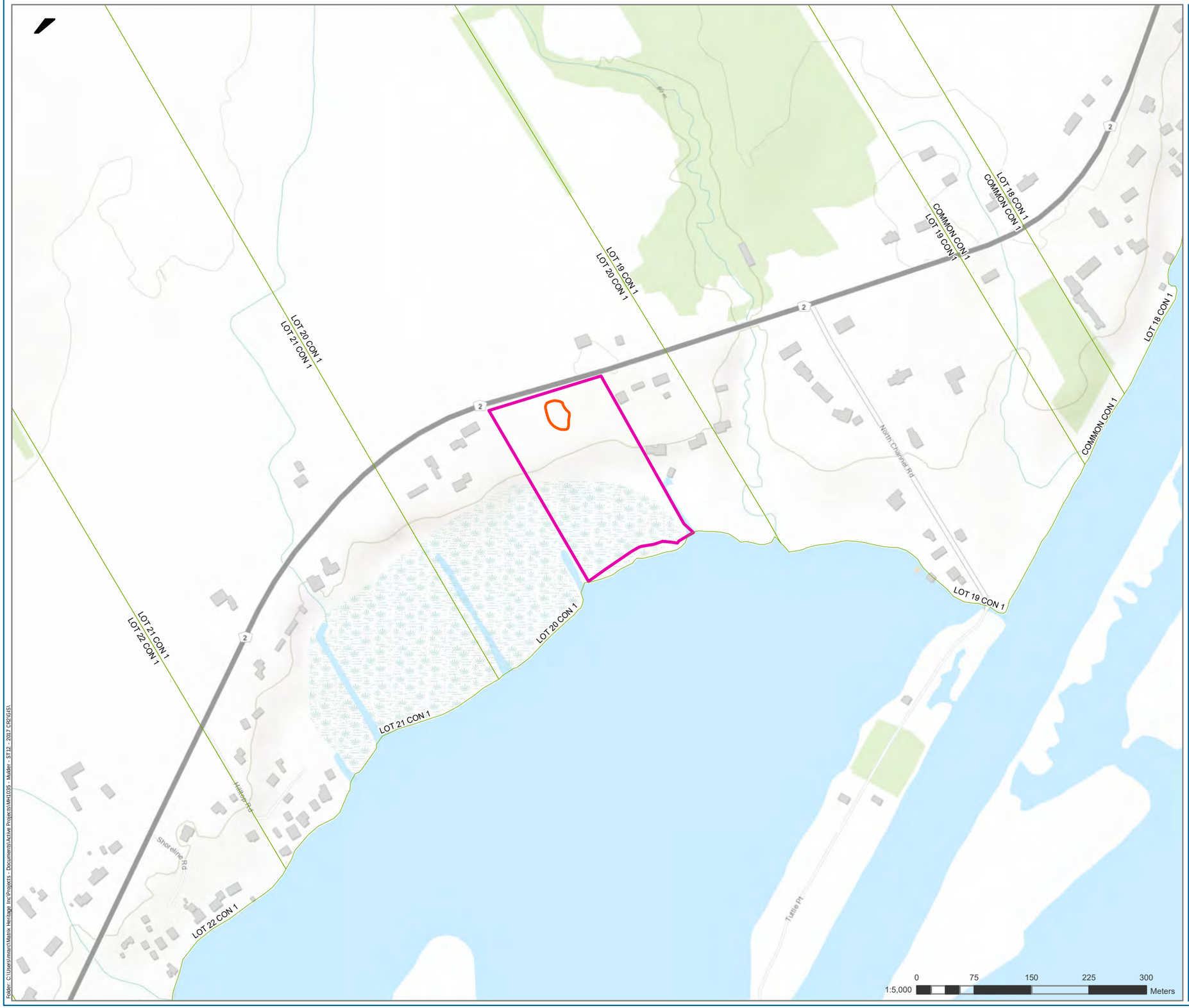
Figure 62: Different clothing adornments, including copper buckles (700E 390N 2), iron eyelets (708E 393N 2), cufflinks (710E 400N 1), and unidentified Bakelite hoop (695E 415N 1) (MH1042-D102).

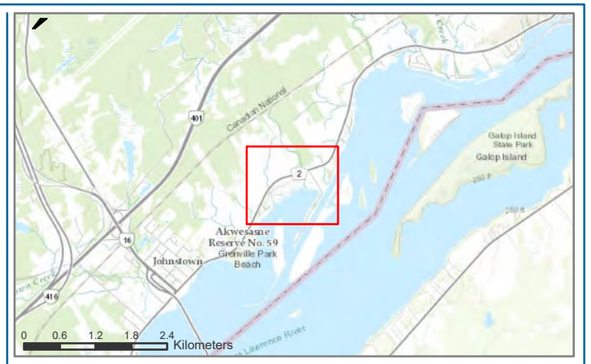
Figure 63: Porcelain toy figurine parts, including a painted leg (705E 385N 1), arm (700E 390N 2), and tree trunk segment (695E 400N 1) (MH1042-D103).

Figure 64: Tobacco tag (685E 385N 1) (MH1042-D104).

Figure 65: Indigenous artifacts, thinning flakes (705E 400N 1, 708E 393N 2) and a heavily reworked projectile point in the middle (700E 380N 1) (MH1042-D105).

13.0Maps





LEGEND

- STUDY AREA
- P. ADAMS SITE (BEFU-17)

Matrix

REFERENCES:
LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, EPA, USDA, AAFC, NRCAN, LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, AAFC, NRCAN

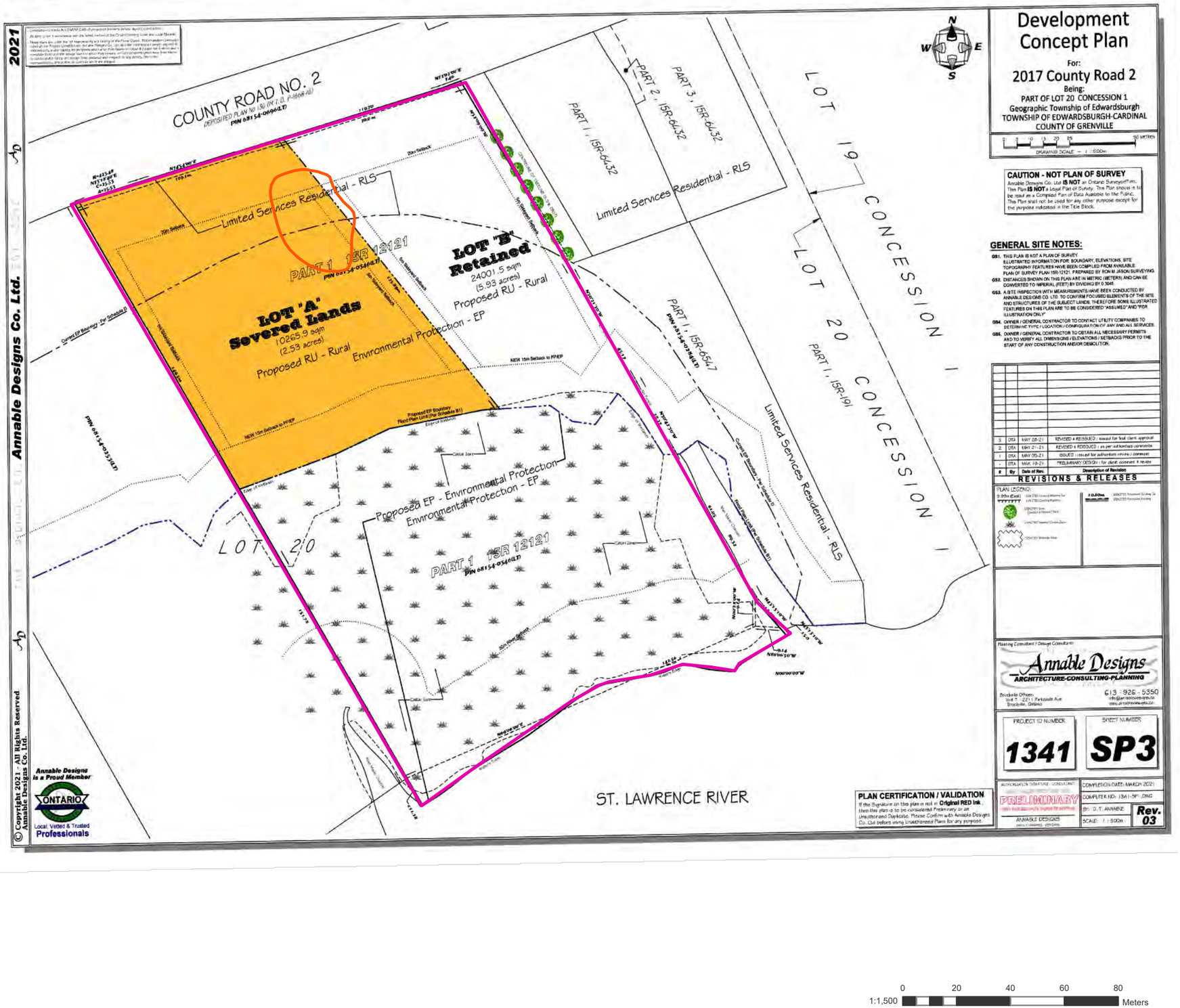
FILE MH1035/MH1042
DATE 2021-10-27
CREATED BY: BM
PROJECTION: NAD 1983 UTM Zone 18N
CHECKED BY:NK

PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

TITLE
LOCATION

MAP
1

Folder: C:\Users\mmac\Matrix Heritage Inc\Projects - Documents\Active Projects\MH1035 - Mallet - ST12 - 2017 CR2\GIS\



LEGEND

- STUDY AREA
- P. ADAMS SITE (BEFU-17)

Matrix

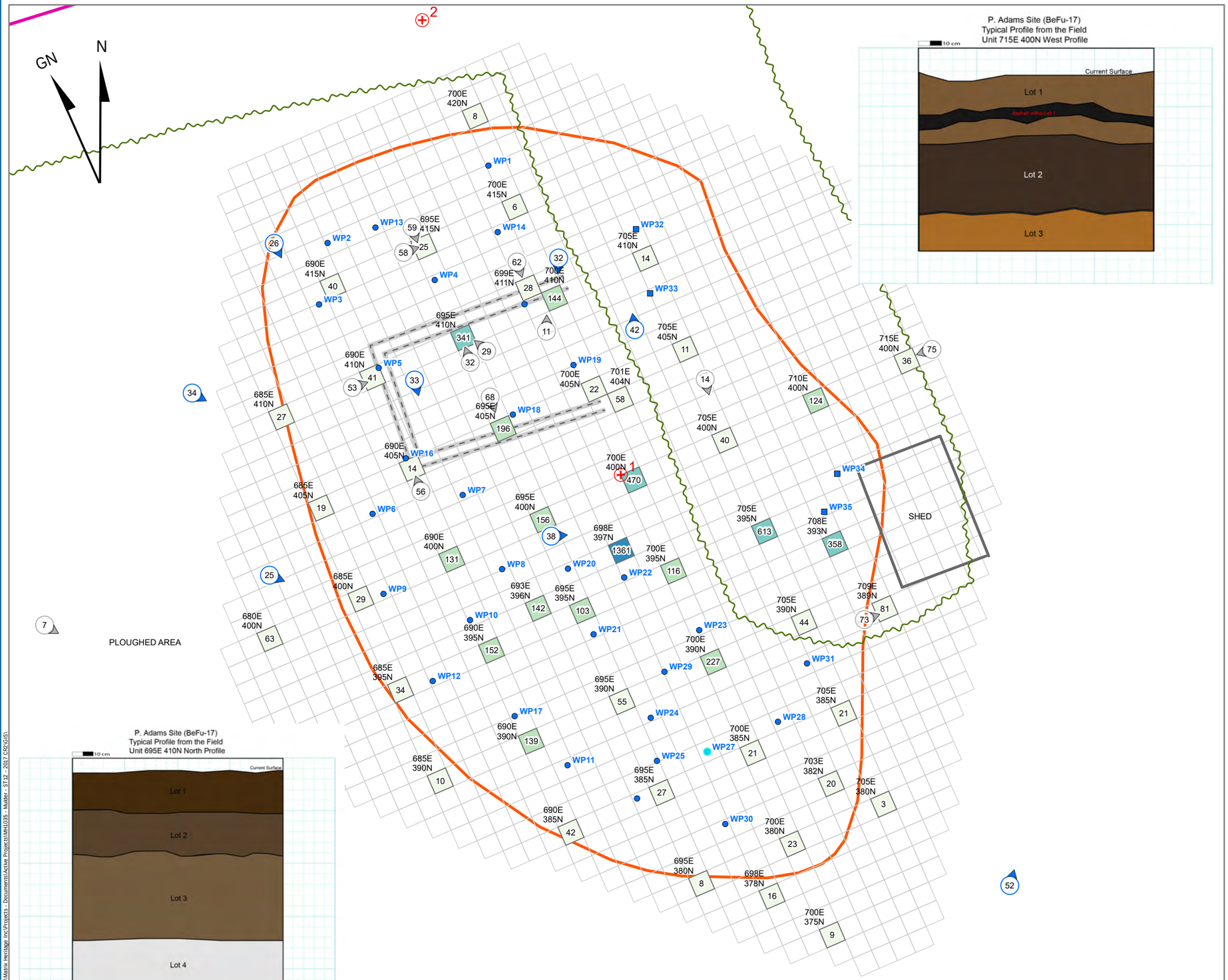
REFERENCES:
LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, AAFC, NRCAN

FILE MH1035/MH1042 DATE 2021-10-27
CREATED BY: BM
PROJECTION: NAD 1983 UTM Zone 18N CHECKED BY:NK

PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

TITLE
CONCEPT PLAN

MAP
2



REFERENCES:
CITY OF OTTAWA, LEEDS AND GRENVILLE, UC OF LEEDS AND GRENVILLE, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, EPA, USDA, AAFC, NRCAN, LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, EPA, USDA, AAFC, NRCAN

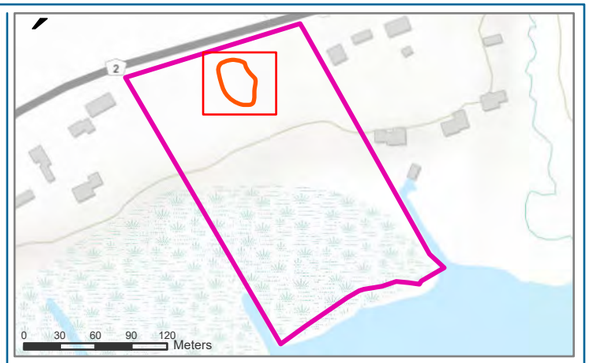
FILE MH1035/MH1042
DATE 2021-11-01
CREATED BY: BM
PROJECTION: NAD 1983 UTM Zone 18N
CHECKED BY:NK

PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

TITLE
SITE DETAIL

MAP
3

Folder: C:\Users\mmacs\Matrix Heritage Inc\Projects - Documents\Active Projects\MH1035 - Mulder - ST12 - 2017 CR2\GIS\



LEGEND

- STUDY AREA
- SITE AREA

STAGE 2 FIND SPOT

- PEDESTRIAN
- TEST PIT
- STAGE 3 1X1 M UNIT
- STAGE 3 1X1 M UNIT WITH MODERN ARTIFACTS IN LOWEST STRATA AND TALLY
- LIMIT OF PLOUGHING
- SHED
- LIMESTONE FOUNDATION
- DATUM 1: 18T 465006 4956547
  DATUM 2 18T 464996 4956569

0 3 6 9 12 Meters 1:200

REFERENCES:
CITY OF OTTAWA, LEEDS AND GRENVILLE, UC OF LEEDS AND GRENVILLE, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, EPA, USDA, AAFC, NRCAN, LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, EPA, USDA, AAFC, NRCAN

FILE MH1035/MH1042
DATE 2021-11-01
CREATED BY: BM
PROJECTION: NAD 1983 UTM Zone 18N
CHECKED BY:NK

PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

TITLE
SITE DETAIL 2

MAP
4

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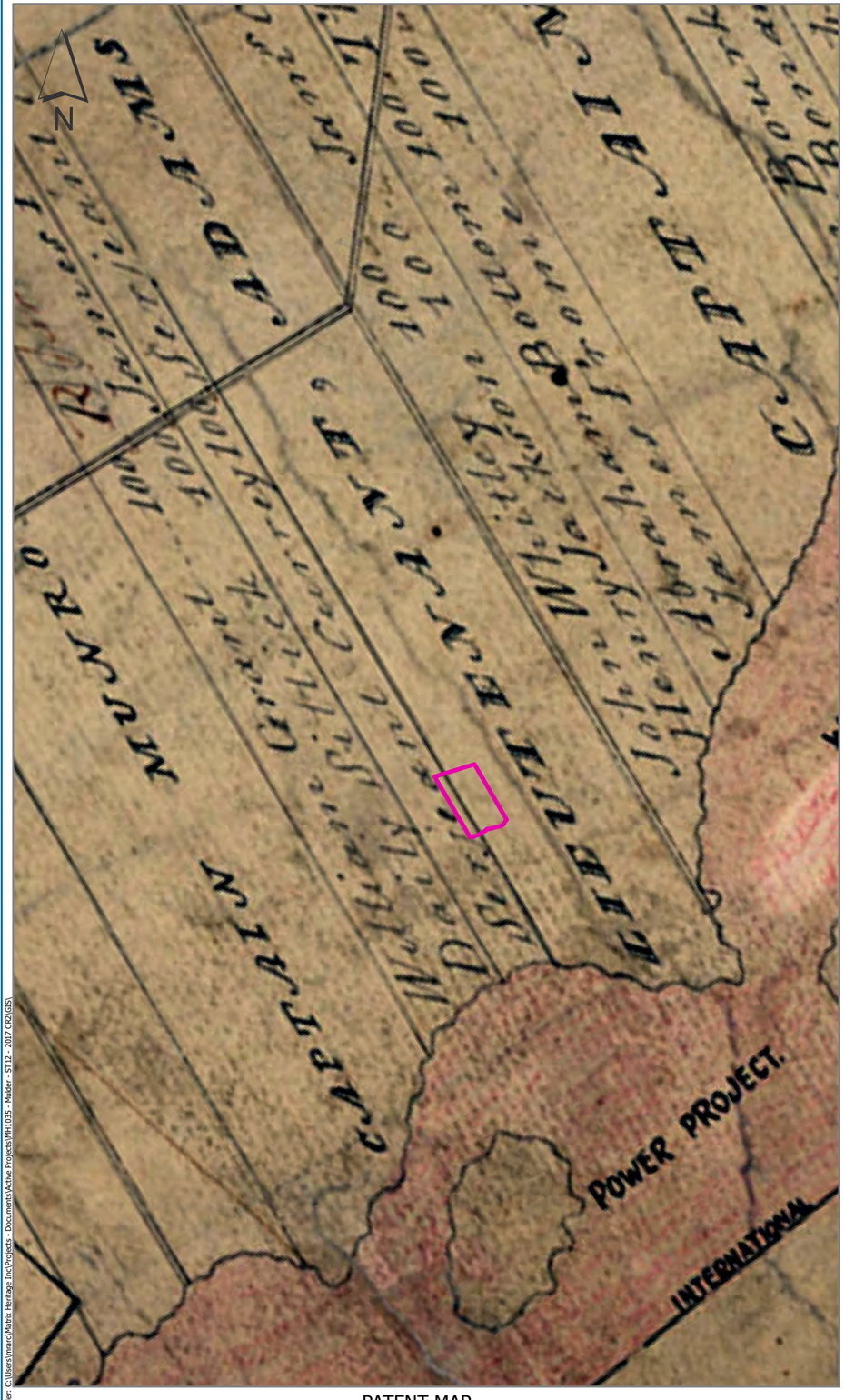
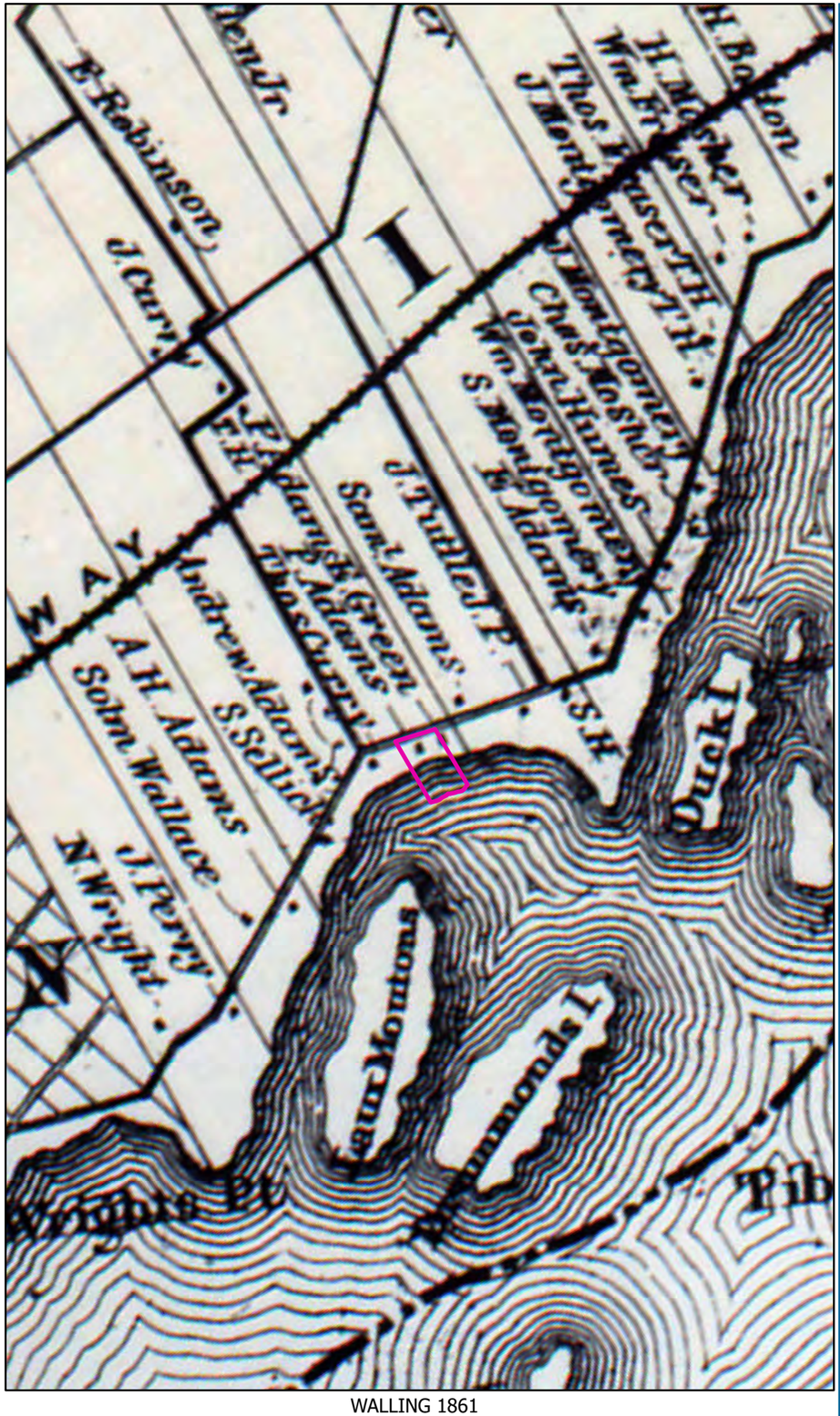
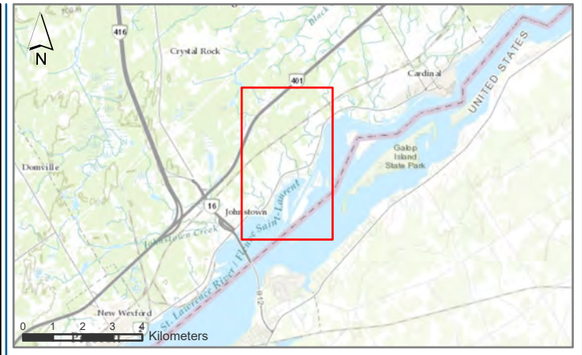


PATENT MAP



WALLING 1861



LEGEND

STUDY AREA

0 310 620 930 1,240

Meters1:20,000

REFERENCES:
LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, USGS, NGA, EPA, USDA, NPS, AAFC, NRCAN
PATENT MAP OF EDWARDSBURG TOWNSHIP
H.F. WALLING 1861 SEGMENT OF THE TOWNSHIP OF EDWARDSBURG, MAP OF THE UNITED COUNTIES OF LEEDS AND GRENVILLE, CANADA WEST

FILE MH1035

DATE 2021-08-04

CREATED BY: BM

PROJECTION: NAD 1983 UTM Zone 18N

CHECKED BY:NK

PROJECT

STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

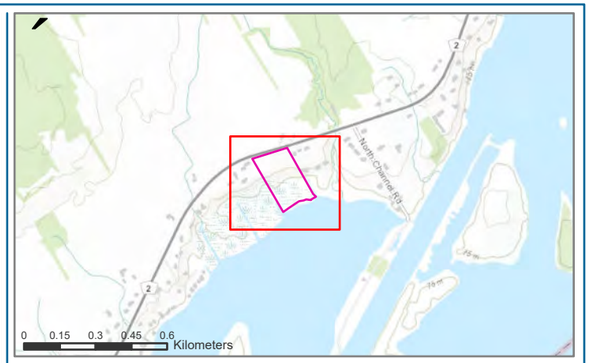
TITLE

HISTORIC

MAP

5

Folder: C:\Users\mario\Matrix Heritage Inc\Projects - Documents\Active Projects\MH1035 - Mulder - ST2 - 2017 CR2\GIS\



LEGEND

STUDY AREA

Matrix

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Meters 1:1,500

REFERENCES:
MAXAR, MICROSOFT, LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, METI/NASA, EPA, USDA, AAFC, NRCAN
AERIAL CIRCA 2017 FROM GEOOTTAWA

FILE MH1035/MH1042

DATE 2021-11-01
CREATED BY: BM
CHECKED BY:NK

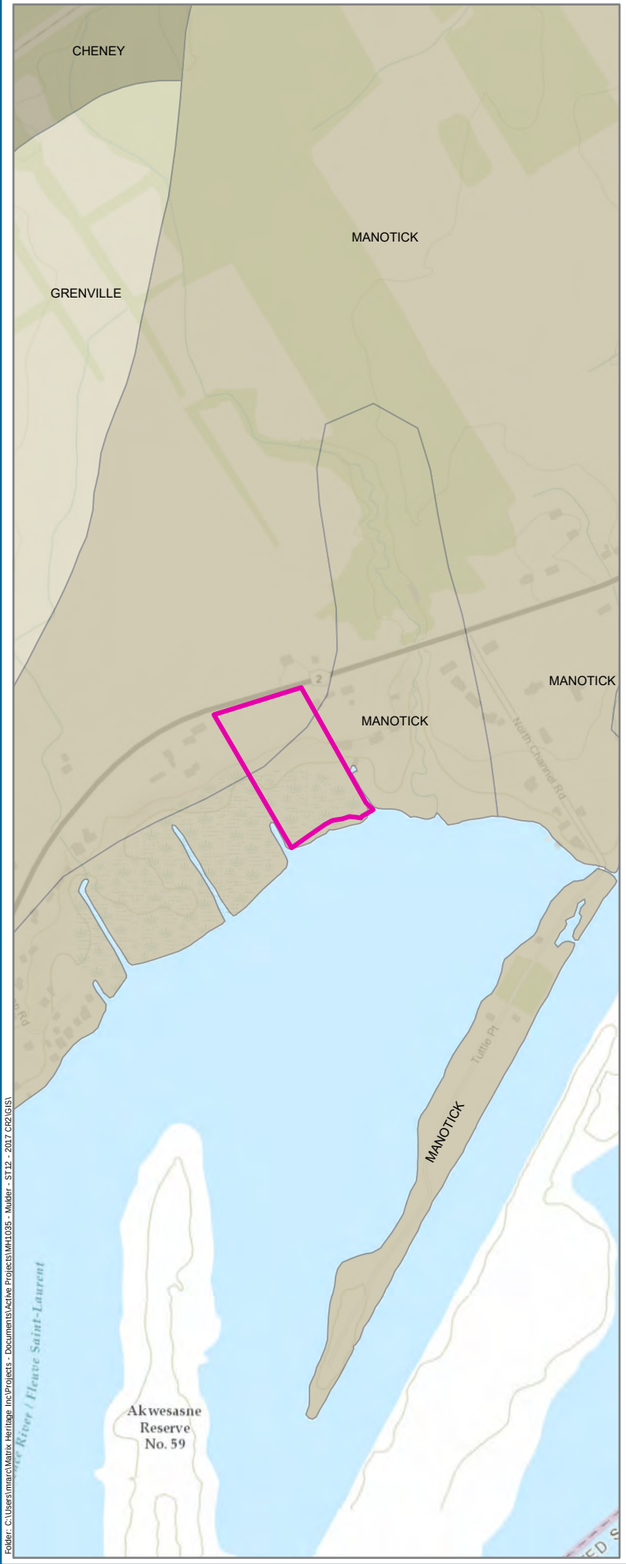
PROJECTION: NAD 1983 UTM Zone 18N

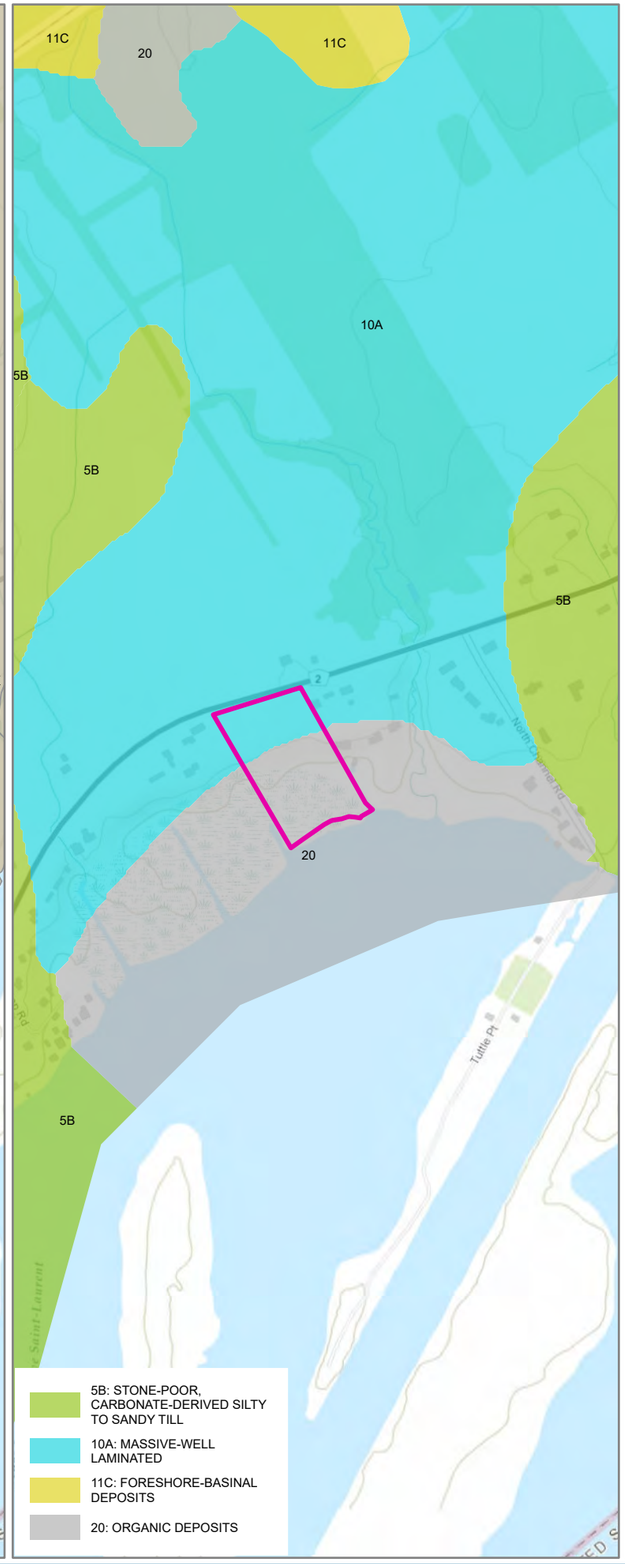
PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

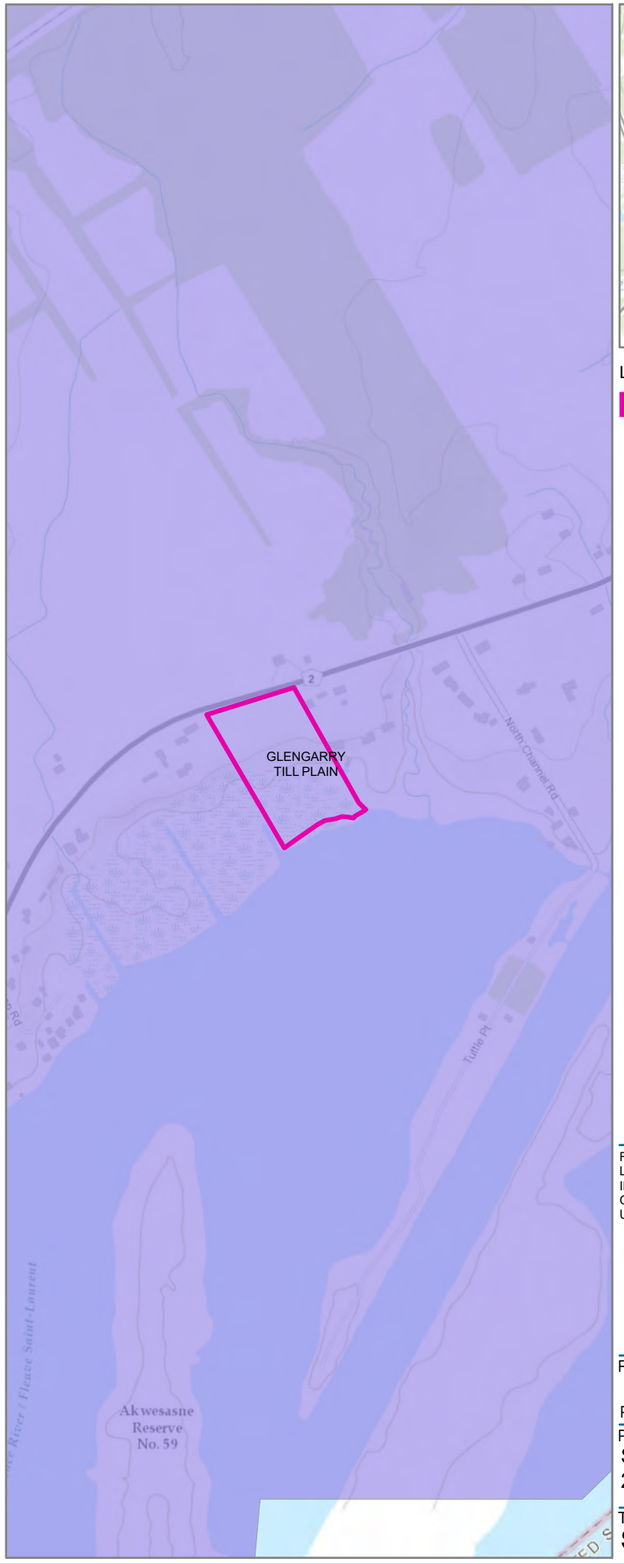
TITLE
CONDITIONS

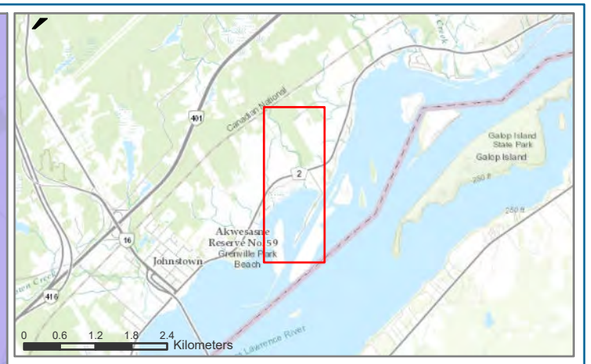
MAP
6

Folder: C:\Users\mmacs\Matrix Heritage Inc\Projects - Documents\Active Projects\MH1035 - Mulder - ST12 - 2017 CR2\GIS\









LEGEND

STUDY AREA

Matrix

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REFERENCES:
LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, INTERMAP, USGS, METI/NASA, EPA, USDA, AAFC, NRCAN, LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, AAFC, NRCAN

FILE MH1035/MH1042

DATE 2021-10-27

CREATED BY: BM

PROJECTION: NAD 1983 UTM Zone 18N

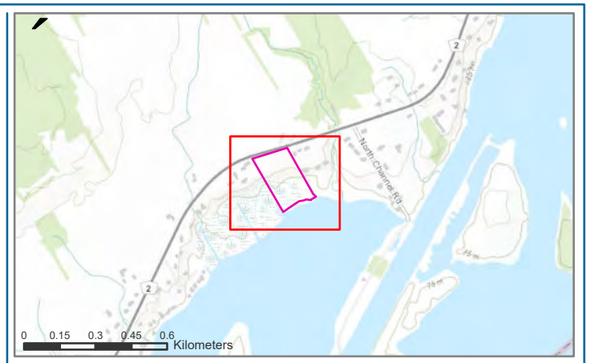
CHECKED BY:NK

PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

TITLE
SOILS AND GEOLOGY

MAP 7

Folder: C:\Users\marc\Matrix Heritage Inc\Projects - Documents\Active Projects\MH1035 - Mulder - ST12 - 2017 CR2\GIS\



LEGEND

STUDY AREA

TESTING METHOD

SHOVEL TEST (5 M INTERVAL)

PEDESTRIAN (5 M INTERVAL)

EXCLUDED

SLOPE

DISTURBED

WET

PHOTO LOCATION, DIRECTION AND CATALOGUE NUMBER

STAGE 2 (MH1035)

STAGE 3 (MH1042)

0 20 40 60 80 Meters 1:1,500

REFERENCES:
MAXAR, MICROSOFT, LEEDS AND GRENVILLE, PROVINCE OF ONTARIO, ESRI CANADA, ESRI, HERE, GARMIN, INCREMENT P, USGS, METI/NASA, EPA, USDA, AAFC, NRCAN AERIAL CIRCA 2017 FROM GEOOTTAWA

FILE MH1035/MH1042

DATE 2021-11-01

CREATED BY: BM

PROJECTION: NAD 1983 UTM Zone 18N

CHECKED BY:NK

PROJECT
STAGE 1, 2, AND 3 ARCHAEOLOGICAL ASSESSMENTS
2017 COUNTY RD 2, EDWARDSBURG/CARDINAL, ON

TITLE
STAGE 2 METHODS

MAP
8

Folder: C:\Users\marc\Matrix Heritage Inc\Projects - Documents\Active Projects\MH1035 - Mulder - ST12 - 2017 CR2\GIS\

14.0 Appendix A: Photographic Catalogue

14.1 MH1035-Stage 2 Field and Artifact Photos

Photo #	Description	Direction	Date	Photographer
MH1035-D001	General view of ploughed field	N	06/08/2021	AJ
MH1035-D002	General view of ploughed field	SW	06/08/2021	AJ
MH1035-D003	General view of ploughed field	SW	06/08/2021	AJ
MH1035-D004	View of southern portion of study area; wet, marshy, cattails	S	06/08/2021	AJ
MH1035-D005	View of southern portion of study area; wet, marshy, cattails	SW	06/08/2021	AJ
MH1035-D006	View of southern portion of study area; wet, marshy, cattails	SE	06/08/2021	AJ
MH1035-D007	View of southern portion of study area; wet, marshy, cattails	S	06/08/2021	AJ
MH1035-D008	General view of ploughed field	N	06/08/2021	AJ
MH1035-D009	General view of site conditions, from the southwest portion of the field	NE	06/08/2021	AJ
MH1035-D010	General view of site conditions, from the southwest portion of the field	NE	06/08/2021	AJ
MH1035-D011	Ploughing conditions	N	06/08/2021	AJ
MH1035-D012	Ploughing conditions	N	06/08/2021	AJ
MH1035-D013	Ploughing conditions	N	06/08/2021	AJ
MH1035-D014	General site conditions, bridge in the background	SE	06/08/2021	AJ
MH1035-D015	Close up of sandy silt soil, subsoil	N	06/08/2021	AJ
MH1035-D016	General view of plough conditions, northern edge of study area	W	06/08/2021	AJ
MH1035-D017	Close up of sandy silt soil, subsoil	E	06/08/2021	AJ
MH1035-D018	General site conditions, bridge in the background	SW	06/08/2021	AJ
MH1035-D019	Grassy area with shed in the centre of the ploughed field	E	06/08/2021	AJ
MH1035-D020	General view of find flags west of the grassy area	S	06/08/2021	AJ
MH1035-D021	General view of find flags west of the grassy area	S	06/08/2021	AJ
MH1035-D022	General view of find flags west of the grassy area	S	06/08/2021	AJ
MH1035-D023	General view of the north western portion of the study area with find flags	W	06/08/2021	AJ
MH1035-D024	General view of the north western portion of the study area with find flags	W	06/08/2021	AJ
MH1035-D025	General view of find flags west of the grassy area	S	06/08/2021	AJ
MH1035-D026	General view of find flags west and south of the grassy area	SE	06/08/2021	AJ
MH1035-D027	General view of find flags west and south of the grassy area	E	06/08/2021	AJ
MH1035-D028	General view of find flags west of the grassy area	E	06/08/2021	AJ
MH1035-D029	Sample of bricks and mortar on the surface where the house foundation is	N	06/08/2021	AJ
MH1035-D030	Sample of bricks and mortar on the surface where the house foundation is	N	06/08/2021	AJ
MH1035-D031	Sample of bricks and mortar on the surface where the house foundation is	NE	06/08/2021	AJ
MH1035-D032	General area of the historic house foundation	SW	06/08/2021	AJ
MH1035-D033	Sample of bricks and mortar on the surface where the house foundation is	S	06/08/2021	AJ

Photo #	Description	Direction	Date	Photographer
MH1035-D034	General area of the historic house foundation	SE	06/08/2021	AJ
MH1035-D035	Sample of test pit in the grassy area	N	06/08/2021	AJ
MH1035-D036	Sample of test pit in the grassy area	E	06/08/2021	AJ
MH1035-D037	Test pitting grassy area	NE	06/08/2021	AJ
MH1035-D038	Test pitting grassy area	E	06/08/2021	AJ
MH1035-D039	Sample of test pit in the grassy area	N	06/08/2021	AJ
MH1035-D040	Sample of test pit in the grassy area	SW	06/08/2021	AJ
MH1035-D041	Sample of test pit in the grassy area	W	06/08/2021	AJ
MH1035-D042	Block of marble	N	06/08/2021	AJ
MH1035-D043	Sample of fill from test pits on western side of grassy area, spent coal, asphalt	S	06/08/2021	AJ
MH1035-D044	Southern edge of ploughed field	S	06/08/2021	AJ
MH1035-D045	Southern edge of ploughed field	SW	06/08/2021	AJ
MH1035-D046	Test pitting along southern edge of field	SW	06/08/2021	AJ
MH1035-D047	Trees and brush in southern edge of the field	E	06/08/2021	AJ
MH1035-D048	Southern edge of ploughed field	S	06/08/2021	AJ
MH1035-D049	Test pitting along southern edge of field	SW	06/08/2021	AJ
MH1035-D050	Test pitting along southern edge of field	SW	06/08/2021	AJ
MH1035-D051	Trees and brush in southern edge of the field	W	06/08/2021	AJ
MH1035-D052	Field walking ploughed field in the eastern portion of the site	NE	06/08/2021	AJ
MH1035-D053	Early Palette painted PWE from WP10 and WP11		02-Nov-21	NK
MH1035-D054	Clay smoking pipe bowl (WP 10) and stem (WP28) fragments.		02-Nov-21	NK
MH1035-D055	VWE wheat pattern teacup from WP21		02-Nov-21	NK
MH1035-D056	Porcelain sherds with lithographed and moulded and gilt designs from WP22		02-Nov-21	NK
MH1035-D057	Bottle finish from WP22		02-Nov-21	NK
MH1035-D058	Brown transfer print on RWE teacup from WP29		02-Nov-21	NK
MH1035-D059	Cut glass tableware from WP26		02-Nov-21	NK
MH1035-D060	Solarized glass pedestal for a dish or lamp from WP26		02-Nov-21	NK
MH1035-D061	RWE sherds with blue transfer prints from WP25 and WP26		02-Nov-21	NK

14.2 MH1042- Stage 3 Field & Artifact Photos

Photo #	Description	Direction	Date	Photographer
MH1042-D001	View of the southern wet portion of the study area and the St. Lawrence River	SW	16-Aug-21	BM
MH1042-D002	View of the southern wet portion of the study area and the St. Lawrence River	W	16-Aug-21	BM
MH1042-D003	View of the southern wet portion of the study area and the St. Lawrence River	W	16-Aug-21	BM
MH1042-D004	View of the site from the edge of the hill	N	16-Aug-21	BM
MH1042-D005	View of the southern wet portion of the study area and the St. Lawrence River	S	16-Aug-21	BM
MH1042-D006	General view of the site from the south	NE	16-Aug-21	BM
MH1042-D007	Excavations along the 700 line	SE	16-Aug-21	BM
MH1042-D008	Excavations along the 700 line	E	16-Aug-21	BM
MH1042-D009	Excavations along the 700 line	N	16-Aug-21	AJ

Photo #	Description	Direction	Date	Photographer
MH1042-D010	Excavating unit 700E 400N	SE	16-Aug-21	AJ
MH1042-D011	Excavating unit 700E 410N	NE	16-Aug-21	AJ
MH1042-D012	Partially excavated unit 700E 410N, showing foundation wall	N	16-Aug-21	AJ
MH1042-D013	Excavations along the 700 line	N	16-Aug-21	AJ
MH1042-D014	Excavating unit 700E 400N	S	16-Aug-21	AJ
MH1042-D015	Excavations in process	SE	16-Aug-21	AJ
MH1042-D016	Recording wall in unit 700E 410N	N	16-Aug-21	AJ
MH1042-D017	General view of units laid out along the 700E line	SE	16-Aug-21	AJ
MH1042-D018	General view of the southwestern extent of the site	SW	16-Aug-21	AJ
MH1042-D019	General site shot, excavations in progress	N	18-Aug-21	AJ
MH1042-D020	General view of site showing laid in units and shed with grassy area	NE	18-Aug-21	AJ
MH1042-D021	Excavating unit 695E 410N	N	18-Aug-21	AJ
MH1042-D022	General shot of excavations in progress	NE	18-Aug-21	AJ
MH1042-D023	Rubble and stratigraphy in unit 700E 400N	NW	18-Aug-21	AJ
MH1042-D024	Digging deep into unit 695E 400N	N	18-Aug-21	AJ
MH1042-D025	Excavating unit 690E 390N	SW	18-Aug-21	AJ
MH1042-D026	Possible dry stone exterior wall/ fence in unit 690E 390N	N	18-Aug-21	AJ
MH1042-D027	On going excavations	SW	18-Aug-21	AJ
MH1042-D028	Excavated unit 695E 400N	W	18-Aug-21	AJ
MH1042-D029	Metal box lid in the rubble inside the house foundation in unit 695E 410N	NW	19-Aug-21	AJ
MH1042-D030	Garbage from the rubble inside the house foundation in unit 695E 410N	W	19-Aug-21	AJ
MH1042-D031	Metal box lid in the rubble inside the house foundation in unit 695E 410N	W	19-Aug-21	AJ
MH1042-D032	Unit 695E 410N excavated to the floor inside the foundation, pillow in the wall	N	19-Aug-21	AJ
MH1042-D033	Finished excavation of unit 695E 410N	NW	19-Aug-21	AJ
MH1042-D034	Photo showing the depth of unit 695E 410N in comparison to the ridge and river	S	19-Aug-21	AJ
MH1042-D035	Excavated unit 690E 405N, the south west corner of the house foundation	S	19-Aug-21	AJ
MH1042-D036	Close up of the south profile of unit 690E 405N	S	19-Aug-21	AJ
MH1042-D037	Partially excavated unit 690E 415N, showing bright subsoil	N	19-Aug-21	AJ
MH1042-D038	A sample of the general stratigraphy across the site, plough zone, then another layer under that, then subsoil.	E	19-Aug-21	AJ
MH1042-D039	A sample of the general stratigraphy across the site, plough zone, then another layer under that, then subsoil.	N	19-Aug-21	AJ
MH1042-D040	Excavating unit 695E 390N	SE	19-Aug-21	AJ
MH1042-D041	Darker soil in the southern portion of the site where we had plentiful waypoints	W	19-Aug-21	AJ
MH1042-D042	Excavating the western portion of the site	E	19-Aug-21	AJ
MH1042-D043	Excavating in the south western portion of the site	S	20-Aug-21	AJ
MH1042-D044	General view of the south western portion of the site	SW	20-Aug-21	AJ
MH1042-D045	General view of the bridge from the southern edge of the site	SW	20-Aug-21	AJ
MH1042-D046	View of the site from the eastern edge of the property, showing slope	W	20-Aug-21	AJ
MH1042-D047	Excavating unit 705E 385N	S	26-Aug-21	AJ
MH1042-D048	Excavating in the grassy area along the 705 line	SE	26-Aug-21	AJ
MH1042-D049	Excavated unit 699E 411N, exterior northern wall of foundation	S	27-Aug-21	AJ
MH1042-D050	Sample of stratigraphy in unit 715E 400N showing coal waste/asphalt, occupation layer, subsoil	S	27-Aug-21	AJ

Photo #	Description	Direction	Date	Photographer
MH1042-D051	North profile of 700E 405N	N	16-Aug-21	AJ
MH1042-D052	Plan at top of lot 4 in unit 700E 400N	N	16-Aug-21	AJ
MH1042-D053	East profile of unit 690E 410N, exterior west wall of the foundation	E	18-Aug-21	AJ
MH1042-D054	Plan of unit 690E 410N, exterior west wall of the foundation and builder's trench visible	E	18-Aug-21	AJ
MH1042-D055	Plan view of 695E 401N, in the cellar in the foundation	N	19-Aug-21	AJ
MH1042-D056	North profile of unit 690E 405N, corner of foundation	N	19-Aug-21	AJ
MH1042-D057	Plan view of unit 690E 405N, south west corner of house foundation	N	19-Aug-21	AJ
MH1042-D058	Plan view of unit 695E 415N	E	19-Aug-21	AJ
MH1042-D059	South profile of unit 695E 415N	S	19-Aug-21	AJ
MH1042-D060	North profile of unit 690E 415N	N	19-Aug-21	AJ
MH1042-D061	Plan view of unit 699E 411N, exterior of northern wall. (arrow in photo is incorrect)	S	27-Aug-21	AJ
MH1042-D062	South profile of unit 699E 411N, exterior of northern wall	S	27-Aug-21	AJ
MH1042-D063	North profile of unit 700E 410N, interior of northern wall	N	16-Aug-21	AJ
MH1042-D064	Plan view at the top of lot 3 in unit 700E 400N	E	16-Aug-21	AJ
MH1042-D065	North profile of unit 700E 410N, interior of northern wall	N	16-Aug-21	AJ
MH1042-D066	Plan view of lot 3 in unit 700E 410N, northern wall	N	16-Aug-21	AJ
MH1042-D067	Plan view of interior of southern foundation wall in unit 695E 405N	E	16-Aug-21	AJ
MH1042-D068	South profile of unit 695E 405N, interior of southern foundation wall	S	16-Aug-21	AJ
MH1042-D069	Plan view of unit 695E 410N	W	18-Aug-21	AJ
MH1042-D070	Plan view of unit 690E 395N	N	18-Aug-21	AJ
MH1042-D071	North profile of unit 695E 410N	N	19-Aug-21	AJ
MH1042-D072	Plan view of unit 708E 393N, possible post holes	N	27-Aug-21	AJ
MH1042-D073	East profile of unit 709E 389N	E	27-Aug-21	AJ
MH1042-D074	Plan view of unit 703E 382N	W	27-Aug-21	AJ
MH1042-D075	West profile of unit 715E 400N showing layer of asphalt	W	27-Aug-21	AJ
MH1042-D076	Plan view of unit 698E 397N	N	27-Aug-21	AJ
MH1042-D077	Excavated unit 699E 411N, exterior northern wall of foundation	S	16-Aug-21	AJ
MH1042-D078	Plan view of unit 690E 410N, exterior of western foundation wall	E	18-Aug-21	AJ
MH1042-D079	Examples of modern artifacts (stainless steel watch face, plastic hair clips, and a plastic bread tag) found during Stage 3 excavations		25-Oct-21	MH
MH1042-D080	Examples of mug handles for VWE vessels		25-Oct-21	MH
MH1042-D081	Fragments of yellowware vessels, plain and decorated with an industrial slip design		25-Oct-21	MH
MH1042-D082	Fragment of a coarse red earthenware vessel with tin glaze		25-Oct-21	MH
MH1042-D083	Transfer print decoration on VWE vessel fragments		25-Oct-21	MH
MH1042-D084	Examples of moulded designs on VWE vessels, including floral motifs and wheat pattern		25-Oct-21	MH
MH1042-D085	Stamped decoration on VWE		25-Oct-21	MH
MH1042-D086	Industrial slipped designs on VWE		25-Oct-21	MH
MH1042-D087	Blue flown transfer on VWE		25-Oct-21	MH
MH1042-D088	Examples of maker's marks on VWE, including Ironstone China mark		25-Oct-21	MH
MH1042-D089	Moulded designs on porcelain		25-Oct-21	MH
MH1042-D090	Transfer printed designs on porcelain		25-Oct-21	MH

Photo #	Description	Direction	Date	Photographer
MH1042-D091	Lustre and gilded decoration on porcelain		25-Oct-21	MH
MH1042-D092	Lithograph design on porcelain		25-Oct-21	MH
MH1042-D093	Brown iodine bottle with plastic threaded cap and solarized manganese tinted pharmaceutical bottle		25-Oct-21	MH
MH1042-D094	Moulded milk glass		25-Oct-21	MH
MH1042-D095	Manganese tinted glass bottle finish, hand finish, and threaded jar finish		25-Oct-21	MH
MH1042-D096	Examples of modern glass artifacts, yellow, red, and moulded glassware		25-Oct-21	MH
MH1042-D097	Modern glass drinking vessel		25-Oct-21	MH
MH1042-D098	Glass fruit jar sealer with "The American Glass Co." impressed around rim		25-Oct-21	MH
MH1042-D099	Iron corroded utensil handles		25-Oct-21	MH
MH1042-D100	Examples of clay smoking pipe bowls, shank, spur, stems, and composite mouthpiece		25-Oct-21	MH
MH1042-D101	Different buttons found during Stage 3 excavation, including porcelain Prosser, iron, shell, and bone buttons		25-Oct-21	MH
MH1042-D102	Different clothing adornments, including copper buckles, iron eyelets, cufflinks, and unidentified Bakelite hoop		25-Oct-21	MH
MH1042-D103	Porcelain toy figurine parts, including a painted leg, arm, and tree trunk segment		25-Oct-21	MH
MH1042-D104	Tobacco tag		25-Oct-21	MH
MH1042-D105	Indigenous artifacts, thinning flakes and a reworked projectile point		25-Oct-21	MH

Appendix B: Document Catalogue

Project	Description	Created By
MH1035	Mulder – Johnstown Field Notes Stage 2 (One Note File)	Andrea Jackson
MH1042	Mulder – Johnstown Field Notes Stage 3 (One Note File)	Andrea Jackson
	Lot forms and suboperation summaries in FileMaker Field Note Database	

Appendix C: Map Catalogue

Map	Description	Created By
1	Location	B. Mortimer
2	Concept Map	B. Mortimer
3	Site Detail	B. Mortimer
4	Site Detail 2	B. Mortimer
5	Historic	B. Mortimer
6	Conditions	B. Mortimer
7	Soils and Geology	B. Mortimer
8	Stage 2 Methods and Photo Key	B. Mortimer

Appendix D: Artifact Inventory

14.3 MH1035 Stage 2

Record Number	Provenience	Quantity	Function	Material	Comment	Decorative Pattern
50826	WP01	2	Mammal Bone	Bone		
50788	WP02	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
50791	WP02	2	Bottle Unidentified	Blue/Green Glass (Aqua)		Plain
50910	WP03	1	Cut Nail	Iron		
50857	WP04	1	Mammal Bone	Bone		
50904	WP05	1	Pane Glass	Colourless Glass		
50842	WP06	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
50799	WP07	1	Shell Unspecified			
50906	WP08	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
50911	WP09	1	Tableware Unspecified	Creamware		Plain
50611	WP10	1	Clay Smoking Pipe Bowl	White Clay		Plain
50613	WP10	2	Tableware Unspecified	RWE - Refined White Earthenware		Plain
50615	WP10	1	Holloware	Coarse Earthenware Red		
50617	WP10	2	Tableware Unspecified	Creamware		Plain
50619	WP10	1	Tableware Unspecified	Pearlware		Plain
50620	WP10	1	Tableware Unspecified	Pearlware		Early Palette - Brown/Mustard/Olive Gr/Blue
50867	WP11	1	Tableware Unspecified	RWE - Refined White Earthenware		Willow
50869	WP11	1	Tableware Unspecified	Pearlware		Plain
50870	WP11	1	Tableware Unspecified	RWE - Refined White Earthenware		Early Palette - Brown/Mustard/Olive Gr/Blue
50871	WP11	1	Tableware Unspecified	Creamware		Plain
50873	WP11	1	Tableware Unspecified	Creamware		Plain
50876	WP11	1	Holloware Unspecified	Coarse Earthenware Red	External Lead Glaze	Plain
50823	WP12	1	Mammal Bone	Bone		
50859	WP13	1	Mammal Bone	Bone		
50860	WP13	1	Brick	Red Brick		
50861	WP13	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
50863	WP13	1	Tableware Unspecified	Porcelain Unspecified	Moulded Pattern As Well	Gilt Band
50865	WP13	1	Tableware Unspecified	Porcelain Unspecified		Gilt Band
50866	WP13	1	Machinery	Aluminum		
50895	WP14	1	Pane Glass	Glass		
50896	WP14	2	Mammal Bone	Bone		
50905	WP15	1	Cut Nail	Iron		
51069	WP16	1	Mammal Bone	Bone		
51070	WP16	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
51071	WP16	1	Holloware	Glass	Milk Glass	Plain
50807	WP17	1	Tableware Unspecified	Porcelain Unspecified		Moulded Unspecified
50808	WP17	1	Tableware Unspecified	Porcelain Unspecified		Moulded
50809	WP17	1	Tableware Unspecified	Porcelain Unspecified		Gilt Band
50817	WP18	7	Coal			
50820	WP18	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Molded Makers Mark (Illegible)	Plain
51091	WP19	1	Spike	Iron		
51093	WP19	4	Pane Glass	Glass		
51095	WP19	1	Lamp Chimney	Glass		
51099	WP19	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
51102	WP19	1	Plate Unspecified	VWE - Vitrified White Earthenware	Floral Pattern	Moulded Unspecified
51105	WP19	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
51107	WP19	1	Tableware Unspecified	Porcelain Unspecified	Possibly A Mug Or Teacup	Plain
51108	WP19	1	Tableware Unspecified	RWE - Refined White Earthenware		Painted Unspecified
50907	WP20	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
50908	WP20	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain

Record Number	Provenience	Quantity	Function	Material	Comment	Decorative Pattern
50909	WP20	1	Holloware	Coarse Earthenware Red	Internal Lead Glaze, Yellow	Plain
50885	WP21	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Teacup? Sugar Bowl?	Wheat / Ceres
50889	WP21	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Floral Design	Moulded Unspecified
50890	WP21	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
50892	WP21	1	Handle / Knob Unspecified	VWE - Vitrified White Earthenware		
51117	WP22	13	Mammal Bone	Bone		
51118	WP22	1	Wire	Iron		
51119	WP22	10	Coal	Coal		
51120	WP22	9	Cut Nail	Iron		
51121	WP22	1	Clinker (Spent Fuel)	Clinker		
51122	WP22	15	Pane Glass	Blue/Green Glass (Aqua)		
51123	WP22	1	Smoking Pipe Bowl	White Clay		Plain
51124	WP22	3	Strap	Iron		
51127	WP22	1	Insulator	Porcelain Unspecified		
51129	WP22	1	Tableware Unspecified	Porcelain Unspecified		Lithograph Unidentified
51132	WP22	1	Tableware Unspecified	Porcelain Unspecified		Plain
51133	WP22	1	Tableware Unspecified	White Glass Opaque (Milk)		Plain
51134	WP22	2	Tableware Unspecified	White Glass Opaque (Milk)		Plain
51135	WP22	2	Tableware Unspecified	RWE - Refined White Earthenware		Plain
51136	WP22	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
51137	WP22	3	Tableware Unspecified	VWE - Vitrified White Earthenware		Wheat / Ceres
51139	WP22	3	Tableware Unspecified	Porcelain Unspecified		Plain
51141	WP22	1	Holloware	Coarse Earthenware Red	No Glaze	
51143	WP22	1	Holloware	Coarse Earthenware Red	No Glaze	
51145	WP22	1	Holloware	Coarse Earthenware Red	Brown Glaze	Plain
51146	WP22	1	Holloware	Coarse Earthenware Red	Yellow Exterior Glaze	Plain
51148	WP22	1	Tableware Unspecified	RWE - Refined White Earthenware	Green Paint With Gilt Band	Painted Unspecified
51152	WP22	1	Tableware Unspecified	RWE - Refined White Earthenware	Same As #51152 And #51108 Same As #51148 And #51108	Painted Unspecified
51154	WP22	1	Bottle Finish	Colourless Glass	Prescription Finish	
51155	WP22	2	Tableware Unspecified	Porcelain Unspecified	Different Pieces Moulded Patterns Gilt Patterns And Bands	Moulded Unspecified
51156	WP22	1	Tableware Unspecified	Porcelain Unspecified	Moulded Pattern Gilt Band	Moulded Unspecified
51160	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
51164	WP22	1	Cup Unspecified	VWE - Vitrified White Earthenware		Plain
51165	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
51168	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
51169	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
51170	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Possible Floral Or Grape Pattern	Moulded Unspecified
51171	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Moulded Scalloped Edge	Plain
51173	WP22	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Moulded Edge With Aqua Floral Transfer	Unspecified Transfer
51175	WP22	1	Tableware Unspecified	Porcelain Unspecified		Moulded Unspecified
51176	WP22	1	Tableware Unspecified	Porcelain Unspecified		Plain
51177	WP22	1	Bottle Unidentified	Blue/Green Glass (Aqua)	Straight Edge	
51179	WP22	1	Bottle Unidentified	Blue/Green Glass (Aqua)	Seam	
51181	WP22	1	Glassware Unidentified	Colourless Glass	Possible Foot Of A Wine Glass Or Goblet	
51185	WP22	1	Bottle Unidentified	Colourless Glass		
51186	WP22	1	Bottle Unidentified	Colourless Glass	Straight Edge, Possible Panel Bottle	
51187	WP22	1	Glassware Unidentified	Colourless Glass	Frosted Or Heated	
51188	WP22	1	Bottle Unidentified	Colourless Glass	Seam	
51189	WP22	1	Bottle Unidentified	Solarized Glass Manganese Tint	Angled Edge, Possible Panel Bottle	
51192	WP22	1	Bottle Unidentified	Solarized Glass Manganese Tint	Seam	
51194	WP22	1	Bottle Unidentified	Solarized Glass Manganese Tint		
50829	WP23	3	Plate Unspecified	VWE - Vitrified White Earthenware		Wheat / Ceres

Record Number	Provenience	Quantity	Function	Material	Comment	Decorative Pattern
50834	WP23	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
50836	WP23	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
50837	WP23	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
50839	WP23	2	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
50840	WP23	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
50844	WP24	1	Bottle Unidentified	Blue/Green Glass (Aqua)		Plain
50846	WP24	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Black Transfer Maker's Mark "...L & SONS"	Plain
51064	WP25	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
51065	WP25	1	Tableware Unspecified	RWE - Refined White Earthenware		Flown Transfer
51066	WP25	2	Holloware	NA. Albany Slip C. Stoneware	Buff Salt Glaze Exterior	Plain
50852	WP26	1	Spiral Wire / Drawn Nail	Iron		
50853	WP26	1	Tableware Unspecified	Porcelain Unspecified		Plain
51199	WP26	1	Mammal Bone	Bone		
51200	WP26	4	Coal	Coal		
51201	WP26	1	Liquor Bottle	Amber/Brown Glass		
51202	WP26	1	Wrought / Forged Spike	Iron		
51204	WP26	2	Cut Nail	Iron		
51207	WP26	1	Machinery	Iron	Iron Base Material With A Copper Alloy Chrome. A Plate With Two Knobs	
51210	WP26	5	Pane Glass	Blue/Green Glass (Aqua)		
51212	WP26	1	Liquor Bottle	Green Glass (Dark Olive)		
51214	WP26	1	Case Bottle	Green Glass		
51215	WP26	2	Slate Board	Slate		
51218	WP26	1	Tableware Unspecified	RWE - Refined White Earthenware	Blue Transfer Pattern On Interior And Exterior	Unspecified Transfer
51220	WP26	1	Tableware Unspecified	RWE - Refined White Earthenware		Stamped
51221	WP26	2	Tableware Unspecified	Porcelain Unspecified	Floral Decal And Gilt Band	Lithograph Unidentified
51224	WP26	5	Bottle Unidentified	Blue/Green Glass (Aqua)		
51226	WP26	1	Tableware Unspecified	Porcelain Unspecified		Plain
51229	WP26	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Leaf Pattern, Possibly Grapes Or Floral	Moulded Unspecified
51231	WP26	1	Tableware Unspecified	VWE - Vitrified White Earthenware	No Design	Plain
51232	WP26	1	Tableware Unspecified	Porcelain Unspecified		Moulded Unspecified
51233	WP26	1	Tableware Unspecified	Porcelain Unspecified		Plain
51234	WP26	4	Holloware	Coarse Earthenware Red	Unglazed	
51235	WP26	1	Tableware Unspecified	RWE - Refined White Earthenware		Unspecified Transfer
51236	WP26	2	Holloware	Coarse Earthenware Red	Unglazed	Plain
51237	WP26	1	Holloware	Coarse Earthenware Red	Yellow/ Green Glaze	Plain
51238	WP26	1	Figurine	Porcelain Unspecified	Possibly An Animal; Design Looks Like Fur	Moulded Unspecified
51239	WP26	2	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
51240	WP26	3	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
51241	WP26	1	Glass Block	Blue/Green Glass (Aqua)	Ribbed	
51242	WP26	1	Tableware Unspecified	Pearlware	Base Of A Teacup Possibly	Moulded Unspecified
51243	WP26	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
51244	WP26	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
51245	WP26	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Green Stamped Maker's Mark Possible Teacup	Plain
51246	WP26	3	Tableware Unspecified	VWE - Vitrified White Earthenware		Plain
51247	WP26	4	Tableware Unspecified	RWE - Refined White Earthenware		Plain
51248	WP26	1	Glassware Unidentified	Solarized Glass Manganese Tint	Pedestal For A Dish Or Lamp	Moulded Unspecified
51249	WP26	1	Tableware Unspecified	Colourless Glass	Cut Glass Serving Dish	Geometric
51253	WP26	2	Tableware Unspecified	Colourless Glass	Thick Cut Glass	Geometric
51255	WP26	1	Tableware Unspecified	Colourless Glass	Thick Cut Glass	Geometric
51259	WP26	3	Bottle Unidentified	Solarized Glass Manganese Tint		
51261	WP26	2	Bottle Unidentified	Colourless Glass	Seam	
51263	WP26	2	Glassware Unidentified	Colourless Glass		
51265	WP26	1	Bottle Unidentified	Blue/Green Glass (Aqua)	Seam	
51267	WP26	1	Jar	Solarized Glass Manganese Tint		

Record Number	Provenience	Quantity	Function	Material	Comment	Decorative Pattern
51269	WP26	2	Bottle Unidentified	Colourless Glass	Large Seam Or Moulded Edge, Possible A Panel Bottle	
51272	WP26	1	Glassware Unidentified	Solarized Glass Manganese Tint	Possibly A Panel Bottle Or A Large Serving Vessel	
51274	WP26	1	Glassware Unidentified	Polychrome / Cased Glass (Layers)	Moulded Brown Marbled Glass	Moulded Unspecified
51073	WP27	2	Plate Unspecified	VWE - Vitrified White Earthenware		Wheat / Ceres
51074	WP27	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
51075	WP27	1	Tableware Unspecified	VWE - Vitrified White Earthenware	Scalloped Rim	Plain
51077	WP27	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Moulded Unspecified
51080	WP27	1	Tableware Unspecified	RWE - Refined White Earthenware	Pink Band Around Rim	Painted Unspecified
51083	WP27	2	Pane Glass	Glass		
51084	WP27	1	Holloware	Colourless Glass		
51086	WP27	2	Holloware	Coarse Earthenware Red	Clear Glaze Exterior	
51089	WP27	1	Holloware	Coarse Earthenware Red	No Glaze	Plain
50601	WP28	1	Clay Smoking Pipe Stem	White Clay		
50604	WP28	1	Tableware Unspecified	RWE - Refined White Earthenware		Plain
50605	WP28	1	Holloware	Coarse Earthenware Red	Tin Glaze Interior	
50912	WP29	1	Tableware Unspecified	RWE - Refined White Earthenware		Sponged
50913	WP29	1	Teacup	RWE - Refined White Earthenware	Interior And Exterior Transfer. Classical Scene	Unspecified Transfer
51067	WP30	2	Cut Nail	Iron		
51068	WP30	1	Mammal Tooth / Teeth	Bone		
50879	WP31	1	Horseshoe Nail	Iron		
50902	WP32	1	Wire	Iron	Twisted Fence Wire	
50903	WP32	1	Cut Nail	Iron		
51072	WP33	1	Wrought / Forged Spike	Iron		
50914	WP34	1	Cut Nail	Iron		
50897	WP35	1	Tableware Unspecified	VWE - Vitrified White Earthenware		Gilt Band
50898	WP35	1	Pane Glass	Glass		
50899	WP35	1	Holloware Unspecified	Colourless Glass		
50900	WP35	1	Brick	Red Brick	Some Grey Mortar Attached	
50901	WP35	1	Wire / Drawn Nail	Iron		

14.4 MH1042 Stage 3

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54681	680E 400N 1	6	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54682	680E 400N 1	2		Cut Nail	Metal						Concretion / Corroded
54683	680E 400N 1	1		Strap	Metal						Concretion / Corroded
54684	680E 400N 1	2	Modern	Bag	Textile	Sewed, Hemmed		21st Century	Grey		
54685	680E 400N 1	3		Sample	Mortar	Wire Inside					Fragmentary
54686	680E 400N 1	2		Staple (Large)	Iron						Concretion / Corroded
54687	680E 400N 1	1	Modern	Shoelace	Textile			21st Century			
54688	680E 400N 1	1	Modern	Saw Blade Unspecified	Iron	Jigsaw Blade		20th Century			Concretion / Corroded
54689	680E 400N 1	1		Flower Pot	Coarse Stoneware				Red	Base	Fragmentary
54690	680E 400N 1	30		Pane Glass	Colourless Glass						Fragmentary
54691	680E 400N 1	1		Pane Glass	Colourless Glass	Stippled					Fragmentary
54692	680E 400N 1	2	Modern	Plastic	Plastic	Garbage		21st Century	Orange		
54693	680E 400N 1	2	Modern	Spiral Wire / Drawn Nail	Steel						
54694	680E 400N 1	8	Modern	Tile	Coarse Stoneware			21st Century	Grey		
54695	680E 400N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54142	685E 390N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54146	685E 390N 1	1	Modern	Bottle Unidentified	Solarized Glass Manganese Tint	Square Bottle				Body	Fragmentary
54147	685E 390N 1	1		Cut Nail	Metal						Incomplete
54148	685E 390N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54149	685E 390N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Cable	Industrial Slip	Tan	Body	Fragmentary
54150	685E 390N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54151	685E 390N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Rim	Fragmentary
54152	685E 390N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Body	Fragmentary
54153	685E 390N 1	1		Holloware Unspecified	Coarse Stoneware	Grey Salt Glaze Exterior, Dark Brown Ridged Interior		Salt Glaze	Buff	Body	Fragmentary
54154	685E 390N 1	1		Holloware Unspecified	Coarse Stoneware	Grey Salt Glaze Exterior, Black Interior, Albany?		Salt Glaze	Grey	Body	Fragmentary
54481	685E 395N 1	5		Mammal Bone	Bone						Fragmentary
54482	685E 395N 1	2	Modern	Beverage Bottle Unspecified	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54483	685E 395N 1	1		Brick	Red Brick						Fragmentary
54484	685E 395N 1	1		Holloware Unspecified	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54485	685E 395N 1	1		Bottle Unidentified	Colourless Glass						Burned / Melted
54486	685E 395N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Body	Fragmentary
54487	685E 395N 1	1		Holloware Unspecified	White Glass Opaque (Milk)		Moulded	Moulded		Body	Fragmentary
54488	685E 395N 1	2		Bottle Unidentified	Colourless Glass			Ground Rim Finish		Rim	Fragmentary
54489	685E 395N 1	1		Rectangular Bar Iron	Iron	Crow Bar					Concretion / Corroded
54490	685E 395N 1	1		Holloware Unspecified	Coarse Stoneware	Interior Is Dark Brown Ridged, Buff Paste		Salt Glaze		Body	Fragmentary
54491	685E 395N 1	2		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54492	685E 395N 1	2		Pharmaceutical / Toiletry Bottle	Blue/Green Glass (Aqua)	Impressed Lettering, "Jacobs"		Impressed		Body	Fragmentary
54493	685E 395N 1	1	Modern	Tobacco Tag	Tin	1877-1922		20th Century			Concretion / Corroded
54494	685E 395N 1	2		Cut Nail	Metal						Concretion / Corroded

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54495	685E 395N 1	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54496	685E 395N 1	1		Tableware Unspecified	Porcelain Unspecified					Body	Fragmentary
54497	685E 395N 1	1		Saucer	Porcelain Unspecified		Moulded	Lustre		Body	Fragmentary
54498	685E 395N 1	4		Sample	Mortar						Fragmentary
54499	685E 395N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Maker's Mark, Eagle "Ments"				Base	Fragmentary
54500	685E 395N 1	3		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54537	685E 400N 1	1	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54538	685E 400N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54540	685E 400N 1	1		Flower Pot	Coarse Earthenware Red			Unglazed		Body	Fragmentary
54541	685E 400N 1	3		Oyster	Shell						Fragmentary
54542	685E 400N 1	2	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54543	685E 400N 1	2	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54544	685E 400N 1	1		Rectangular Bar Iron	Iron	Crow Bar					Concretion / Corroded
54545	685E 400N 1	5		Cut Nail	Metal						Concretion / Corroded
54546	685E 400N 1	6	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54547	685E 400N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54548	685E 400N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54549	685E 400N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54550	685E 400N 1	1		Holloware Unspecified	Porcelain Unspecified		Plain			Footring	Fragmentary
54551	685E 400N 1	1		Beverage Bottle Unspecified	Colourless Glass			Hand Tooled Bottle Finish		Finish / Rim	Fragmentary
54438	685E 405N 1	1		Pane Glass	Colourless Glass						Fragmentary
54439	685E 405N 1	1		Mammal Bone	Bone						Fragmentary
54440	685E 405N 1	2	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54441	685E 405N 1	3		Cut Nail	Metal						Concretion / Corroded
54442	685E 405N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54443	685E 405N 1	1		Sample	Mortar						
54444	685E 405N 1	1		Tableware Unspecified	White Glass Opaque (Milk)		Moulded	Moulded		Footring	Fragmentary
54445	685E 405N 1	1		Preform	Iron						
54446	685E 405N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54447	685E 405N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54448	685E 405N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Rim	Fragmentary
54449	685E 405N 1	1		Wheel	Iron	Wheel And Plate Attaced					
54450	685E 405N 1	2		Mug	Vwe - Vitrified White Earthenware		Moulded	Moulded		Handle	Fragmentary
54835	685E 410N 1	3		Mammal Bone	Bone						Fragmentary
54836	685E 410N 1	8		Pane Glass	Colourless Glass						Fragmentary
54837	685E 410N 1	5		Cut Nail	Metal						Concretion / Corroded
54838	685E 410N 1	1	Modern	Spiral Wire / Drawn Nail	Steel						
54839	685E 410N 1	5	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54840	685E 410N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54841	685E 410N 1	1	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54842	685E 410N 1	1		Teacup	Porcelain Unspecified	Ridged Dots	Moulded	Moulded		Rim	Fragmentary
54843	685E 410N 1	1		Clay Smoking Pipe Shank / Bowl Juncture	White Clay					Shank	Fragmentary
54844	685E 410N 1	1		Cut Spike	Metal						Concretion / Corroded
54306	690E 385N 1	2		Mammal Bone	Bone						Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54307	690E 385N 1	1		Mammal Bone	Bone						Calcined
54308	690E 385N 1	6		Cut Nail	Metal						Concretion / Corroded
54309	690E 385N 1	2	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54310	690E 385N 1	1		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54311	690E 385N 1	2		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54312	690E 385N 1	1	Modern	Beverage Bottle Unspecified	Amber/Brown Glass			Modern Section Machine Bottle		Base	Fragmentary
54313	690E 385N 1	2		Flower Pot	Coarse Earthenware Red					Body	Fragmentary
54314	690E 385N 1	1		Holloware Unspecified	Coarse Stoneware	Dark Brown Interior And Ridged, Salt Glaze Exterior, Buff Paste		Salt Glaze		Body	Fragmentary
54315	690E 385N 1	11		Pane Glass	Colourless Glass						Fragmentary
54316	690E 385N 1	4		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54317	690E 385N 1	2		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54318	690E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware	Maker's Mark 'Iron" Presumed To Be Ironstone China				Footring	Fragmentary
54319	690E 385N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Moulded	Moulded		Rim	Fragmentary
54320	690E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54321	690E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Burned / Melted
54322	690E 385N 1	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54056	690E 390N 1	6		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54057	690E 390N 1	2		Brick	Red Brick						Fragmentary
54058	690E 390N 1	3		Tile	Coarse Earthenware Red			Unglazed			Fragmentary
54059	690E 390N 1	9	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54060	690E 390N 1	2		Bottle Unidentified	Yellow Glass					Body	Fragmentary
54061	690E 390N 1	7		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54062	690E 390N 1	1		Button	Shell	Single Hole					
54063	690E 390N 1	12		Pane Glass	Colourless Glass						Fragmentary
54064	690E 390N 1	1		Mammal Bone	Bone						Fragmentary
54065	690E 390N 1	2		Bird Bone	Bone						Fragmentary
54066	690E 390N 1	4		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54067	690E 390N 1	1		Bottle Finish	Colourless Glass			Hand Tooled Bottle Finish		Finish / Rim	Fragmentary
54068	690E 390N 1	22		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54069	690E 390N 1	2		Cut Spike	Metal						Complete
54070	690E 390N 1	6	Modern	Wire / Drawn Nail	Metal						Incomplete
54071	690E 390N 1	14		Cut Nail	Metal						Incomplete
54072	690E 390N 1	1		Holloware Unspecified	Coarse Stoneware			Albany Slip Interior And Exterior		Footring	Fragmentary
54073	690E 390N 1	6		Holloware Unspecified	Coarse Stoneware	Salt Glaze Exterior, Interior Dark Brown And Ridged		Salt Glaze	Grey	Body	Fragmentary
54074	690E 390N 1	1		Spigot	Pewter (Various Alloys)						
54076	690E 390N 1	3		Holloware Unspecified	Coarse Stoneware	Black Interior, Salt Glaze Exterior		Salt Glaze	Grey	Body	Fragmentary
54077	690E 390N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Flown Transfer	Flow Transfer	Blue	Body	Fragmentary
54078	690E 390N 1	1		Door Knob	Porcelain Unspecified						Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54079	690E 390N 1	1		Clay Smoking Pipe Bowl	White Clay		Dots			Bowl	Fragmentary
54080	690E 390N 1	1		Teacup	Vwe - Vitrified White Earthenware		Plain			Handle	Fragmentary
54081	690E 390N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Unspecified Transfer	Other Transfer (1st Group/ Black, Dk Brown, Red)	Black	Body	Fragmentary
54082	690E 390N 1	1		Teacup	Vwe - Vitrified White Earthenware	Floral Motif	Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Teal	Rim	Fragmentary
54083	690E 390N 1	2		Dinner Plate 9-11"	Porcelain Unspecified					Rim	Fragmentary
54084	690E 390N 1	1		Teacup	Porcelain Unspecified	Leaves	Moulded			Rim	Fragmentary
54085	690E 390N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54086	690E 390N 1	2		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Rim	Fragmentary
54087	690E 390N 1	6		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54088	690E 390N 1	2		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Footring	Fragmentary
54089	690E 390N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54090	690E 390N 1	4		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54091	690E 390N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54092	690E 390N 1	6		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54603	690E 395N 1	2		Strap	Iron						Concretion / Corroded
54604	690E 395N 1	1		Brick	Red Brick						Fragmentary
54605	690E 395N 1	9	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54606	690E 395N 1	17		Cut Nail	Metal						Concretion / Corroded
54607	690E 395N 1	1		Holloware Unspecified	Coarse Earthenware Red					Body	Fragmentary
54608	690E 395N 1	3	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54609	690E 395N 1	1		Glassware Unidentified	Colourless Glass		Moulded	Moulded		Body	Fragmentary
54610	690E 395N 1	1		Can Lid	Tin						
54611	690E 395N 1	5		Tableware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54612	690E 395N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Burned / Melted
54613	690E 395N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Painted Unspecified	Painted	Green	Body	Fragmentary
54614	690E 395N 1	7		Coal	Coal						Spent /Exhausted
54615	690E 395N 1	1	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54616	690E 395N 1	5		Mammal Bone	Bone						Fragmentary
54617	690E 395N 1	2		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54618	690E 395N 1	10		Bottle Unidentified	Colourless Glass						Fragmentary
54619	690E 395N 1	23		Pane Glass	Colourless Glass						Fragmentary
54620	690E 395N 1	7		Pane Glass	Colourless Glass	Floral Motif Sticker? Or Painted?					Fragmentary
54621	690E 395N 1	7		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54622	690E 395N 1	25		Liquor Bottle	Green Glass (Light)					Finish / Rim	Fragmentary
54623	690E 395N 1	7		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54624	690E 395N 1	2		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54625	690E 395N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54626	690E 395N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres			Rim	Fragmentary
54627	690E 395N 1	10		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54253	690E 400N 1	2	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54254	690E 400N 1	2		Brick	Red Brick						Fragmentary
54255	690E 400N 1	2		Tile	Coarse Earthenware Red						Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54256	690E 400N 1	2		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54257	690E 400N 1	1		Mammal Bone	Bone						Fragmentary
54258	690E 400N 1	1	Modern	Spiral Wire / Drawn Nail	Steel						
54259	690E 400N 1	21		Cut Nail	Metal						Concretion / Corroded
54260	690E 400N 1	9	Modern	Wire / Drawn Nail	Metal						Incomplete
54261	690E 400N 1	39		Pane Glass	Colourless Glass						Fragmentary
54262	690E 400N 1	4		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54263	690E 400N 1	1		Sheeting	Steel	Corrugated					
54264	690E 400N 1	1		Strap	Iron						
54265	690E 400N 1	9		Coal	Coal						Spent /Exhausted
54266	690E 400N 1	3		Asphalt	Asphalt						Fragmentary
54267	690E 400N 1	2		Holloware Unspecified	Porcelain Unspecified		Plain			Rim	Fragmentary
54268	690E 400N 1	1		Holloware Unspecified	White Glass Opaque (Milk)		Moulded			Body	Fragmentary
54269	690E 400N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54270	690E 400N 1	5		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54271	690E 400N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54272	690E 400N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54273	690E 400N 1	1	Modern	Unidentified Object	Plastic	Think Plastic Sheet With A Corner			Pink		Fragmentary
54274	690E 400N 1	1	Modern	Hairpin	Plastic	Hair Clip, Plastic With Fake Jewels		21st Century			
54165	690E 400N 2	1	Modern	Hair Comb	Bakelite (Phenol -Formaldehyde Resin)						Fragmentary
54170	690E 400N 2	2		Tableware Unspecified	Yelloware					Body	Fragmentary
54171	690E 400N 2	1		Mammal Bone	Bone						Calcined
54172	690E 400N 2	3	Modern	Wire / Drawn Nail	Metal						Incomplete
54173	690E 400N 2	1		Holloware Unspecified	Porcelain Unspecified					Base	Fragmentary
54174	690E 400N 2	1		Figurine	Porcelain Unspecified	Dome Shaped					
54175	690E 400N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Handle	Fragmentary
54176	690E 400N 2	2	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54177	690E 400N 2	3		Coal	Coal						Spent /Exhausted
54178	690E 400N 2	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Exfoliated
53947	690E 405N 1	1	Modern	Spiral Wire / Drawn Nail	Steel						Complete
53948	690E 405N 1	2		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
53949	690E 405N 1	3		Cut Nail	Metal						Incomplete
53950	690E 405N 1	1		Coal	Coal	Shiny					Spent /Exhausted
53951	690E 405N 1	1	Modern	Lid / Cover Unspecified	Solarized Glass Manganese Tint			Threaded Closure		Lid/Sealer/Closure	Fragmentary
53952	690E 405N 1	1		Bottle Finish	Colourless Glass			Hand Tooled Bottle Finish		Finish / Rim	Fragmentary
53953	690E 405N 1	1		Saucer	Rwe - Refined White Earthenware		Unspecified Transfer	Blue Transfer	Blue	Rim	Fragmentary
53954	690E 405N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
53955	690E 405N 1	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
53990	690E 410N 1	1		Cut Spike	Metal						Complete
53991	690E 410N 1	3	Modern	Wire / Drawn Nail	Metal						Incomplete
53992	690E 410N 1	21		Cut Nail	Metal						Concretion / Corroded
53993	690E 410N 1	1		Shell Unspecified	Shell						
53994	690E 410N 1	6		Pane Glass	Colourless Glass						Fragmentary

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53995	690E 410N 1	1		Oyster	Shell						Fragmentary
53996	690E 410N 1	1	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
53997	690E 410N 1	1		Coffee Pot	Fine Earthenware Red/Buff/Brown			Jackfield Type 19th Century		Body	Fragmentary
53998	690E 410N 1	1		Button	Porcelain Unspecified			Prosser	Blue		Complete
53999	690E 410N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Ironstone China Maker's Mark				Body	Fragmentary
54000	690E 410N 1	1		Mug	Porcelain Unspecified	Handle Broken Off				Body	Fragmentary
54001	690E 410N 1	1		Dinner Plate 9-11"	Rwe - Refined White Earthenware		Edged Ware Unidentified	Painted	Blue	Rim	Burned / Melted
54002	690E 410N 1	1		Clay Smoking Pipe Bowl	White Clay		Thistle			Bowl	Fragmentary
54003	690E 410N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54233	690E 415N 1	17		Cut Nail	Metal						Concretion / Corroded
54234	690E 415N 1	6	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54235	690E 415N 1	6		Pane Glass	Colourless Glass						Fragmentary
54236	690E 415N 1	1		Coffee Pot	Fine Earthenware Red/Buff/Brown			Jackfield Type 19th Century		Body	Fragmentary
54237	690E 415N 1	1		Teacup	Porcelain Unspecified		Moulded			Handle	Fragmentary
54238	690E 415N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54239	690E 415N 1	1		Holloware Unspecified	Yelloware		Banded	Industrial Slip	Blue	Body	Fragmentary
54240	690E 415N 1	1		Lid / Cover Unspecified	Vwe - Vitrified White Earthenware		Plain			Lid/Sealer/Closure	Fragmentary
54241	690E 415N 1	1		Tableware Unspecified	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54242	690E 415N 1	4		Mammal Bone	Bone			Cut			Fragmentary
54243	690E 415N 1	1		Door Knob	Porcelain Unspecified	Circular Shape					Fragmentary
54098	693E 396N 1	6		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54099	693E 396N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54100	693E 396N 1	24		Cut Nail	Metal						Incomplete
54101	693E 396N 1	1		Mammal Bone	Bone						Calcined
54102	693E 396N 1	2		Mammal Bone	Bone						Fragmentary
54103	693E 396N 1	2		Brick	Red Brick						Fragmentary
54104	693E 396N 1	2	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54105	693E 396N 1	22		Pane Glass	Colourless Glass						Fragmentary
54106	693E 396N 1	4		Bottle Unidentified	Green Glass (Light)				Teal	Body	Fragmentary
54107	693E 396N 1	6	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54108	693E 396N 1	1		Unidentified Object	Iron	Square					
54109	693E 396N 1	2		Teacup	Vwe - Vitrified White Earthenware		Plain			Handle	Fragmentary
54110	693E 396N 1	1		Holloware Unspecified	Coarse Stoneware	Brown Ridged Interior		Salt Glaze		Body	Fragmentary
54111	693E 396N 1	2		Holloware Unspecified	Coarse Stoneware		Plain	Rockingham		Body	Fragmentary
54112	693E 396N 1	1		Teacup	Rwe - Refined White Earthenware		Stamped	Stamped	Purple	Rim	Fragmentary
54113	693E 396N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Stamped	Stamped	Brown	Body	Fragmentary
54114	693E 396N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Exfoliated
54115	693E 396N 1	2		Dinner Plate 9-11"	Porcelain Unspecified		Plain			Body	Fragmentary
54116	693E 396N 1	2		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Maker's Mark	Plain			Body	Fragmentary
54117	693E 396N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware	Teal Glaze	Plain	Tin Glaze		Body	Fragmentary
54118	693E 396N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54119	693E 396N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain	Moulded		Rim	Fragmentary
54120	693E 396N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware	Moulded Panels	Paneled Moulded			Rim	Burned / Melted

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54121	693E 396N 1	3		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Rim	Fragmentary
54122	693E 396N 1	6		Holloware Unspecified	Vwe - Vitrified White Earthenware					Body	Fragmentary
54123	693E 396N 1	14		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54124	693E 396N 1	14		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54428	693E 396N 2	2		Pane Glass	Colourless Glass						Fragmentary
54429	693E 396N 2	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54430	693E 396N 2	3		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54431	693E 396N 2	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54433	693E 396N 2	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54434	693E 396N 2	2	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54347	695E 380N 1	1		Cut Nail	Metal						Concretion / Corroded
54348	695E 380N 1	1		Holloware Unspecified	Coarse Stoneware	Interior Dark Brown And Ridged		Salt Glaze		Body	Fragmentary
54349	695E 380N 1	1	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54350	695E 380N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54351	695E 380N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Purple	Rim	Fragmentary
54352	695E 380N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54353	695E 380N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54845	695E 385N 1	1		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54846	695E 385N 1	2		Cut Nail	Metal						Concretion / Corroded
54847	695E 385N 1	2	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54848	695E 385N 1	1	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54849	695E 385N 1	1		Flower Pot	Coarse Earthenware Red					Body	Fragmentary
54850	695E 385N 1	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54851	695E 385N 1	3		Mammal Bone	Bone			Cut			Fragmentary
54852	695E 385N 1	4	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54853	695E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54854	695E 385N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54855	695E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54856	695E 385N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Exfoliated
54857	695E 385N 1	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Burned / Melted
54858	695E 385N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54859	695E 385N 1	3		Clinker (Spent Fuel)	Clinker	Layered			White		Fragmentary
54461	695E 390N 1	2		Brick	Red Brick						Fragmentary
54462	695E 390N 1	2		Flower Pot	Coarse Earthenware Red			Unglazed		Body	Fragmentary
54463	695E 390N 1	1		Clay Smoking Pipe Bowl	White Clay					Body	Fragmentary
54464	695E 390N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54465	695E 390N 1	1	Modern	Bottle Unidentified	Green Glass (Light)			Modern Section Machine Bottle		Body	Fragmentary
54466	695E 390N 1	1	Modern	Tile	Coarse Stoneware			21st Century	Grey		
54467	695E 390N 1	4	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54468	695E 390N 1	1		Holloware	Coarse Stoneware	Dark Brown Interior, Ridged, Buff Paste		Salt Glaze	Brown, Dark	Body	Fragmentary
54469	695E 390N 1	1		Strap	Iron						Concretion / Corroded
54470	695E 390N 1	1		Screw	Metal						Concretion / Corroded
54471	695E 390N 1	3		Mammal Bone	Bone						Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54472	695E 390N 1	9		Cut Nail	Metal						Concretion / Corroded
54473	695E 390N 1	2		Bowl /Individual Service	Vwe - Vitrified White Earthenware	Pink Painted Body?	Stamped	Stamped	Pink	Rim	Fragmentary
54474	695E 390N 1	6	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54475	695E 390N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54476	695E 390N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Paneled Moulded			Rim	Fragmentary
54477	695E 390N 1	11		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54478	695E 390N 1	1		Holloware Unspecified	Porcelain Unspecified		Plain			Rim	Fragmentary
54479	695E 390N 1	1		Holloware Unspecified	Porcelain Unspecified	Filigree Moulding	Scalloped Rim	Moulded		Rim	Fragmentary
54480	695E 390N 1	4		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54578	695E 395N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54579	695E 395N 1	1	Modern	Bottle Unidentified	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54580	695E 395N 1	1		Lamp Chimney	Colourless Glass						Fragmentary
54581	695E 395N 1	2		Glassware Unidentified	Colourless Glass						Burned / Melted
54582	695E 395N 1	13		Pane Glass	Colourless Glass						Fragmentary
54583	695E 395N 1	10	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54584	695E 395N 1	1		Railroad Spike	Iron					Head	Fragmentary
54585	695E 395N 1	5		Brick	Red Brick						Fragmentary
54586	695E 395N 1	5		Flower Pot	Coarse Earthenware Red						Fragmentary
54587	695E 395N 1	1		Coal	Coal						Spent /Exhausted
54588	695E 395N 1	1		Holloware Unspecified	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54589	695E 395N 1	1		Holloware Unspecified	Coarse Stoneware	Buff Paste, Dark Brown Interior, Ridged		Salt Glaze		Body	Fragmentary
54590	695E 395N 1	1		Dinner Plate 9-11"	Porcelain Unspecified		Plain			Footring	Fragmentary
54591	695E 395N 1	8		Mammal Bone	Bone						Fragmentary
54592	695E 395N 1	8		Cut Nail	Metal						Concretion / Corroded
54593	695E 395N 1	1		Horseshoe	Iron						Incomplete
54594	695E 395N 1	3		Clay Smoking Pipe Bowl	White Clay		Plain			Bowl	Fragmentary
54595	695E 395N 1	2		Teacup	Porcelain Unspecified		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Green	Body	Fragmentary
54596	695E 395N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware	Body Is Pink?	Stamped	Stamped	Brown	Body	Fragmentary
54597	695E 395N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware	Lettering	Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Purple	Body	Fragmentary
54598	695E 395N 1	4		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Body	Fragmentary
54599	695E 395N 1	4		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54600	695E 395N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Exfoliated
54601	695E 395N 1	16		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54602	695E 395N 1	10		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54888	695E 400N 1	3		Bottle Unidentified	Colourless Glass						Burned / Melted
54889	695E 400N 1	2	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54890	695E 400N 1	85		Pane Glass	Colourless Glass						Fragmentary
54891	695E 400N 1	1		Staple (Large)	Iron						Concretion / Corroded
54892	695E 400N 1	1		Railroad Spike	Iron						Concretion / Corroded
54893	695E 400N 1	10	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54894	695E 400N 1	2		Mirror	Mirror Glass						Fragmentary
54895	695E 400N 1	2		Lamp Chimney	Colourless Glass						Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54896	695E 400N 1	1		Flower Pot	Coarse Earthenware Red					Rim	Fragmentary
54897	695E 400N 1	1		Holloware Unspecified	Coarse Earthenware Red			Salt Glaze		Body	Fragmentary
54898	695E 400N 1	4		Mammal Bone	Bone						Fragmentary
54899	695E 400N 1	1		Crock	Coarse Stoneware			Salt Glaze		Rim	Fragmentary
54900	695E 400N 1	11		Cut Nail	Metal						Concretion / Corroded
54901	695E 400N 1	1	Modern	Jar Lid	Colourless Glass	The American Glass Co.		20th Century		Lid/Sealer/Closure	Complete
54902	695E 400N 1	1		Hook	Iron	With Handle					Concretion / Corroded
54903	695E 400N 1	1		Figurine	Porcelain Unspecified	Figurine Tree	Painted Unspecified	Painted	Brown		Fragmentary
54904	695E 400N 1	1		Oyster	Shell						Fragmentary
54905	695E 400N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54906	695E 400N 1	1		Holloware Unspecified	Yelloware					Body	Fragmentary
54907	695E 400N 1	1	Modern	Unidentified Object	Steel	Forked End		20th Century			Concretion / Corroded
54908	695E 400N 1	1	Modern	Hair Comb	Plastic	Tapered Tip, Piece Of A Comb Maybe?		21st Century	Red		Fragmentary
54909	695E 400N 1	1	Modern	Unidentified Object	Plastic			20th Century	Brown		Fragmentary
54910	695E 400N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Moulded	Moulded		Rim	Fragmentary
54911	695E 400N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Maker's Mark: Ironstone	Plain			Body	Fragmentary
54912	695E 400N 1	15		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54913	695E 400N 1	3		Mug	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54914	695E 400N 1	1		Holloware Unspecified	Porcelain Unspecified	Ridged	Moulded			Rim	Fragmentary
54915	695E 400N 1	1	Modern	Holloware Unspecified	Porcelain Unspecified		Lithograph Unidentified	Lithograph	Blue	Body	Fragmentary
54916	695E 400N 1	1		Tableware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54275	695E 405N 1	1		Mammal Bone	Bone			Cut			Fragmentary
54276	695E 405N 1	2	Modern	Cup (Disposable)	Plastic			21st Century			Fragmentary
54277	695E 405N 1	1	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54278	695E 405N 1	1	Modern	Spiral Wire / Drawn Nail	Steel						
54279	695E 405N 1	2		Staple (Large)	Iron	Roofing Staple?					Concretion / Corroded
54280	695E 405N 1	1		Tableware Unspecified	Yelloware						Fragmentary
54281	695E 405N 1	1		Watch Face	Stainless Steel						
54282	695E 405N 1	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54283	695E 405N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54284	695E 405N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54285	695E 405N 1	63	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54286	695E 405N 1	1	Modern	Door Lock	Stainless Steel	Weiser		21st Century			Concretion / Corroded
54287	695E 405N 1	97		Pane Glass	Colourless Glass						Fragmentary
54288	695E 405N 1	21		Pane Glass	Colourless Glass	Stippled					Fragmentary
54042	695E 410N 1	2		Hinge	Iron	Screws Still Attached					Concretion / Corroded
54043	695E 410N 1	4	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54044	695E 410N 1	7		Cut Nail	Metal						Incomplete
54045	695E 410N 1	1		Mammal Bone	Bone						Fragmentary
54046	695E 410N 1	2		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54047	695E 410N 1	5		Pane Glass	Colourless Glass						Fragmentary
54048	695E 410N 1	1		Cartridge Casing	Copper	.22 Small Caliber Bullet					
54049	695E 410N 1	2		Holloware Unspecified	Porcelain Unspecified		Plain			Rim	Fragmentary
54050	695E 410N 1	1		Holloware Unspecified	Porcelain Unspecified	Horseshoe Decoration		Impressed		Body	Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54051	695E 410N 1	1		Tableware Unspecified	Yelloware					Body	Fragmentary
54052	695E 410N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware	Scalloped	Moulded	Moulded		Body	Fragmentary
54053	695E 410N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54054	695E 410N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54055	695E 410N 1	4		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54211	695E 410N 2	1		Screw	Metal						Concretion / Corroded
54212	695E 410N 2	1		Holloware Unspecified	Yelloware					Body	Fragmentary
54213	695E 410N 2	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54214	695E 410N 2	1		Tableware Unspecified	Rwe - Refined White Earthenware		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Green	Body	Fragmentary
54215	695E 410N 2	14		Pane Glass	Colourless Glass						Fragmentary
54216	695E 410N 2	1		Bolt	Iron	Nut, Bolt And Washer					
54217	695E 410N 2	4	Modern	Wire / Drawn Nail	Metal						Incomplete
54218	695E 410N 2	12		Cut Nail	Metal						Incomplete
54860	695E 410N 3	5		Roof Shingle	Tar						Fragmentary
54861	695E 410N 3	1	Modern	Cup (Disposable)	Styrofoam Polystyrene (Cups, Packing Mat. Toys)				White		
54862	695E 410N 3	2		Sample	Mortar						Fragmentary
54863	695E 410N 3	3	Modern	Spiral Wire / Drawn Nail	Steel						Complete
54864	695E 410N 3	2	Modern	Mesh	Textile			21st Century			
54865	695E 410N 3	5	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54866	695E 410N 3	12		Cut Nail	Metal						Concretion / Corroded
54867	695E 410N 3	1		Spigot	Iron						Concretion / Corroded
54868	695E 410N 3	15		Textile Sample	Textile	Possible Tp?					Fragmentary
54869	695E 410N 3	1		Strap	Tin						
54870	695E 410N 3	1		Wire	Stainless Steel	Thicker Gauge					
54871	695E 410N 3	1		Holloware Unspecified	Porcelain Unspecified		Plain			Footring	Fragmentary
54872	695E 410N 3	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54873	695E 410N 3	1	Modern	Unidentified Object	Plastic			21st Century	Blue		Fragmentary
54874	695E 410N 3	2		Eyelet / Grommet	Stainless Steel	Squished					
54875	695E 410N 3	139		Pane Glass	Colourless Glass						Fragmentary
54696	695E 410N 4	1		Sample	Mortar						Fragmentary
54697	695E 410N 4	8	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54698	695E 410N 4	17		Cut Nail	Metal						Concretion / Corroded
54699	695E 410N 4	1	Modern	Roofing Nail	Metal			21st Century			
54700	695E 410N 4	20		Pane Glass	Colourless Glass						Fragmentary
54701	695E 410N 4	1	Modern	Bottle Cap	Plastic			21st Century	Blue		
54702	695E 410N 4	1		Shoe	Leather	Rivet In Leather					Fragmentary
54703	695E 410N 4	8		Scrap	Metal						Concretion / Corroded
54704	695E 410N 4	12	Modern	Textile Sample	Textile	Blanket, Shirt, Towel?		21st Century	White		
54705	695E 410N 4	2	Modern	Box	Plastic	Jewelry Box With Felt Insert		20th Century	Grey		Burned / Melted
54706	695E 410N 4	10	Modern	Spirit Glass	Colourless Glass			21st Century		Body	Fragmentary
54156	695E 415N 1	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54157	695E 415N 1	8		Pane Glass	Colourless Glass						Fragmentary
54158	695E 415N 1	1		Sample	Mortar						Fragmentary

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54159	695E 415N 1	2		Clay Smoking Pipe (Functionally Complete)	White Clay					Bowl	Fragmentary
54160	695E 415N 1	1		Button	Porcelain Unspecified	4 Hole, Ridged		Prosser			
54161	695E 415N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54162	695E 415N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres			Rim	Fragmentary
54163	695E 415N 1	1	Modern	Toy Jewelry	Bakelite (Phenol -Formaldehyde Resin)	Thicker Bottom And Tapers Much Thinner At The Top, Possible Earring/Ring?			Black		
54164	695E 415N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
53989	695E 415N 3	6		Cut Nail	Metal						Concretion / Corroded
54155	695E 415N 3	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54032	698E 378N 1	1		Mammal Bone	Bone						Calcined
54033	698E 378N 1	2		Cut Nail	Metal						Concretion / Corroded
54034	698E 378N 1	1		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54035	698E 378N 1	1		Pane Glass	Colourless Glass						Fragmentary
54036	698E 378N 1	1	Modern	Unidentified Object	Plastic						
54037	698E 378N 1	2	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Base	Fragmentary
54038	698E 378N 1	1		Holloware Unspecified	Porcelain Unspecified		Unspecified Transfer	Blue Transfer	Blue	Body	Fragmentary
54039	698E 378N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54040	698E 378N 1	3		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54041	698E 378N 1	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54937	698E 397N 1	1		Nut	Iron	Square					
54938	698E 397N 1	1		Brick	Red Brick						Fragmentary
54939	698E 397N 1	4		Roof Tile	Tar						Fragmentary
54940	698E 397N 1	2		Strap	Metal						Concretion / Corroded
54941	698E 397N 1	2		Slag (Metal Working)	Slag						Burned / Melted
54942	698E 397N 1	32		Glassware Unidentified	Colourless Glass						Burned / Melted
54943	698E 397N 1	22		Bottle Unidentified	Blue/Green Glass (Aqua)						Fragmentary
54944	698E 397N 1	1	Modern	Bottle Unidentified	Solarized Glass Manganese Tint						Fragmentary
54945	698E 397N 1	2		Bottle Unidentified	Green Glass (Dark Olive)					Body	Fragmentary
54946	698E 397N 1	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54947	698E 397N 1	1		Bottle Unidentified	Green Glass (Light)	Hexagonal Base, Thick		Post Bottom Mould		Base	Fragmentary
54948	698E 397N 1	1	Modern	Lid / Cover Unspecified	Stainless Steel	Bullseye Circular Ridged		21st Century		Lid/Sealer/Closure	
54949	698E 397N 1	1		Mammal Bone	Bone						Fragmentary
54950	698E 397N 1	1		Clay Smoking Pipe Mouthpiece/Bite	White Clay					Mouthpiece	Fragmentary
54951	698E 397N 1	1		Rectangular Bar Iron	Iron	Tapered End					Concretion / Corroded
54952	698E 397N 1	1		Eye Bolt	Iron	Threaded					Concretion / Corroded
54953	698E 397N 1	11	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54954	698E 397N 1	25		Cut Nail	Metal						Concretion / Corroded
54955	698E 397N 1	120		Pane Glass	Colourless Glass						Fragmentary
54956	698E 397N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Rim	Burned / Melted
54957	698E 397N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Burned / Melted
54958	698E 397N 1	2		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54959	698E 397N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54960	698E 397N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Scalloped Rim	Moulded		Rim	Burned / Melted
54961	698E 397N 1	1		Mug	Vwe - Vitrified White Earthenware		Moulded			Handle	Fragmentary
54962	698E 397N 1	22		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54963	698E 397N 1	3		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Purple	Body	Fragmentary
54964	698E 397N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Unspecified Transfer	Blue Transfer	Blue	Body	Fragmentary
54965	698E 397N 1	1		Saucer	Porcelain Unspecified	Moulded Filigree	Scalloped Rim	Lustre		Rim	Fragmentary
54966	698E 397N 1	1		Holloware Unspecified	Porcelain Unspecified		Moulded	Lustre		Body	Fragmentary
54967	698E 397N 1	1		Holloware Unspecified	Porcelain Unspecified	Moulded Filigree	Scalloped Rim	Moulded		Rim	Fragmentary
54364	698E 397N 2	2	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54365	698E 397N 2	2		Screw	Metal						Incomplete
54366	698E 397N 2	1	Modern	Washer	Rubber Derived Synthetic Unspecified			21st Century	Red		
54367	698E 397N 2	1		Clay Smoking Pipe Mouthpiece/Bite	White Clay					Stem	Fragmentary
54368	698E 397N 2	3		Bird Bone	Bone						Fragmentary
54369	698E 397N 2	5		Mammal Bone	Bone						Burned / Melted
54370	698E 397N 2	3		Mammal Bone	Bone			Cut			Fragmentary
54371	698E 397N 2	2		Charcoal	Charcoal						Burned / Melted
54372	698E 397N 2	5		Coal	Coal						Spent /Exhausted
54373	698E 397N 2	3		Wire	Copper						Concretion / Corroded
54374	698E 397N 2	5		Flower Pot	Coarse Earthenware Red					Body	Burned / Melted
54375	698E 397N 2	1	Modern	Label / Tag	Plastic	Bread Tag		21st Century	Blue		
54376	698E 397N 2	1		Washer	Iron						
54377	698E 397N 2	3	Modern	Foil	Aluminum	Tin Foil					
54378	698E 397N 2	2		Bowl /Individual Service	Vwe - Vitrified White Earthenware		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Green	Rim	Fragmentary
54379	698E 397N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54380	698E 397N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Body	Fragmentary
54381	698E 397N 2	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Burned / Melted
54382	698E 397N 2	1	Modern	Tile	Coarse Earthenware			21st Century	Grey		
54384	698E 397N 2	2		Spring	Iron						Concretion / Corroded
54385	698E 397N 2	4		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54386	698E 397N 2	2		Strap	Iron						Concretion / Corroded
54387	698E 397N 2	2		Strap	Pewter (Various Alloys)	Holes At Both Ends					
54388	698E 397N 2	1	Modern	Unidentified Object	Rubber Derived Synthetic Unspecified	Ridged		21st Century			Burned / Melted
54389	698E 397N 2	4	Modern	Sheeting	Tin			20th Century			
54390	698E 397N 2	1		Whetstone / Hone	Quartz						Fragmentary
54391	698E 397N 2	1	Modern	Threaded Can Cap	Stainless Steel			Threaded Closure			
54392	698E 397N 2	1		Rectangular Bar Iron	Iron	Crow Bar					
54393	698E 397N 2	2		Utensil Handle Unspecified	Iron						Concretion / Corroded
54394	698E 397N 2	26		Cut Nail	Metal						Concretion / Corroded
54395	698E 397N 2	47	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54396	698E 397N 2	1		Hook	Iron	Rectangular Hollow Head					Concretion / Corroded
54397	698E 397N 2	1	Modern	Extract Bottle	Amber/Brown Glass	Dominion Bottle From The 1940s, Maybe Pharmaceutical Or Extract, With Plastic Threaded Cap					Complete
54398	698E 397N 2	61		Bottle Unidentified	Colourless Glass						Burned / Melted
54399	698E 397N 2	76		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54400	698E 397N 2	250		Pane Glass	Colourless Glass						Fragmentary
54401	698E 397N 2	2		Unidentified Object	Iron	Agricultural Equipment Parts					
54770	698E 397N 2	20		Cut Nail	Metal						Concretion / Corroded
54771	698E 397N 2	30	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54772	698E 397N 2	1		Cut Spike	Metal						Complete
54773	698E 397N 2	3		Railroad Spike	Iron						Concretion / Corroded
54774	698E 397N 2	2		Agricultural / Horticultural Item	Iron						Concretion / Corroded
54775	698E 397N 2	5		Bottle Unidentified	Green Glass (Dark Olive)					Body	Fragmentary
54776	698E 397N 2	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54777	698E 397N 2	2		Sheet	Tin						
54778	698E 397N 2	5	Modern	Foil	Tin	Tin Foil		20th Century			
54779	698E 397N 2	2	Modern	Asphalt	Asphalt			20th Century	Black		
54780	698E 397N 2	2		Can Lid	Tin			19th Century			Fragmentary
54781	698E 397N 2	10		Unidentifiable (Corroded Lump Etc.)	Iron						Concretion / Corroded
54782	698E 397N 2	1		Charcoal	Charcoal						Spent /Exhausted
54783	698E 397N 2	2		Flower Pot	Coarse Earthenware Red					Body	Fragmentary
54784	698E 397N 2	3		Brick	Red Brick						Fragmentary
54785	698E 397N 2	1		Unidentified Object	Iron	Barbed					
54786	698E 397N 2	1	Modern	Plastic	Plastic	Garbage, Written On It 'Pepper'		20th Century			
54787	698E 397N 2	3		Oyster	Shell	Or Possible Extremely Burnt Glass					Fragmentary
54788	698E 397N 2	1		Sample	Mortar				White		Fragmentary
54789	698E 397N 2	1		Clay Smoking Pipe Bowl	White Clay					Bowl	Fragmentary
54790	698E 397N 2	2		Mammal Bone	Bone						Fragmentary
54791	698E 397N 2	1	Modern	Textile Sample	Textile	Paper Napkin?		21st Century			
54792	698E 397N 2	1	Modern	Plastic	Plastic	Disposable Cup		21st Century	Orange		Fragmentary
54793	698E 397N 2	1		Jewelry	Stainless Steel	Piece Of A Bracelet? Pyramid Shaped					
54794	698E 397N 2	1	Modern	Lamp Chimney	Solarized Glass Manganese Tint					Body	Fragmentary
54795	698E 397N 2	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54796	698E 397N 2	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54797	698E 397N 2	1		Holloware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54798	698E 397N 2	1		Saucer	Vwe - Vitrified White Earthenware	Floral Motif	Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Teal	Footring	Fragmentary
54799	698E 397N 2	1		Holloware Unspecified	Coarse Earthenware Red			Tin Glaze		Base	Fragmentary
54800	698E 397N 2	1		Holloware Unspecified	Coarse Stoneware	Interior Is Dark Brown And Ridged		Salt Glaze	Brown, Dark	Body	Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54801	698E 397N 2	2	Modern	Glassware Unidentified	Colourless Glass		Moulded	Modern Section Machine Bottle		Body	Fragmentary
54802	698E 397N 2	1		Holloware Unspecified	Basalt Fine Stoneware (Black)	Hole In The Middle Of The Base		Unglazed	Black	Base	Fragmentary
54803	698E 397N 2	2		Teacup	Vwe - Vitrified White Earthenware	Of Jackfield, But Paste Is Light Grey	Plain			Rim	Burned / Melted
54804	698E 397N 2	20	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54805	698E 397N 2	275		Pane Glass	Colourless Glass						Fragmentary
54806	698E 397N 2	160		Glassware Unidentified	Colourless Glass						Burned / Melted
54244	699E 411N 1	1		Brick	Red Brick						Fragmentary
54245	699E 411N 1	1		Tableware Unspecified	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54246	699E 411N 1	2		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54247	699E 411N 1	1		Coal Shovel	Coal						Spent /Exhausted
54248	699E 411N 1	1		Asphalt	Asphalt						Fragmentary
54249	699E 411N 1	2		Sample	Mortar						Fragmentary
54250	699E 411N 1	5		Panel Bottle	Blue/Green Glass (Aqua)					Body	Fragmentary
54251	699E 411N 1	4	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54252	699E 411N 1	1	Modern	Spiral Wire / Drawn Nail	Steel						
54811	699E 411N 2	1		Brick	Red Brick						Fragmentary
54812	699E 411N 2	5		Pane Glass	Colourless Glass						Fragmentary
54813	699E 411N 2	1		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54814	699E 411N 2	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54815	699E 411N 2	1		Cut Nail	Metal						Concretion / Corroded
54816	699E 411N 2	1		Screw	Metal						Concretion / Corroded
54335	700E 375N 1	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54336	700E 375N 1	1		Lamp Chimney	Colourless Glass						Fragmentary
54337	700E 375N 1	1		Bottle Unidentified	Blue/Green Glass (Aqua)						Fragmentary
54338	700E 375N 1	1	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54339	700E 375N 1	2		Holloware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54340	700E 375N 1	1		Brick	Red Brick						Fragmentary
54341	700E 375N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Exfoliated
54342	700E 375N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Exfoliated
54179	700E 380N 1	1	Modern	Beverage Bottle Unspecified	Solarized Glass Manganese Tint	Liquor Bottle				Finish / Rim	Fragmentary
54180	700E 380N 1	1		Bottle Finish	Blue/Green Glass (Aqua)					Finish / Rim	Fragmentary
54181	700E 380N 1	1		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Burned / Melted
54182	700E 380N 1	2		Pane Glass	Colourless Glass						Fragmentary
54183	700E 380N 1	3		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54184	700E 380N 1	3		Cut Nail	Metal						Incomplete
54185	700E 380N 1	2		Holloware Unspecified	Porcelain Unspecified	Floral Motif	Unspecified Transfer	Blue Transfer	Blue	Rim	Fragmentary
54186	700E 380N 1	1	Modern	Textile Sample	Plastic			21st Century	Purple		Fragmentary
54187	700E 380N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Rim	Fragmentary
54188	700E 380N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54189	700E 380N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54190	700E 380N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Body	Fragmentary
54191	700E 380N 1	1		Tableware Unspecified	Coarse Earthenware Red	Streaked With Green		Tin Glaze		Body	Fragmentary
54193	700E 380N 1	1		Point	Onondaga Chert	Off Center, May Have Been Much Larger But		Jack's Reef			

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
						Reworked After Continued Use					
54354	700E 385N 1	2		Bolt	Metal						Concretion / Corroded
54355	700E 385N 1	4		Cut Nail	Metal						Concretion / Corroded
54356	700E 385N 1	1		Cut Spike	Metal						Complete
54357	700E 385N 1	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54358	700E 385N 1	2	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54359	700E 385N 1	2		Bottle Unidentified	Blue/Green Glass (Aqua)						Burned / Melted
54360	700E 385N 1	4		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54361	700E 385N 1	3		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54362	700E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Exfoliated
54363	700E 385N 1	1	Modern	Teacup	Porcelain Unspecified		Lithograph Unidentified	Lithograph	Orange	Body	Fragmentary
54707	700E 390N 1	30		Mammal Bone	Bone						Fragmentary
54708	700E 390N 1	2	Modern	Bottle Unidentified	Green Glass (Light)			Modern Section Machine Bottle		Body	Fragmentary
54709	700E 390N 1	8	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54710	700E 390N 1	1		Holloware Unspecified	Yelloware					Body	Fragmentary
54711	700E 390N 1	6		Coal	Coal						Spent /Exhausted
54712	700E 390N 1	5		Flower Pot	Coarse Earthenware Red					Body	Fragmentary
54713	700E 390N 1	2		Washer	Iron						Concretion / Corroded
54714	700E 390N 1	1		Plumbing Fixture	Iron	Wingnut Attached					Concretion / Corroded
54715	700E 390N 1	1		Lighting Fixture	Iron	5 Screw Holes					Concretion / Corroded
54716	700E 390N 1	1		Mug	Vwe - Vitrified White Earthenware		Moulded	Moulded		Handle	Fragmentary
54717	700E 390N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Flown Transfer	Flow Transfer	Blue	Body	Fragmentary
54718	700E 390N 1	1		Strap	Iron	Screw Hole					Concretion / Corroded
54719	700E 390N 1	2		Bolt	Iron	Nut And Bolt					Concretion / Corroded
54721	700E 390N 1	16		Cut Nail	Metal						Concretion / Corroded
54722	700E 390N 1	1		Utensil Handle Unspecified	Iron						Concretion / Corroded
54723	700E 390N 1	1	Modern	Composite Smoking Pipe Mouthpiece	Bakelite (Phenol -Formaldehyde Resin)				Black	Mouthpiece	Fragmentary
54724	700E 390N 1	1	Modern	Exterior Insulator (Power/Communiction)	Blue/Green Glass (Aqua)			20th Century			Fragmentary
54725	700E 390N 1	7		Pane Glass	Colourless Glass						Fragmentary
54726	700E 390N 1	40		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54727	700E 390N 1	2	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54728	700E 390N 1	1	Modern	Glassware Unidentified	Colourless Glass		Moulded	20th Century			Fragmentary
54729	700E 390N 1	1		Bottle Unidentified	Blue/Green Glass (Aqua)	"One Imperial"		Impressed		Body	Fragmentary
54730	700E 390N 1	1	Modern	Tableware Unspecified	Porcelain Unspecified		Lithograph Unidentified	Lithograph	Green	Body	Fragmentary
54731	700E 390N 1	1		Tableware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54732	700E 390N 1	1		Saucer	Porcelain Unspecified	Moulded	Scalloped Rim	Lustre		Rim	Fragmentary
54733	700E 390N 1	1		Unidentified Object	Porcelain Unspecified	Figurine?	Moulded		White		Fragmentary
54734	700E 390N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware	Maker's Mark "China" Maybe Ironstone China				Footring	Fragmentary
54735	700E 390N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Paneled Moulded			Rim	Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54736	700E 390N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Rim	Fragmentary
54737	700E 390N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Burned / Melted
54738	700E 390N 1	10		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54739	700E 390N 1	30		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54740	700E 390N 1	4		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54741	700E 390N 1	12		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54742	700E 390N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54743	700E 390N 1	1		Lid / Cover Unspecified	Vwe - Vitrified White Earthenware		Plain			Lid/Sealer/Closure	Fragmentary
53959	700E 390N 2	1		Beverage Bottle Unspecified	Green Glass (Dark)					Body	Fragmentary
53960	700E 390N 2	1		Bottle Unidentified	Colourless Glass					Body	Fragmentary
53961	700E 390N 2	1		Bottle Unidentified	Blue/Green Glass (Aqua)					Neck	Fragmentary
53962	700E 390N 2	6		Cut Nail	Metal						Complete
53963	700E 390N 2	2		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
53964	700E 390N 2	2		Mammal Bone	Bone			Cut			
53965	700E 390N 2	1		Crock	Coarse Stoneware	Dark Brown Glaze Inside, Cream Colored Glaze Exterior		Salt Glaze		Body	Fragmentary
53966	700E 390N 2	1		Metal Preform	Iron	Iron Number 8, Inch Long					Concretion / Corroded
53967	700E 390N 2	3		Buckle	Copper Alloy	Leather On The Underside, Embossed Stars On Surface					Concretion / Corroded
53968	700E 390N 2	1		Doll Arm / Hand	Porcelain Unspecified	Doll Arm	Moulded				Complete
54720	700E 390N 2	5	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54646	700E 395N 1	3		Brick	Red Brick						Fragmentary
54647	700E 395N 1	1		Screw	Metal						Concretion / Corroded
54648	700E 395N 1	1		Mammal Bone	Bone						Burned / Melted
54649	700E 395N 1	1		Coal	Coal						Spent /Exhausted
54650	700E 395N 1	3		Pane Glass	Colourless Glass						Fragmentary
54651	700E 395N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54653	700E 395N 1	8		Mammal Bone	Bone						Fragmentary
54654	700E 395N 1	3		Mammal Bone	Bone			Cut			Fragmentary
54655	700E 395N 1	2		Hinge	Iron						Concretion / Corroded
54656	700E 395N 1	1		Strap	Iron						Concretion / Corroded
54657	700E 395N 1	8	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54658	700E 395N 1	20		Cut Nail	Metal						Concretion / Corroded
54659	700E 395N 1	1		Wine Glass	Colourless Glass					Base	Fragmentary
54660	700E 395N 1	1	Modern	Electrical Item	Glass			20th Century			
54661	700E 395N 1	1		Button	Iron						Concretion / Corroded
54662	700E 395N 1	1		Button	Porcelain Unspecified	Iron Shank, Moulded			White		
54663	700E 395N 1	2		Saucer	Porcelain Unspecified		Scalloped Rim	Moulded		Rim	Fragmentary
54664	700E 395N 1	1	Modern	Saucer	Porcelain Unspecified		Lithograph Unidentified	Lithograph	Green	Body	Fragmentary
54665	700E 395N 1	1		Teacup	Porcelain Unspecified	Maker's Mark, "...Many For" "...B. Buck Man, Ogdensburg N.Y."		Lustre		Footring	Fragmentary
54666	700E 395N 1	2		Glassware Unidentified	Colourless Glass						Burned / Melted

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54667	700E 395N 1	2		Glassware Unidentified	Blue/Green Glass (Aqua)						Burned / Melted
54668	700E 395N 1	7		Bottle Unidentified	Green Glass (Light)					Body	Fragmentary
54669	700E 395N 1	14	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54670	700E 395N 1	1		Panel Bottle	Colourless Glass	"Har"		Impressed		Body	Fragmentary
54671	700E 395N 1	2	Modern	Beverage Bottle Unspecified	Colourless Glass			Crown		Finish / Rim	Fragmentary
54672	700E 395N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Purple	Body	Fragmentary
54673	700E 395N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Scalloped Rim	Moulded		Rim	Fragmentary
54674	700E 395N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54675	700E 395N 1	4		Tableware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres			Rim	Fragmentary
54676	700E 395N 1	5		Holloware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54677	700E 395N 1	5		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54678	700E 395N 1	6		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54679	700E 395N 1	3		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54680	700E 395N 1	2		Lid / Cover Unspecified	Vwe - Vitrified White Earthenware		Plain			Lid/Sealer/Closure	Fragmentary
54219	700E 400N 1	1		Mammal Tooth / Teeth	Dentine (Tooth)						
54220	700E 400N 1	1		Strap	Iron						Concretion / Corroded
54221	700E 400N 1	2		Pane Glass	Colourless Glass						Fragmentary
54222	700E 400N 1	1		Lamp Chimney	Colourless Glass						Fragmentary
54224	700E 400N 1	2		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54225	700E 400N 1	2		Clay Smoking Pipe Bowl	White Clay					Bowl	Burned / Melted
54226	700E 400N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Purple	Body	Fragmentary
54227	700E 400N 1	1		Teacup	Porcelain Unspecified		Moulded			Handle	Fragmentary
54228	700E 400N 1	2		Bottle Unidentified	Colourless Glass						Burned / Melted
54229	700E 400N 1	2		Holloware Unspecified	Porcelain Unspecified					Body	Fragmentary
54230	700E 400N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Rim	Fragmentary
54231	700E 400N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54232	700E 400N 1	4		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54628	700E 400N 2	11	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54629	700E 400N 2	15		Cut Nail	Metal						Concretion / Corroded
54630	700E 400N 2	1		Bottle Unidentified	Green Glass (Light)					Body	Burned / Melted
54631	700E 400N 2	5		Unidentified Object	Leather				Black		Fragmentary
54632	700E 400N 2	1		Eyelet / Grommet	Pewter (Various Alloys)	Shoe Part?					
54633	700E 400N 2	2		Mammal Bone	Bone						
54634	700E 400N 2	1		Tableware Unspecified	Porcelain Unspecified		Plain			Rim	Fragmentary
54635	700E 400N 2	1	Modern	Holloware Unspecified	Vwe - Vitrified White Earthenware		Lithograph Unidentified	Lithograph	Pink	Body	Fragmentary
54636	700E 400N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54637	700E 400N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54638	700E 400N 2	1		Bottle Unidentified	Red Glass					Body	Fragmentary
54639	700E 400N 2	1	Modern	Jar	Colourless Glass			Threaded Closure		Finish / Rim	Fragmentary
54640	700E 400N 2	3	Modern	Tile	Coarse Stoneware			21st Century	Grey		Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54641	700E 400N 2	6		Sample	Mortar						Fragmentary
54642	700E 400N 2	1		Rectangular Bar Iron	Iron	Crow Bar					Concretion / Corroded
54643	700E 400N 2	50		Pane Glass	Colourless Glass						Fragmentary
54644	700E 400N 2	19		Glassware Unidentified	Colourless Glass						Burned / Melted
54645	700E 400N 2	38		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54501	700E 400N 3	8		Brick	Red Brick						Fragmentary
54502	700E 400N 3	2		Sample	Mortar						Fragmentary
54503	700E 400N 3	5		Tile	Coarse Earthenware						Fragmentary
54504	700E 400N 3	1		Slag (Metal Working)	Slag						Burned / Melted
54505	700E 400N 3	1		Holloware Unspecified	Coarse Earthenware Red			Salt Glaze		Body	Fragmentary
54506	700E 400N 3	1		Tableware Unspecified	Coarse Stoneware			Rockingham		Body	Fragmentary
54507	700E 400N 3	1		Tableware Unspecified	Yelloware					Body	Fragmentary
54508	700E 400N 3	1	Modern	Washer	Rubber Derived Synthetic Unspecified			21st Century	Black		Fragmentary
54509	700E 400N 3	1		Holloware Unspecified	Coarse Stoneware			Bristol Style Glaze Dipped		Body	Fragmentary
54510	700E 400N 3	1		Glassware Unidentified	White Glass Opaque (Milk)					Body	Fragmentary
54511	700E 400N 3	1	Modern	Holloware Unspecified	Vwe - Vitrified White Earthenware	Floral Motif	Lithograph Unidentified	Lithograph	Green	Body	Fragmentary
54512	700E 400N 3	1		Eyelet / Grommet	Iron						Concretion / Corroded
54513	700E 400N 3	1		Textile Sample	Textile	Thin, Frayed Fabric			Grey		
54514	700E 400N 3	2		Textile Sample	Textile	Eyelet Attached, Thin Frayed Fabric			Black		
54515	700E 400N 3	2		Mammal Bone	Bone						Calcined
54516	700E 400N 3	10		Mammal Bone	Bone						Fragmentary
54517	700E 400N 3	4		Strap	Iron						Fragmentary
54518	700E 400N 3	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54519	700E 400N 3	7		Coal	Coal						Spent /Exhausted
54520	700E 400N 3	1		Hinge	Iron	Triangular Shape					
54521	700E 400N 3	1		Screw	Metal						Concretion / Corroded
54522	700E 400N 3	1		Bolt	Metal						Concretion / Corroded
54523	700E 400N 3	2	Modern	Spiral Wire / Drawn Nail	Steel						
54524	700E 400N 3	5	Modern	Bottle Unidentified	Colourless Glass		Moulded	Modern Section Machine Bottle		Body	Fragmentary
54525	700E 400N 3	1	Modern	Unidentified Object	Rubber Derived Synthetic Unspecified	Ridged		21st Century			Burned / Melted
54527	700E 400N 3	1		Sheeting	Tin						Concretion / Corroded
54528	700E 400N 3	1		Hinge	Iron	Semicircle With Screws Still Attached					Concretion / Corroded
54529	700E 400N 3	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54530	700E 400N 3	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54531	700E 400N 3	8		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54532	700E 400N 3	1	Modern	Tableware Unspecified	Vwe - Vitrified White Earthenware	Floral Motif	Lithograph Unidentified	Lithograph	Green	Body	Fragmentary
54533	700E 400N 3	75		Pane Glass	Colourless Glass					Body	Burned / Melted
54534	700E 400N 3	75		Pane Glass	Colourless Glass						Fragmentary
54535	700E 400N 3	35		Cut Nail	Metal						Concretion / Corroded
54536	700E 400N 3	26	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54539	700E 400N 3	3		Mammal Bone	Bone						Fragmentary
53979	700E 405N 1	2		Pane Glass	Colourless Glass						Fragmentary
53980	700E 405N 1	1		Rectangular Bar Iron	Iron	Crowbar, Tapered End					

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
53981	700E 405N 1	1		Mammal Bone	Bone			Cut			Fragmentary
53982	700E 405N 1	1		Glassware Unidentified	Blue/Green Glass (Aqua)						Burned / Melted
53983	700E 405N 1	1		Button	Porcelain Unspecified			Prosser			Complete
53984	700E 405N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Banded	Industrial Slip	Blue	Body	Fragmentary
53985	700E 405N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
53986	700E 405N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
53987	700E 405N 1	1		Saucer	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
53988	700E 405N 1	1		Lid / Cover Unspecified	Vwe - Vitrified White Earthenware	Dots	Moulded	Moulded		Lid/Sealer/Closure	Fragmentary
54435	700E 405N 2	4		Cut Nail	Metal						Concretion / Corroded
54436	700E 405N 2	4	Modern	Beverage Bottle Unspecified	Colourless Glass	Machine					Fragmentary
54437	700E 405N 2	2		Beer Bottle	Coarse Stoneware			Bristol Style Glaze Dipped		Body	Fragmentary
54008	700E 410N 1	5		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54009	700E 410N 1	3		Mammal Bone	Bone						Fragmentary
54010	700E 410N 1	1		Brick	Red Brick						Fragmentary
54011	700E 410N 1	2		Holloware Unspecified	Coarse Earthenware Red			Salt Glaze		Body	Fragmentary
54012	700E 410N 1	5		Cut Nail	Metal						Incomplete
54013	700E 410N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54014	700E 410N 1	3		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54015	700E 410N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54016	700E 410N 1	1		Holloware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54093	700E 410N 2	2		Asphalt	Asphalt						Fragmentary
54094	700E 410N 2	3		Cut Nail	Metal						Incomplete
54095	700E 410N 2	2		Sample	Mortar						Fragmentary
54096	700E 410N 2	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54097	700E 410N 2	27		Pane Glass	Colourless Glass						Fragmentary
54302	700E 410N 3	2		Cut Nail	Metal						Concretion / Corroded
54303	700E 410N 3	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54304	700E 410N 3	1	Modern	Tile	Coarse Stoneware			21st Century			
54305	700E 410N 3	80		Pane Glass	Colourless Glass						Fragmentary
54343	700E 415N 1	3		Brick	Red Brick						Fragmentary
54344	700E 415N 1	1		Mammal Bone	Bone						
54345	700E 415N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary
54346	700E 415N 1	1		Pane Glass	Colourless Glass						Fragmentary
54296	700E 420N 1	2		Brick	Red Brick						Fragmentary
54297	700E 420N 1	1		Pane Glass	Colourless Glass						Fragmentary
54298	700E 420N 1	1		Clay Smoking Pipe Stem	White Clay					Stem	Fragmentary
54299	700E 420N 1	1		Door Knob	Porcelain Unspecified	Round					
54300	700E 420N 1	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Burned / Melted
54301	700E 420N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Burned / Melted
54194	701E 404N 1	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54195	701E 404N 1	6		Cut Nail	Metal						Incomplete
54196	701E 404N 1	1		Sample	Mortar						Fragmentary
54197	701E 404N 1	7		Brick	Red Brick						Fragmentary
54198	701E 404N 1	1		Bottle Unidentified	Green Glass (Dark)					Body	Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54199	701E 404N 1	1	Modern	Unidentified Object	Plastic	Stippled, Might Be Leather?		20th Century	Blue		Burned / Melted
54200	701E 404N 1	1		Coal	Coal						Spent /Exhausted
54202	701E 404N 1	25		Pane Glass	Colourless Glass						Fragmentary
54831	701E 404N 3	5		Pane Glass	Colourless Glass						Fragmentary
54832	701E 404N 3	4		Brick	Red Brick						Fragmentary
54833	701E 404N 3	5	Modern	Wrapper	Plastic	Food Wrapper		21st Century			
54834	701E 404N 3	1		Plaster	Plaster				White		Fragmentary
54017	703E 382N 1	1	Modern		Styrofoam Polystyrene (Cups, Packing Mat. Toys)						Fragmentary
54018	703E 382N 1	1		Mammal Bone	Bone						Fragmentary
54019	703E 382N 1	2		Cut Nail	Metal						Incomplete
54020	703E 382N 1	1		Washer	Iron						Concretion / Corroded
54021	703E 382N 1	1		Lamp Chimney	Colourless Glass						Fragmentary
54022	703E 382N 1	1		Chain Link	Iron						Fragmentary
54023	703E 382N 1	1		Strap	Iron						Concretion / Corroded
54024	703E 382N 1	1		Clay Smoking Pipe Spur / Foot	White Clay					Foot	Fragmentary
54025	703E 382N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54026	703E 382N 1	1		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54027	703E 382N 1	2		Bottle Unidentified	Colourless Glass					Base	Fragmentary
54028	703E 382N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54029	703E 382N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54030	703E 382N 1	1		Milk Pan	Coarse Earthenware Red		Plain	Salt Glaze		Rim	Fragmentary
54031	703E 382N 1	1		Holloware Unspecified	Coarse Earthenware Red		Plain	Lead Glaze		Body	Fragmentary
53956	705E 380N 1	1		Beverage Bottle Unspecified	Green Glass (Dark Olive)					Body	Fragmentary
53957	705E 380N 1	1		Bottle Unidentified	Colourless Glass					Body	Fragmentary
53958	705E 380N 1	1		Bottle Unidentified	Colourless Glass	Impressed Lettering " Geo B" Perhaps From George A. Berry & Co. Glass Bottles, 1850s Onward		Impressed		Body	Fragmentary
54818	705E 385N 1	1		Holloware Unspecified	Yelloware		Plain			Body	Fragmentary
54819	705E 385N 1	1		Sample	Mortar				Grey		
54820	705E 385N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Unspecified Transfer	Other Transfer (1st Group/ Black, Dk Brown, Red)	Black	Body	Fragmentary
54821	705E 385N 1	1		Glassware Unidentified	Colourless Glass						Burned / Melted
54822	705E 385N 1	1	Modern	Bottle Unidentified	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54823	705E 385N 1	1	Modern	Glassware Unidentified	Solarized Glass Manganese Tint		Moulded	Moulded		Rim	Fragmentary
54824	705E 385N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54825	705E 385N 1	1		Clinker (Spent Fuel)	Clinker				Black		Spent /Exhausted
54826	705E 385N 1	1		Toy Figure Unspecified	Porcelain Unspecified	Porcelain Doll Leg, Wit A Painted Black Boot, Roman Numeral 7 On The Side	Painted Unspecified	Painted	Black	Leg	Fragmentary
54827	705E 385N 1	6		Cut Nail	Metal						Concretion / Corroded
54828	705E 385N 1	1		Bolt	Metal						Concretion / Corroded
54829	705E 385N 1	1		Strap	Iron	One Hole At Either End					
54830	705E 385N 1	4	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54125	705E 390N 1	2		Brick	Red Brick						Fragmentary
54126	705E 390N 1	1		Flower Pot	Coarse Earthenware Red					Body	Fragmentary

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54127	705E 390N 1	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54128	705E 390N 1	2	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54129	705E 390N 1	3		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54130	705E 390N 1	9		Mammal Bone	Bone						Fragmentary
54131	705E 390N 1	1		Coal	Coal						Spent /Exhausted
54132	705E 390N 1	5		Holloware Unspecified	Porcelain Unspecified		Moulded			Base	Fragmentary
54133	705E 390N 1	1	Modern	Tableware Unspecified	Porcelain Unspecified		Lithograph Unidentified	Lithograph	Green	Body	Fragmentary
54134	705E 390N 1	1		Holloware Unspecified	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54135	705E 390N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Unspecified Transfer	Blue Transfer	Blue	Body	Fragmentary
54136	705E 390N 1	1		Button	Iron	Shank Is Flattened Against Button					Concretion / Corroded
54137	705E 390N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54138	705E 390N 1	6		Strap	Iron						Concretion / Corroded
54139	705E 390N 1	6		Cut Nail	Metal						Concretion / Corroded
54140	705E 390N 1	1		Table Fork	Iron	Wood Handle, Some Tines Are Broken					Concretion / Corroded
54141	705E 390N 1	1		Unidentified Object	Iron	Rounded Corners, Several Holes In The Middle					Concretion / Corroded
53969	705E 395N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
53970	705E 395N 1	2		Mammal Bone	Bone						Fragmentary
53971	705E 395N 1	1		Can Unspecified	Iron					Rim	Concretion / Corroded
53972	705E 395N 1	2		Cut Nail	Metal						Incomplete
53973	705E 395N 1	1		Screw	Steel						Fragmentary
53974	705E 395N 1	2		Pane Glass	Colourless Glass						Fragmentary
53975	705E 395N 1	1		Glassware Unidentified	Colourless Glass		Scalloped Rim			Rim	Fragmentary
53976	705E 395N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
53977	705E 395N 1	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Rim	Fragmentary
53978	705E 395N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Ironstone China Maker's Mark	Plain			Base	Fragmentary
54552	705E 395N 2	1		Mammal Bone	Bone						Calcined
54553	705E 395N 2	1		Fish Bone	Bone	Vertebra					
54554	705E 395N 2	5		Lamp Chimney	Colourless Glass						Fragmentary
54555	705E 395N 2	1	Modern	Plastic	Plastic	Hair Clip?		21st Century	Red		Fragmentary
54556	705E 395N 2	2		Mammal Bone	Bone			Cut			Fragmentary
54557	705E 395N 2	1		Bird Bone	Bone						
54558	705E 395N 2	1	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle			Fragmentary
54559	705E 395N 2	17		Pane Glass	Colourless Glass						Fragmentary
54560	705E 395N 2	4	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle			Fragmentary
54561	705E 395N 2	1	Modern	Bottle Unidentified	Colourless Glass			Machine Made Stippled Base			Fragmentary
54562	705E 395N 2	3	Modern	Plastic	Plastic	Thin, Fragile			Brown		Fragmentary
54563	705E 395N 2	10		Mammal Bone	Bone						Fragmentary
54564	705E 395N 2	20		Cut Nail	Metal						Fragmentary
54565	705E 395N 2	22	Modern	Wire / Drawn Nail	Metal						Fragmentary
54566	705E 395N 2	1	Modern	Sheeting	Tin			20th Century			Fragmentary
54567	705E 395N 2	1	Modern	Unidentified Object	Paper	Patterned To Look Like Birch Bark?		20th Century			

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54568	705E 395N 2	3		Strap	Iron						Concretion / Corroded
54569	705E 395N 2	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54570	705E 395N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware	Floral Motif	Unspecified Transfer	Other Transfer (2nd Series/Lt. Green Blue Brown Purple	Green	Body	Fragmentary
54744	705E 395N 3	6		Panel Bottle	Blue/Green Glass (Aqua)					Body	Fragmentary
54745	705E 395N 3	4		Scrap	Metal						Concretion / Corroded
54746	705E 395N 3	15		Lamp Chimney	Colourless Glass						Fragmentary
54747	705E 395N 3	7		Wire	Metal						Concretion / Corroded
54748	705E 395N 3	5	Modern	Bottle Unidentified	Solarized Glass Manganese Tint					Body	Fragmentary
54749	705E 395N 3	5		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54750	705E 395N 3	1		Staple	Iron						Concretion / Corroded
54751	705E 395N 3	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54752	705E 395N 3	1		Holloware Unspecified	Porcelain Unspecified		Plain			Body	Fragmentary
54753	705E 395N 3	4		Flower Pot	Coarse Earthenware Red					Body	Fragmentary
54754	705E 395N 3	1		Button	Porcelain Unspecified			Prosser	White		Complete
54755	705E 395N 3	1		Clay Smoking Pipe Bowl	White Clay		Plain			Bowl	Burned / Melted
54756	705E 395N 3	1		Spring	Iron						
54757	705E 395N 3	2	Modern	Washer	Rubber Derived Synthetic Unspecified			20th Century	Brown		Fragmentary
54758	705E 395N 3	1		Roofing Nail	Metal						Concretion / Corroded
54759	705E 395N 3	1		Tack	Iron						Concretion / Corroded
54760	705E 395N 3	1	Modern	Textile Sample	Textile			20th Century	White		
54761	705E 395N 3	80		Pane Glass	Colourless Glass						Fragmentary
54762	705E 395N 3	63		Cut Nail	Metal						Fragmentary
54763	705E 395N 3	82	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54764	705E 395N 3	8		Mammal Bone	Bone						Calcined
54765	705E 395N 3	20		Bird Bone	Bone						Fragmentary
54766	705E 395N 3	60		Mammal Bone	Bone						Fragmentary
54767	705E 395N 3	3		Mammal Bone	Bone			Cut			Fragmentary
54768	705E 395N 3	1	Modern	Panel Bottle	Solarized Glass Manganese Tint						Complete
53934	705E 395N 4	2		Cut Nail	Metal						Incomplete
53935	705E 395N 4	4	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
53936	705E 395N 4	2		Screw	Metal						Concretion / Corroded
53937	705E 395N 4	1		Safety Pin	Steel	Distal Circular End Of A Safety Pin					Fragmentary
53938	705E 395N 4	3		Strap	Metal	Very Thin And Delicate					Fragmentary
53939	705E 395N 4	1		Button	Pewter (Various Alloys)	Heavy, Maybe Utilitarian, Two Semicircle Holes					Fragmentary
53940	705E 395N 4	7		Lamp Chimney	Colourless Glass						Fragmentary
53941	705E 395N 4	2		Dinner Plate 9-11"	Porcelain Unspecified		Plain	Lustre		Body	Fragmentary
53942	705E 395N 4	3		Pharmaceutical / Toiletry Bottle	Blue/Green Glass (Aqua)	Small Rectangular Bottle				Body	Fragmentary
53943	705E 395N 4	18		Pane Glass	Colourless Glass						Fragmentary
53944	705E 395N 4	38		Bottle Unidentified	Colourless Glass					Body	Fragmentary
53945	705E 395N 4	1	Modern	Beverage Bottle Unspecified	Colourless Glass			Machine Made Stippled Base		Base	Fragmentary
53946	705E 395N 4	1		Glassware Unidentified	Colourless Glass		Moulded	Moulded		Body	Fragmentary
54571	705E 395N 5	3		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54572	705E 395N 5	2		Cut Nail	Metal						Concretion / Corroded
54573	705E 395N 5	8	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54574	705E 395N 5	1	Modern	Foil	Tin			21st Century			Fragmentary
54575	705E 395N 5	4	Modern	Panel Bottle	Blue/Green Glass (Aqua)			Owen's Machine		Body	Fragmentary
54576	705E 395N 5	4		Bottle Unidentified	Green Glass (Light)			Cup Bottom Mould		Body	Fragmentary
54577	705E 395N 5	20		Panel Bottle	Colourless Glass	Impressed Lettering "Imper" Imperial?		Hand Tooled Bottle Finish		Finish / Rim	Fragmentary
54323	705E 400N 1	5		Mammal Bone	Bone						Fragmentary
54324	705E 400N 1	7		Brick	Red Brick						Fragmentary
54325	705E 400N 1	14		Pane Glass	Colourless Glass						Fragmentary
54326	705E 400N 1	1		Coal	Coal						Spent /Exhausted
54327	705E 400N 1	2	Modern	Cup (Disposable)	Plastic			20th Century	Tan	Rim	Fragmentary
54328	705E 400N 1	1	Modern	Wire / Drawn Nail	Metal						Incomplete
54329	705E 400N 1	1		Cut Nail	Metal						Incomplete
54330	705E 400N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Wheat / Ceres			Rim	Fragmentary
54331	705E 400N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Floral Motif	Moulded Unspecified	Moulded		Rim	Fragmentary
54332	705E 400N 1	1		Teacup	Vwe - Vitrified White Earthenware		Moulded	Moulded		Handle	Fragmentary
54333	705E 400N 1	3		Dinner Plate 9-11"	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54334	705E 400N 1	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54769	705E 400N 1	1		Flake	Onondaga Chert			Thinning Flake			Fragmentary
54807	705E 405N 1	3		Cut Nail	Metal						Concretion / Corroded
54808	705E 405N 1	1	Modern	Spiral Wire / Drawn Nail	Steel						Complete
54809	705E 405N 1	1		Brick	Red Brick						Fragmentary
54810	705E 405N 1	6		Pane Glass	Colourless Glass						Fragmentary
54203	705E 410N 1	1		Cut Nail	Metal						Incomplete
54204	705E 410N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54205	705E 410N 1	5		Mammal Bone	Bone						Fragmentary
54206	705E 410N 1	1		Brick	Red Brick						Fragmentary
54207	705E 410N 1	1		Pane Glass	Colourless Glass						Fragmentary
54208	705E 410N 1	1		Sample	Mortar						Fragmentary
54209	705E 410N 1	1		Coal	Coal						Spent /Exhausted
54210	705E 410N 1	1		Glassware Unidentified	White Glass Opaque (Milk)						Burned / Melted
54451	708E 393N 1	3	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54452	708E 393N 1	4		Lamp Chimney	Colourless Glass						Fragmentary
54453	708E 393N 1	1		Glassware Unidentified	Colourless Glass	Dots	Moulded	Moulded		Rim	
54454	708E 393N 1	4		Eyelet / Grommet	Leather						Fragmentary
54455	708E 393N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54456	708E 393N 1	1		Tableware Unspecified	Rwe - Refined White Earthenware		Plain			Footring	Fragmentary
54457	708E 393N 1	1		Holloware Unspecified	Rwe - Refined White Earthenware		Plain			Body	Fragmentary
54458	708E 393N 1	15	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54459	708E 393N 1	1		Mammal Bone	Bone	Tibia		Cut			Fragmentary
54460	708E 393N 1	11		Pane Glass	Colourless Glass						Fragmentary
54917	708E 393N 2	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54918	708E 393N 2	3		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54919	708E 393N 2	8		Cut Nail	Metal						Concretion / Corroded
54920	708E 393N 2	4		Eyelet / Grommet	Leather						
54921	708E 393N 2	7		Lamp Chimney	Colourless Glass						Fragmentary
54922	708E 393N 2	1	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle			Fragmentary
54923	708E 393N 2	5		Glassware Unidentified	Colourless Glass						Burned / Melted
54924	708E 393N 2	6	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle		Body	Fragmentary
54925	708E 393N 2	3		Glassware Unidentified	Colourless Glass		Moulded			Rim	Fragmentary
54926	708E 393N 2	45		Pane Glass	Colourless Glass						Fragmentary
54927	708E 393N 2	16	Modern	Bottle Unidentified	Blue/Green Glass (Aqua)			Modern Section Machine Bottle		Body	Fragmentary
54928	708E 393N 2	1		Unidentified Object	Pewter (Various Alloys)	Circular, Ridged					
54929	708E 393N 2	1		Sample	Mortar						Fragmentary
54930	708E 393N 2	2		Thinning Flake	Onondaga Chert						
54931	708E 393N 2	6		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54932	708E 393N 2	1		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Rim	Fragmentary
54933	708E 393N 2	1		Mug	Vwe - Vitrified White Earthenware		Wheat / Ceres	Moulded		Rim	Fragmentary
54934	708E 393N 2	200		Milk Pan	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54935	708E 393N 2	2		Brick	Red Brick						Fragmentary
54936	708E 393N 2	2		Flower Pot	Coarse Earthenware Red					Rim	Fragmentary
54004	709E 389N 1	1		Bottle Unidentified	Colourless Glass					Body	Fragmentary
54005	709E 389N 1	1		Bird Bone	Bone						
54006	709E 389N 1	1	Modern	Wire / Drawn Nail	Metal						Incomplete
54007	709E 389N 1	1		Bolt	Metal	Nut, Bolt, And Washer					Concretion / Corroded
54876	709E 389N 2	13	Modern	Bottle Unidentified	Colourless Glass			Modern Section Machine Bottle			Fragmentary
54877	709E 389N 2	2		Glassware Unidentified	Green Glass (Dark)						Burned / Melted
54878	709E 389N 2	1		Bolt	Iron	Nut And Bolt					Concretion / Corroded
54879	709E 389N 2	10		Mammal Bone	Bone						Fragmentary
54880	709E 389N 2	1		Wing Nut	Iron	Wing Bolt, Looks Like Batman Symbol					Concretion / Corroded
54881	709E 389N 2	3		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54882	709E 389N 2	2		Strap	Iron						Concretion / Corroded
54883	709E 389N 2	2		Tableware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54884	709E 389N 2	1		Tableware Unspecified	Vwe - Vitrified White Earthenware		Scalloped Rim			Rim	Fragmentary
54885	709E 389N 2	1	Modern	Holloware Unspecified	Vwe - Vitrified White Earthenware		Lithograph Unidentified	Lithograph	Pink	Body	Fragmentary
54886	709E 389N 2	30	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54887	709E 389N 2	11		Cut Nail	Metal						Concretion / Corroded
54402	710E 400N 1	2		Railroad Spike	Iron						Concretion / Corroded
54403	710E 400N 1	2		Holloware Unspecified	Coarse Earthenware Red			Tin Glaze		Body	Fragmentary
54404	710E 400N 1	5	Modern	Bottle Unidentified	Green Glass (Dark)			Modern Section Machine Bottle		Body	Fragmentary
54405	710E 400N 1	1		Milk Pan	Coarse Earthenware Red			Tin Glaze		Rim	Fragmentary
54406	710E 400N 1	1		Mammal Bone	Bone						Calcined
54407	710E 400N 1	1		Screw	Metal						Concretion / Corroded
54408	710E 400N 1	2	Modern	Beer Bottle	Amber/Brown Glass			Modern Section Machine Bottle		Body	Fragmentary
54409	710E 400N 1	3		Glassware Unidentified	Colourless Glass						Burned / Melted
54410	710E 400N 1	1		Button	Bone			2 Hole			

REC #	PROVENIENCE	QUANT	ERA	OBJECT	MATERIAL	COMMENT	DECORATIVE PATTERN	PRIMARY DIAGNOSTIC	COLOUR	PORTION	CONDITION
54411	710E 400N 1	12		Mammal Bone	Bone						Fragmentary
54412	710E 400N 1	3	Modern	Spiral Wire / Drawn Nail	Steel						Concretion / Corroded
54413	710E 400N 1	1		Bottle Unidentified	Colourless Glass	Impressed Lettering		Impressed		Body	Fragmentary
54414	710E 400N 1	2		Cuff Link / Sleeve Button	Copper						Concretion / Corroded
54415	710E 400N 1	6		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54416	710E 400N 1	2		Strap	Leather						
54417	710E 400N 1	10		Bottle Unidentified	Blue/Green Glass (Aqua)					Body	Fragmentary
54418	710E 400N 1	1		Mammal Bone	Bone			Cut			Fragmentary
54419	710E 400N 1	22		Pane Glass	Colourless Glass						Fragmentary
54420	710E 400N 1	12	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54421	710E 400N 1	25		Cut Nail	Metal						Concretion / Corroded
54422	710E 400N 1	1		Cut Spike	Metal						Complete
54423	710E 400N 1	1		Horseshoe	Iron						Fragmentary
54424	710E 400N 1	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware	Floral Motif	Moulded	Moulded		Rim	Fragmentary
54425	710E 400N 1	3		Holloware Unspecified	Vwe - Vitrified White Earthenware		Plain			Body	Fragmentary
54426	710E 400N 1	2		Holloware Unspecified	Vwe - Vitrified White Earthenware		Moulded	Moulded		Body	Fragmentary
54427	710E 400N 1	2		Mug	Vwe - Vitrified White Earthenware		Moulded	Moulded		Rim	Fragmentary
53932	715E 400N 1	1		Slag (Metal Working)	Slag						Burned / Melted
53933	715E 400N 1	1	Modern	Wire / Drawn Nail	Metal						Concretion / Corroded
54289	715E 400N 2	20		Mammal Bone	Bone						Fragmentary
54290	715E 400N 2	9		Unidentifiable (Corroded Lump Etc.)	Metal						Concretion / Corroded
54291	715E 400N 2	1		Cut Nail	Metal						Incomplete
54292	715E 400N 2	1		Bottle Unidentified	Colourless Glass						Fragmentary
54293	715E 400N 2	1		Dinner Plate 9-11"	Vwe - Vitrified White Earthenware		Plain			Footring	Fragmentary
54294	715E 400N 2	1		Clay Smoking Pipe Bowl	White Clay		Ridges & Facets			Bowl	Fragmentary
54295	715E 400N 2	1		Picture Nail	Copper Alloy	Decorated Head, Filigree, Copper Head, From A Piece Of Furniture		Embossed			Concretion / Corroded

SCHEDULE "F"

SITE SURVEY
PREPARED BY MELDRUM-JASON SURVEYORS
OCTOBER, 2022

SKETCH SHOWING SETBACKS
GEOGRAPHIC TOWNSHIP OF EDWARDSBURGH
TOWNSHIP OF EDWARDSBURGH/CARDINAL
COUNTY OF GRENVILLE
RON M. JASON O.L.S.
SCALE: 1:750

0 5 15 25 40 50 METRES

METRIC
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NOTES

DISTANCES ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING THE DISTANCES BY A COMBINED SCALE FACTOR OF 0.9996073.

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

COORDINATE VALUES ARE TO A RURAL ACCURACY IN ACCORDANCE WITH SECTION 14 (2) OF O. REG. 216/10.

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, SHOWN HEREON, BY REAL TIME NETWORK (RTN) OBSERVATIONS AND ARE REFERRED TO THE CENTRAL MERIDIAN OF UTM ZONE 18, (75°W) NAD83 (CSRS) (2010).

BEARING COMPARISONS SHOWN ARE WITH UNDERLYING PLANS.

COORDINATES WERE DERIVED FROM REAL-TIME NETWORK OBSERVATIONS USING THE CAN-NET NETWORK UTM, ZONE 18, NAD83 (CSRS) (2010)		
STATION	NORTHING	EASTING
A	4956546.607	464908.550
B	4956474.174	464953.236

LEGEND

□	DENOTES PLANTED MONUMENT
■	DENOTES FOUND MONUMENT
SIB	DENOTES STANDARD IRON BAR
SSIB	DENOTES SHORT STANDARD IRON BAR
IB	DENOTES IRON BAR
CM	DENOTES CONCRETE MONUMENT
CC	DENOTES CUT CROSS
IP	DENOTES IRON PIPE
ø	DENOTES ROUND
WIT	DENOTES WITNESS
ACC	DENOTES ACCEPTED
MEAS	DENOTES MEASURED
INST	DENOTES INSTRUMENT
x-x	DENOTES FENCE
P1	DENOTES DEPOSITED PLAN No. 130 (M.T.O. P-1668-16)
P2	DENOTES PLAN 15R-12121
P3	DENOTES PLAN 15R-6547

MELDRUM-JASON
SURVEYORS
A division of Ivan B. Wallace O.L.S.
IBWSURVEYORS.COM | 1.800.667.0696

PARTY CHIEF: BP | DRAWN BY: BM | CHECKED BY: RJ | PLOT DATE: •
FILE NAME: A-033808-1 | copies available at LandSurveyRecords.com

Properties

PIN 68154 - 0346 LT ☑ Affects Part of Prop

Description PT LT 20 CON 1 EDWARDSBURGH AS IN PR65490 LYING S OF PR152106, EXCEPT PART 2, 15R12245; EDWARDSBURGH/CARDINAL

Address 2017 COUNTY RD 2
CARDINAL

Consideration

Consideration $0.00

Applicant(s)

The notice is based on or affects a valid and existing estate, right, interest or equity in land

Name MADISON MULDER ENTERPRISES INC.

Address for Service 2927 Goodin Road, Spencerville,
Ontario K0E 1X0

A person or persons with authority to bind the corporation has/have consented to the registration of this document.

This document is not authorized under Power of Attorney by this party.

Party To(s) *Capacity* *Share*

Name THE CORPORATION OF THE TOWNSHIP OF EDWARDBURGH CARDINAL

Address for Service 18 Centre St, Spencerville, ON K0E 1X0

A person or persons with authority to bind the corporation has/have consented to the registration of this document.

This document is not authorized under Power of Attorney by this party.

Statements

This notice is pursuant to Section 71 of the Land Titles Act.

This notice is for an indeterminate period

Schedule: See Schedules

Signed By

Natalie Heykoop 222 Prescott Street
Kemptville
K0G 1J0
acting for Applicant(s) Signed 2023 01 16

Tel 613-258-0038

Fax 613-258-0039

I have the authority to sign and register the document on behalf of the Applicant(s).

Submitted By

THE LAW OFFICE OF CONNIE LAMBLE 222 Prescott Street
Kemptville
K0G 1J0
2023 01 16

Tel 613-258-0038

Fax 613-258-0039

Fees/Taxes/Payment

Statutory Registration Fee $69.00

Total Paid $69.00

File Number

Applicant Client File Number : 220693