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June 10th, 2024

Carveth Care Centre
Long Term Care Redevelopment
375 James Street
Gananoque, Ontario

OCA Project Number: 2207

Planning Rationale

Site Location and Current Use

Carveth Care Centre (**CCC**) located at 375 James Street in Gananoque, Ontario is currently a longstanding and operating 104 Bed Long-Term Care Facility and 36 Unit Retirement Home with a small independently operated Care Clinic. The facility is the only long-term care building in the community, with the nearest other long-term care facility being in the Kingston and Amherst area. The facility is bordered by three major streets, namely James Street, North Street and Herbert Street.

Ownership, Operations and Employment

The home is a family operated business of Gibson Family Health Care, which also operates the Helen Henderson Care Centre, a second Long-Term Care building in Amherstview, Ontario. **CCC** is currently one of the larger employers in the area.

Reason and Rationale for Addition and Expansion to the Current Facility

The Long-Term Care bed licences for the **CCC** facility are set to expire at the end of 2025, however the licences have recently been extended by 5 years.

As part of the Ministry of Long-Term Care redevelopment program, and prior to renewal of the licences, **CCC** is required to upgrade their current building to standards of the

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latest Ministry of Long-Term Care Design Manual (**MLTC**), Public Health Ontario's Infection Prevention and Control (**IPAC**), and Ontario legislation "***Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1"*** which came into effect in 2021. In addition, older portions of the building will be required to be updated to the current Ontario Building Code, Ontario Fire Codes and energy efficiency standards. In order to meet these requirements and also to continue operation of the facility during the renovations, a large addition is required. Please refer to the Project Overview for a more comprehensive description of some of the larger spatial requirements.

Additional Beds and Units

As noted above, no additional bed licences are part of the redevelopment, the construction is only proceeding to maintain the existing bed licences in the facility, and only one new Retirement Unit is proposed.

Town of Gananoque Official Plan

Per the Town of Gananoque's official plan, CCC falls under the category of "Residential Schedule B." The current use of Retirement Building in our opinion would fall under residential definitions of the plan, however, as an institutional occupancy the current Long-Term Care Building would fall outside of this definition and would be an existing non-conforming use. The small clinic that is independently operated on the site would also fall under this category.
Both of these uses are compatible and beneficial to the community as they offer employment as well as provide care for the elders of the community.

The increase of area to the facility is required to meet the new requirements and no additional Long-Term Care beds are to be included. In terms of additional density, only one additional retirement unit is to be added to the facility. As such, no increase in the current facilities' traffic or noise levels is anticipated in the final completion of the project.

Additional Receiving Entrance/Exit Off of North Street

The facility is currently loading through the garbage area and exit stair nearest the kitchen. As part of the facility improvements, a new receiving area is proposed on the

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southwest side of the existing building. To service the new loading area, a new curb cut and site entrance of off North Street is proposed. In review with the owner, the receiving area is used during standard business hours and occurs only a few times over the week for deliveries of food and medical supplies. The current garbage pick-up area will remain and no change to the current garbage pick-up schedule is anticipated. Please refer to the separate traffic study report attached for greater details.

Development By-Law Overview

Based on the dimensions and the definition of lot lines in the Development Permit By-law and as reviewed with the planning department of Gananoque, the lot lines for the project are defined as follows:

- **Front Lot Line** is along **Herbert Street** as it is the shortest yard and would be deemed to be the **front yard**
- **Interior Lot** is the side yard abutting the existing 2 storey residential dwelling at 381 James Street with a setback at 1.2 m or 3.9 ft
- **Exterior Side Yard** is the yard abutting North Street with a setback requirement of 4.5 m or 14.7 ft
- **Rear Lot Line** is the yard abutting James Street with a setback requirement of 7.5 m or 24.5 ft.

Adjacent Uses

CCC is bordered by the following uses:

- West: Single Family Dwelling units (other side of James Street)
- South: Single Family Dwelling units (other side of North Street)
- North: Shared property line with one single family home and the municipal fire station.
- East: Trade and Industry Policy Area (across Herbert Street).

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Requests for Relief from the Current By-law

In review with the planning department and the current development by-law, the project is seeking following reliefs:

1. Parking on Herbert Street – Existing parking is in place

Requirement:

- Parking is not permitted in the **front yard** (**Herbert Street**) – relief is required.

Request for relief and reason:

- The current parking is existing and has been in place since the large 2005 LTC addition. Some minor alterations are required as follows:
  a) A small addition consisting of a maintenance garage, small environmental office, and electrical room for the new generator.
  b) A new generator
  c) Revisions to the LTC and clinic entrance on the east property side, as the MLTC will no longer allow shared entrances for LTC building for IPAC conformance.
  d) A new canopy and connecting breezeway to the existing retirement building.
  e) Adjustments for more current barrier-free/universal parking spots to latest standards.

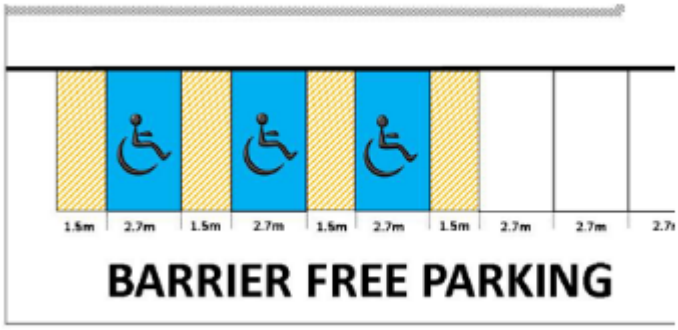
2. Parking Spot Requirements

Requirement:

- Parking requirement for a nursing home, home for the aged or long-term care facility is 1 space per 6 for every six patients plus 1 space for every four employees.
- The calculation for accessible parking is 1/20 with the following layout:

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No relief requested.

- The proposed addition requires removal of the northeast parking lot for construction of the new addition as well as some reduction to meet the current accessible parking requirements. The current existing parking count is 102 spaces and will be reduced by 14 parking spaces to 88. In review of the by-law, the reduced parking count will still meet the development requirements. Please refer to the traffic consultant report for greater details on site compliance.

3. Lot Coverage Relief – The current building as non-conforming at 36.6% and is requested at 44%.

- Lot coverage is 35% as per the residential designation – relief is required as the lot coverage identified is requested at 44%. Please note that 43.6% is required, however 44% is requested to allow for further minor design development without requests for greater relief.

Request for relief and reason:

- Per the project brief and rationale, a large addition is required to provide a new wing for residents occupying the building while the other portions of the building are renovated in sequence. In addition, additional space is required to meet the current MLTC guidelines, IPAC requirements, and the legislation Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1 which came into effect in 2021.

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4. **Rear Yard set-back relief from James Street – required relief of rear yard requirement of 7.5 m to 6.64 m.**

- The rear yard of James Street would require relief as the drawing indicates that the new single storey addition will be setback 6.64m and is required to be increased by 0.86 m to 7.5m.

Request for relief and reason:

- In consideration of all requirements, the best placement for the addition is on the northwest corner of the site. As all residents' rooms, lounge areas and activity spaces are governed by the MLTC, the additional 0.86 meters is required to comply with the resident room sizes. Note that Carveth Care Centre has opted for larger lounge and activity spaces than required to better serve the residents.

Review with Adjacent Neighborhood

CCC currently has excellent relationships with the residents and fire departments boarding the property. The properties to the north have expressed positive reactions to the development as part of the development is to correct some long ongoing drainage issues on both properties along that shared property line. Per review with the Town of Gananoque, CCC has been advised to contact all adjacent neighbours to review the project to address common concerns with all construction projects such as traffic and parking.

Please contact OCA Architects Inc if you have any further questions, concerns, or clarifications.

Sincerely,

Michael Scott Schumacher
Partner, Senior Architect

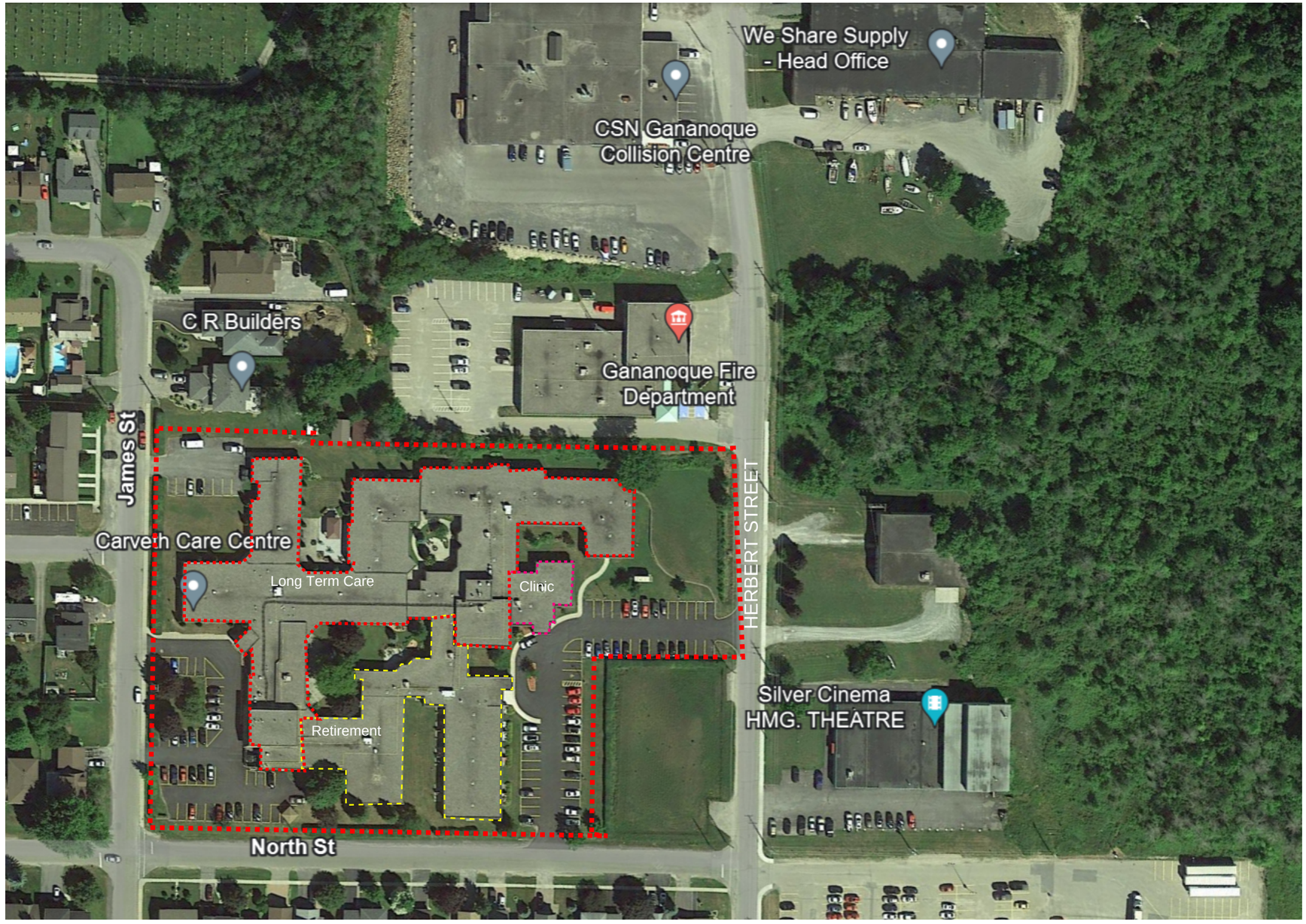
OCA Architects Inc.

SK1 CARVETH CARE CENTRE - 375 Jame Street, Gananoque
AERIAL PHOTO OF SURROUNDING AREA AND USES - High level.
NOTE THAT IMAGE IS TAKEN FROM GOOGLE EARTH - May 6th, 2024



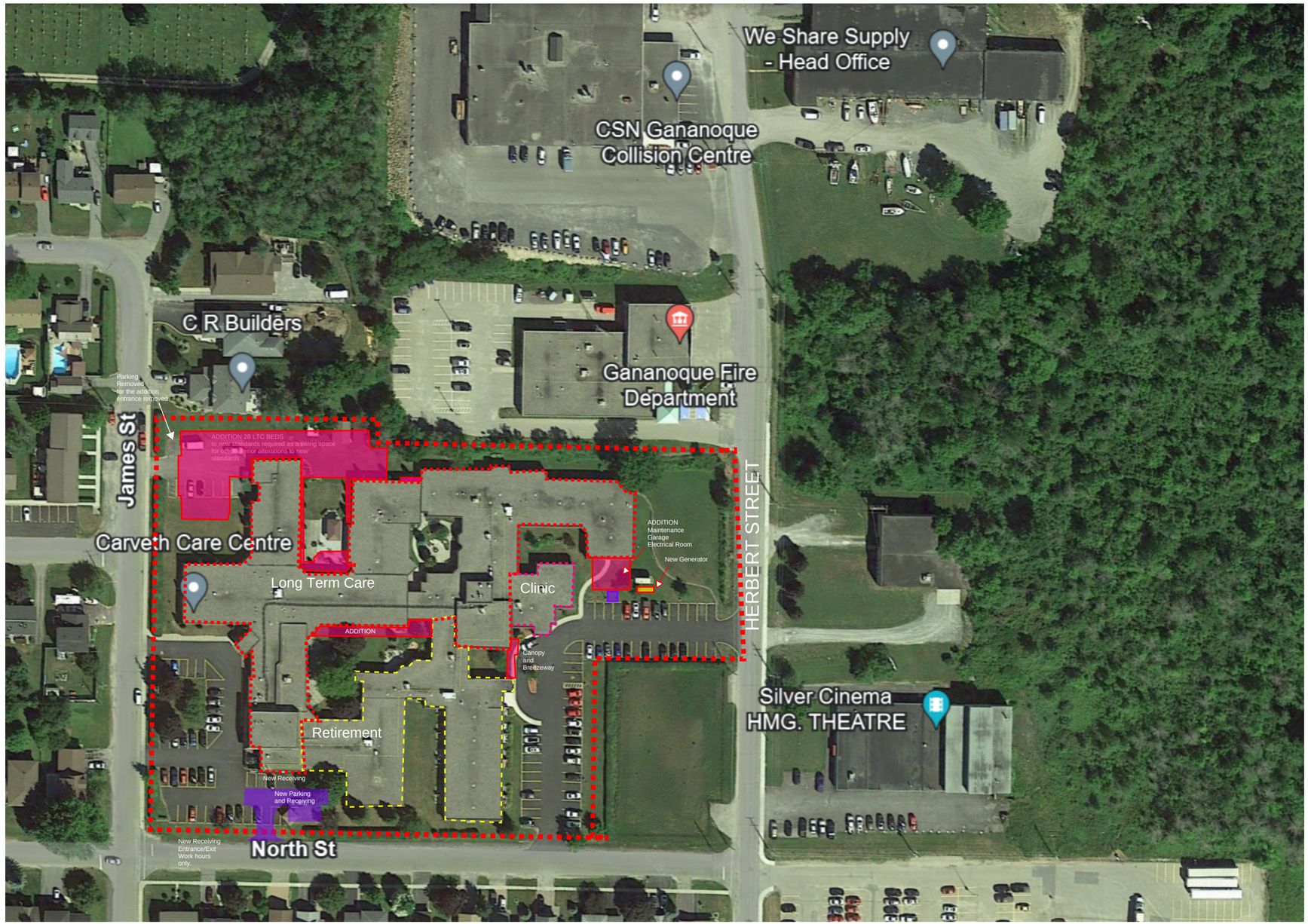
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SK2 CARVETH CARE CENTRE - 375 Jame Street, Gananoque
AERIAL PHOTO OF SURROUNDING AREA AND USES - Closer scale - showing the existing building
NOTE THAT IMAGE IS TAKEN FROM GOOGLE EARTH - May 6th, 2024



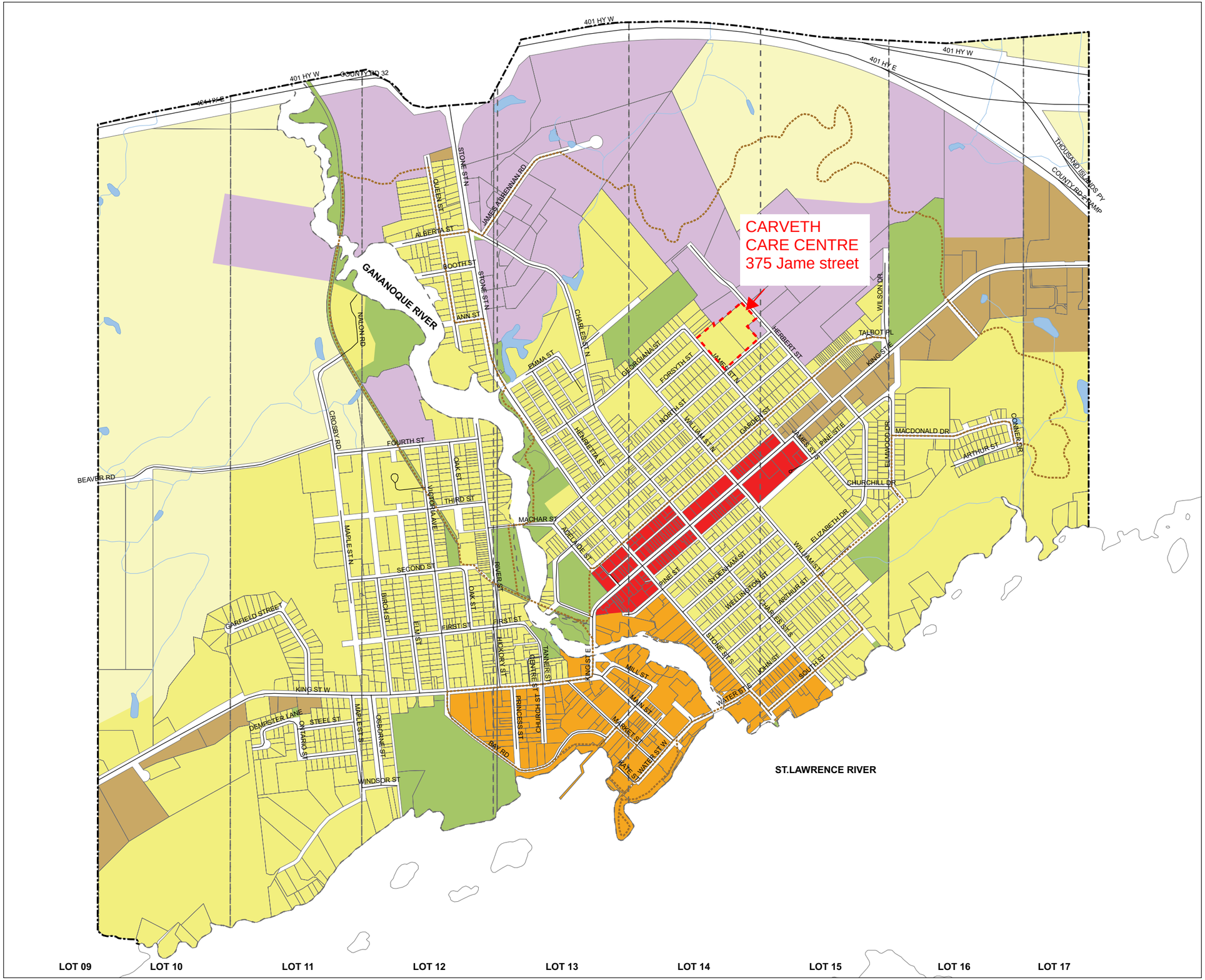
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SK3 CARVETH CARE CENTRE - 375 Jame Street, Gananoque
AERIAL PHOTO OF SURROUNDING AREA AND USES - Closer scale - Showing NEW Additions NOTE THAT IMAGE IS TAKEN FROM GOOGLE EARTH - May 6th, 2024



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DIAGRAM 1 - OFFICIAL MASTER PLAN - WITH CARVETH CARE CENTRE IDENTIFIED



THE CORPORATION OF THE TOWN OF GANANOQUE
Canadian Gateway to the 1000 Islands

Official Plan
Schedule
KEY MAP

Legend

- Lowertown - Schedule "A"
- Residential - Schedule "B"
- General Commercial
- Highway Commercial
  (Schedule "C")
- Employment Lands - Schedule "D"
- Open Space
- Rural
  (Schedule "E")
- Roads
- Recreational Pathway
- Parcels
- Lot Concessions
- Watercourse
- Municipal Boundary

Other Schedules:

Natural and Cultural Heritage Feature - Schedule "F"
Development Constraints - Schedule "G"
Roads - Schedule "H"
Land Use - Schedule "I"

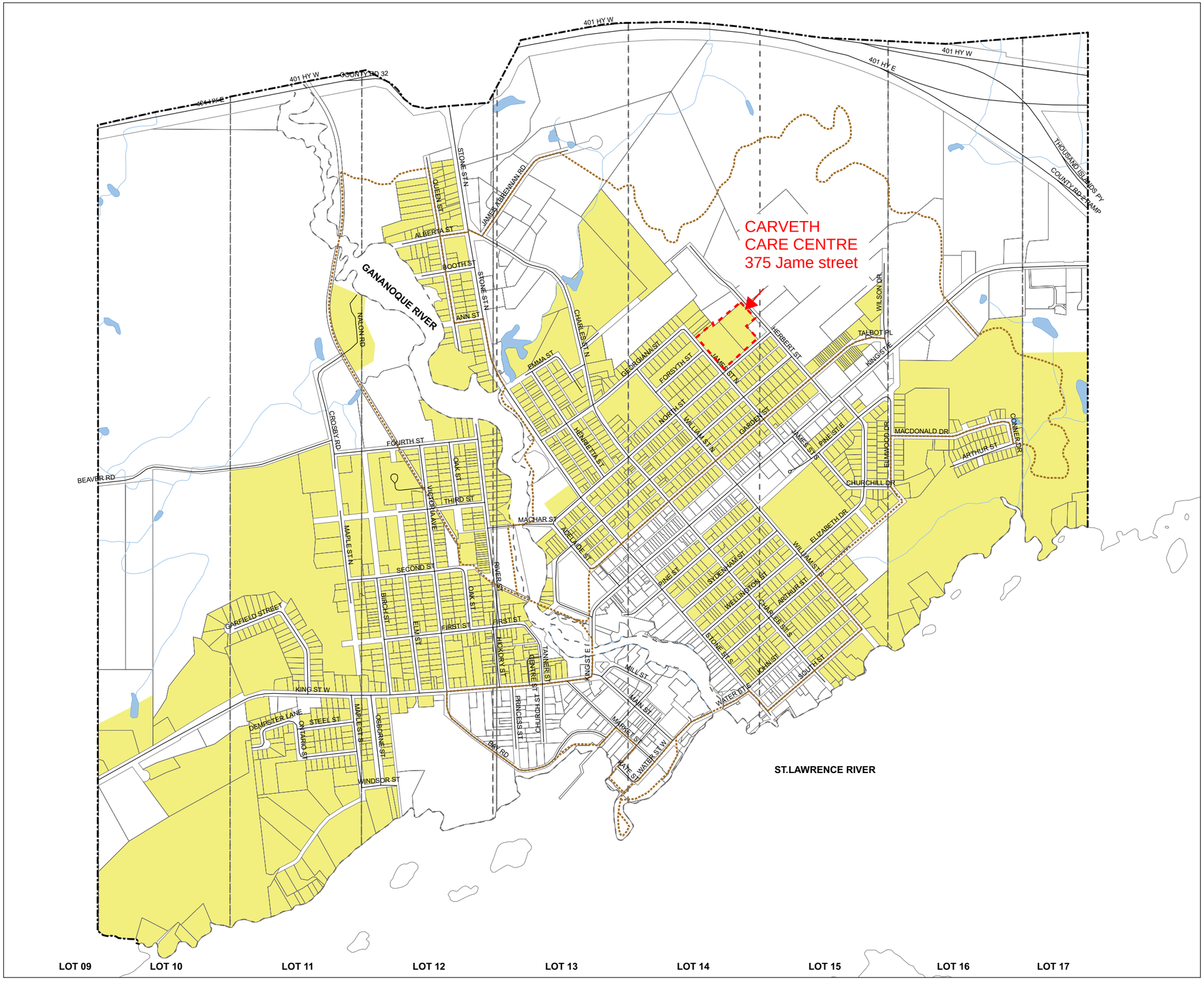
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N W E S

Drawings are produced by Stantec Consulting Ltd.
with base information supplied by the United Counties
of Leeds & Grenville (2007).
@ August 2009

Stantec

DIAGRAM 2 - SCHEDULE B - WITH CARVETH CARE CENTRE IDENTIFIED



THE CORPORATION OF THE TOWN OF GANANOQUE
Canadian Gateway to the 1000 Islands

Official Plan
Schedule "B"
RESIDENTIAL POLICY AREA

Legend

- Residential
- Roads
- Recreational Pathway
- Parcels
- Lot Concessions
- Watercourse
- Municipal Boundary

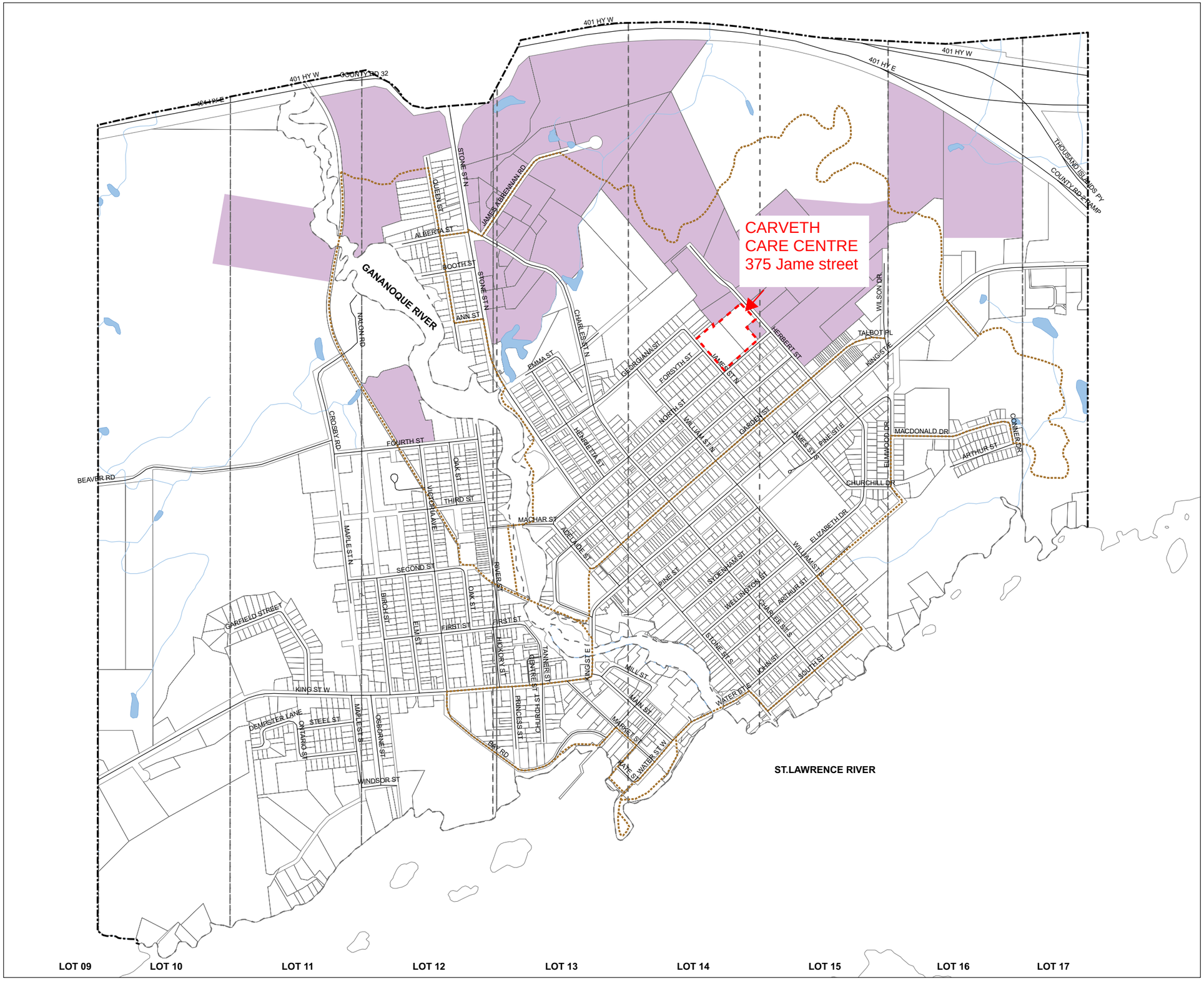
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DIAGRAM 3 - ADJACNET SITE SCHEDULE "D" - WITH CARVETH CARE CENTRE IDENTIFIED



THE CORPORATION OF THE TOWN OF GANANOQUE
Canadian Gateway to the 1000 Islands

Official Plan
Schedule "D"
TRADE AND INDUSTRY POLICY AREA

Legend

- Employment Lands
- Roads
- Recreational Pathway
- Parcels
- Lot Concessions
- Watercourse
- Municipal Boundary

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N W E S

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Stantec

May 2024

Carveth Care
Gananoque, ON



STORMWATER MANAGEMENT REPORT

PREPARED BY:

ASTERISK
ENGINEERING CORPORATION
1480 Bath Road,
KINGSTON ONTARIO
K7M 4X6

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APPENDIX B - TABLES

1. INTRODUCTION

Asterisk Engineering Corporation was retained by Carveth Care Centre to create a stormwater management report for the building addition to the long-term care home located at 375 James St in Gananoque ON.

The following report will present a pre vs post-development stormwater analysis of the property and present a workable stormwater management strategy.

2. Project Description

Carveth Care Centre is a long-term care facility located at 375 James St in Gananoque ON and is proposing to build new additions to the facility. The new development will include a new 1077 sq.m wing to the facility, 3 extensions to the existing building envelope, a new 87 sq.m workshop addition, an expansion to the parking lot, new access to North Street, and the update of the landscaping for 3 courtyards.

Figure 03 in the appendix shows the location of these new elements. The site will use existing drainage patterns and a new catch basin will be installed in one courtyard. Two (2) swales will be installed: one to the North to direct runoff from the new addition and the second will be an enhanced swale treating water runoff from the new parking lot.

In Figure 03 the new wing is labeled as 'One Storey Addition', the extensions to the existing façade are labeled as 'BLDG Expansion' 1 to 3, and the new workshop is labeled as 'New Workshop'.

3. Existing Site

The property is 2.16 Ha in size and has an 8100 sq.m facility that includes multiple wings and Two (2) enclosed courtyards. The property has three(3) parking lots, one on the Southwest end, one(1) to the East end, and a gravel parking lot on the Northwest end of the lot. The property has access to James St to the West, North St to the South, and Herbert St to the East. A creek runs along the Northern property line.

Residential houses are located to the North, West, and South of the property. Emergency Services building is North of the subject property and commercial space is to the East. See Figure 01 for the Key Plan and Figure 02 for the survey.

4. Proposed Grading

The proposed changes to grading will be around the areas that will be developed, majority of the site will remain as it but the proposed site works will be demonstrated in Figures 04 to 07.

The new wing and building expansions 1 and 2 are shown in Figure 04. A new swale will be installed in the Northern property line to direct stormwater runoff to James St as to not negatively affect the neighboring residential property. A swale will be installed within the new courtyard on the West end to direct stormwater runoff to James St and a catch basin will be installed within the new enclosed courtyard. The new catch basin will drain to the inside of the new wing and will be discharged via a sump pump to the proposed Northern swale.

The new workshop in Figure 05 will slope away from the proposed addition and to the parking lot which will ultimately drain to the existing catch basin in the middle of the lot.

The updated central courtyard, as depicted in Figure 06, will drain to the existing catch basin in the center of the courtyard. The new landscaped areas along the eastern parking lot will drain to the parking lot itself.

The new access and expansion to the parking spot will drain to two places. The space that is already asphalt will maintain its existing drainage pattern to North St and the new access will have a 6.1% slope to North St. The new parking spaces will discharge to an enhanced swale for quality control, the swale runs adjacent to North St and will be discharging to North St.

The grading will range from 2% to 33% and has been designed to maintain an accessible path of travel with particular attention to the courtyards. Swales will be sloped between 0.75% and 1.0 %.

5. Stormwater Management

Stormwater Design Criteria

The proposed development will be to standards set by the Ministry of Environment, Climate Change and Park (MECP) and Cataraqui Region Conservation Authority (CRCA). According to the pre-application with the Town of Gananoque staff and CRCA, the requirements for the proposed development are to maintain existing development flows (pre-development flows) of the 2-Year storm event, and the site will need to store up to the 100-Year storm event for the post-development site conditions (the post-development flows). This will be referred to as the 'Pre = Post development flows'.

Quality controls for the stormwater runoff will need to ensure that all flows from the new development will treat up to 70% of total suspended solids (TSS). This will be to the Normal Protection standards as set by the MECP for the end-of-pipe water quality for stormwater runoff.

Tributary Areas

Due to the existing site being fully developed the tributary areas for this report will be localized to the areas where the development will occur. 6 Tributary areas have been created based on discharge location. It is important to note that the existing has split drainage and discharges to all 3 adjacent roads, the sewers along James St, the neighboring residential property, and the adjacent creek to the North.

- Tributary Area 1 contains the new wing and enclosed courtyard and discharges to the proposed swale along the Northern property line.
- Tributary Area 2 is building extension 2 that discharges to the creek.
- Tributary Area 3a is the existing central courtyard and discharges to the storm sewers.
- Tributary Area 3b is the sidewalk area by the parking lot and discharges to the storm sewers.
- Tributary Area 3c is the new workshop and discharges to the storm sewer.
- Tributary Area 4 is the expanded parking lot and new access that discharges to North St.

***NOTE: Area 3 a to c are combined into one area for runoff calculations as they are all connected to the storm sewer system.**

Quantity Controls

To meet the requirement for the pre = post-development flows the quantity of water flow will have to be calculated by the intensity duration frequency (IDF) relationship, as per the MTO IDF Curve Lookup for Gananoque:

2-Year: i=20.6(Tc)^-0.699

100-Year: i=45.6(Tc)^-0.699

Post Development Tc = 15 min

Post-Development Impervious Percentage (For Grassed Swale Drainage Area) = 90%

This will give an approximate 2-year and 100-year rainfall conditions. Time of Concentration (Tc) has been assumed to be 15 min because the site is fully developed. These calculations are used to size stormwater control features to manage the 100-year storm event.

All of the Pre vs Post calculations are listed in the Appendix.

Pre Development Flow Rate

The following are the pre-development stormwater flowrates for the site, as mentioned above they are broken down into 6 different tributary areas:

Pre-Tributary Area 1

- Development Total Area = 0.42 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.59
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpre-2yr = **37.4 l/s**
- Qpre-100Yr = **82.9 l/s**

Pre-Tributary Area 2

- Development Total Area = 0.03 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.47
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpre-2yr = **2.1 l/s**
- Qpre-100Yr = **4.7 l/s**

Pre-Tributary Area 3a, 3b and 3c

- Development Total Area = 0.30 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.60
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpre-2yr = **27.0 l/s**
- Qpre-100Yr = **59.8 l/s**

Pre-Tributary Area 4

- Development Total Area = 0.08 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.49
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpre-2yr = **6.0 l/s**
- Qpre-100Yr = **13.2 l/s**

Post-Development Flow Rate

The post-development flow rates take into account all the increased hard surfaces for the tributary area and will maintain the existing discharge location:

Post-Tributary Area 1

- Development Total Area = 0.42 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.68
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpost-2yr = **43.3 l/s**
- Qpost-100Yr = **95.9 l/s**

Post-Tributary Area 2

- Development Total Area = 0.03 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.68
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpost-2yr = **3.1 l/s**
- Qpost-100Yr = **6.9 l/s**

Post-Tributary Area 3a, 3b and 3c

- Development Total Area = 0.30 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.71
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpost-2yr = **31.9 l/s**
- Qpost-100Yr = **70.7 l/s**

Post-Tributary Area 4

- Development Total Area = 0.08 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.58
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpost-2yr = **6.9 l/s**
- Qpost-100Yr = **15.4 l/s**

Roof Top Stormwater Storage

Due to the site having pre-existing drainage issues the proposed development plans to use rooftop storage to manage the difference between the 2-yr pre-development flowrates and the 100-Yr post-development flowrates. The rooftop storage will be sized to accommodate the difference in flow rates for all of the development areas and will be located on the new wing located in Tributary 1. The majority of the development area (Trib Areas 1, 3 a, 3b, and 3c) will be discharging to James St or the James St storm sewer. Tributary Areas 2 and 4 are quite small in size and have a minor increase in flow rates, these areas will be taken into account for the rooftop storage.

Pre-Tributary Area

- Development Total Area = 0.83 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.58
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpre-2yr = **72.5 l/s**
- Qpre-100Yr = **160.5 l/s**

Post-Tributary Area

- Development Total Area = 0.83 Ha
- Time of concentration = 15min
- Runoff coefficient of pre-development area = 0.68
- Intensity calculations (2yr-100yr -MTO IDF Curve Lookup – See Rainfall Data)
- Qpost-2yr = **85.3 l/s**
- Qpost-100Yr = **188.8 l/s**

The leaders from the roof will restrict the discharge to **72.5 l/s** and will be required to store up to **109 cu.m** of water. This would result in a total of **10 cm** of water overtop of the roof of the new wing.

See Table 6 in the Appendix for time step calculations for the stormwater storage. The sizing of the roof leaders will be designed by the mechanical consultant, a overflow will be required for water levels that exceed 90 mm.

Quality Controls

Tributary Area 4 will require quality controls as the proposal is expanding the size of the parking lot. The rest of the development will be expanding the building or landscaped space which will be considered clean enough to discharge as is.

The treatment objectives are to remove 70% of TSS based upon the 2003 MOE Manual as requested by CRCA during consultation. The enhanced swale will have the following design, this will assure proper quality controls for:

- 0.2 m flat bottom;
- 4.15 l/s flow;
- 0.004 m/s velocity (based on 25mm, 4hr Chicago Storm Event)
- 0.014 Ha Trib area
- 2.5(h):1(v) side slopes
- 15 cm grass length

• 0.1 m high check dam spaced 10 m apart maximum

See Table 7 in Appendix B or Enhanced Swale Sizing Calculations. The size and slope of the swale will be confirmed during site plan control.

According to the *Low Impact Development Stormwater Management Planning and Design Guide* by Toronto and Region Conservation Authority and Credit Valley Conservation, Enhanced swales have a Median pollutant mass removal rate of 76%. The soils of the enhanced swales will be tilled to 300 mm to improve the infiltration rate of the soils and improve the water quality treatment performance of the swale.

6. Erosion and Sediment Control

To reduce the possibility of sediment loads entering the environment, sediment and erosion control measures should be implemented. Before construction has begun, silt fences and straw bales shall be installed to protect the creek and stormwater structures from sediment runoff from the development during construction. Catch basins within and adjacent to the property should be covered with geotextile cloth to protect the structure from getting clogged.

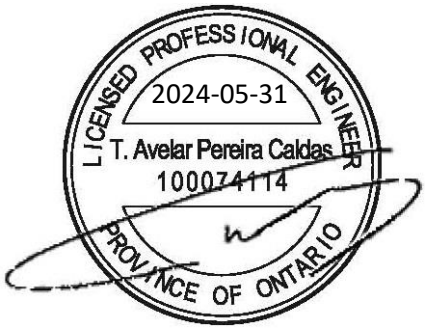
The owner is responsible for ensuring that best management practices are followed and all erosion control measures are maintained during and after construction. The landowner will be responsible for all maintenance associated with the stormwater management facilities on site.

The site will require monthly visual inspection during construction, and cleaning when necessary. Sections of the silt fence will need to be replaced if damaged. Once the site stabilizes, erosion control measures can be removed. An annual inspection by the owner will be sufficient.

7. CONCLUSION

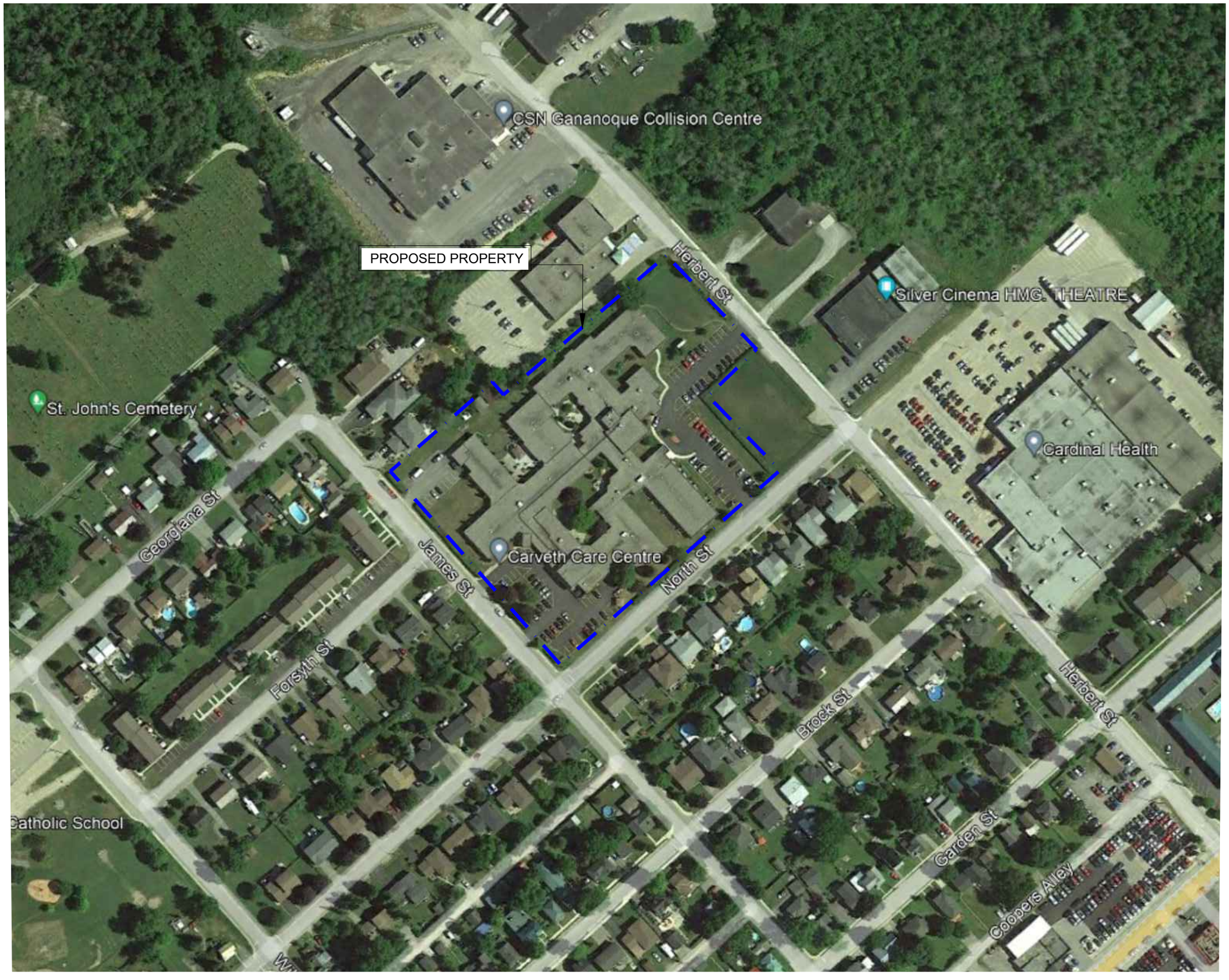
Based on the information provided, this brief presents a workable stormwater management strategy, which can accommodate the proposed development and maintain post-development flows to pre-development levels respectively.

Prepared By:



Tiago Caldas, M.Eng., P.Eng.
President – Owner

APPENDIX A - FIGURES



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
CARVETH CARE

ASTERISK ENGINEERING CORPORATION
1480 BATH RD, UNIT 201
Kingston, ON.
K7M 4X6
(613) 542-2040 fax 1 613 280-1335
www.asteriskengineering.com

ISSUED FOR	REV	DATE
PRE - APPLICATION	01	2024/06/04

Do not scale drawings. Refer to Architectural drawings for dimensions. All elevations /dimensions shall be verified with Architectural drawings and any discrepancy shall be reported inmediately to consultant. Read this drawing in conjunction with ALL applicable Architectural, Mechanical, electrical and other disciplines involved.
This drawings are "design drawings" only and are not intended to be used as shop drawings.

LEGEND

SCALE:	UNITS:
1:2000	m

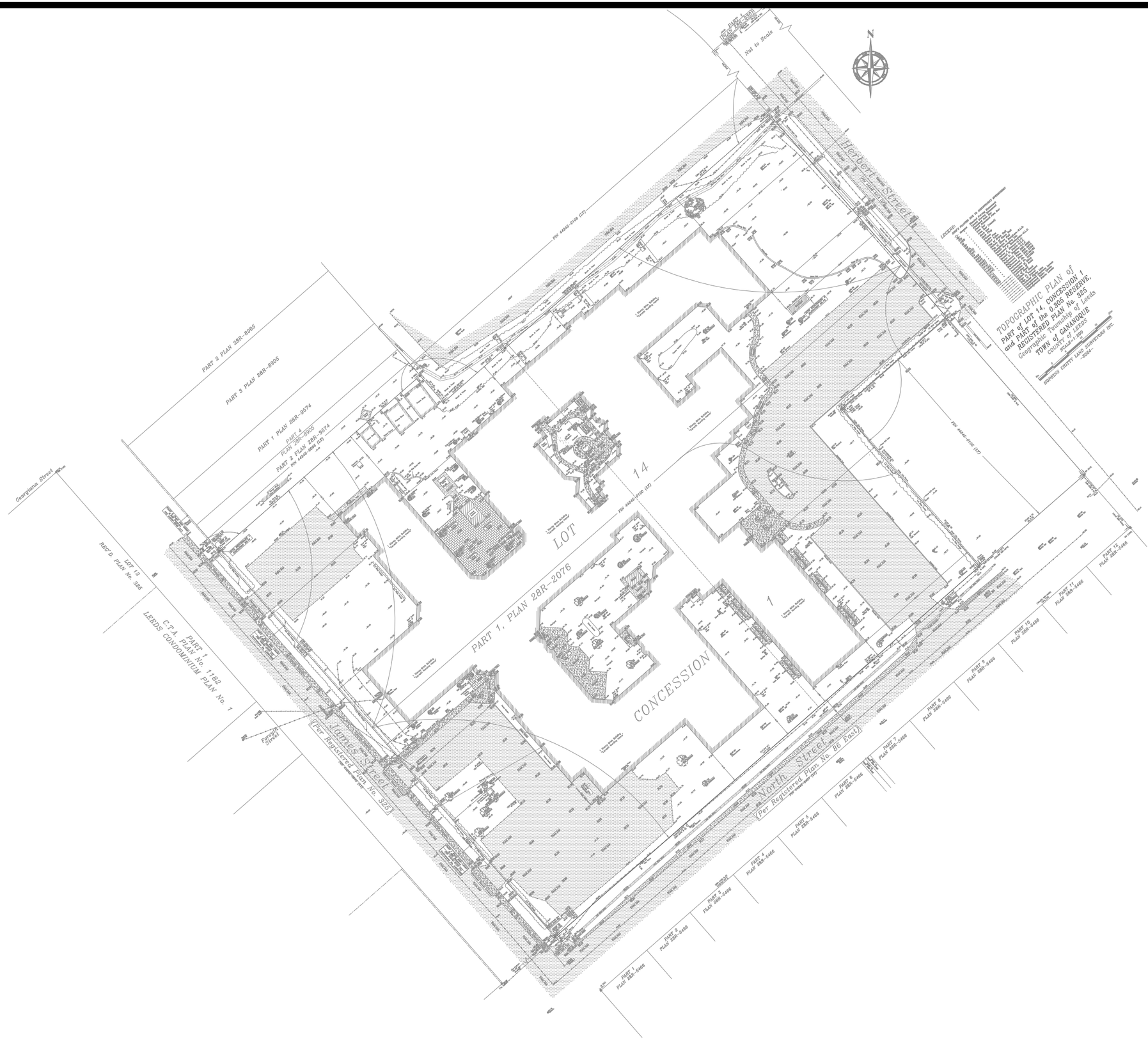
DESIGNED:	CHECKED:	DRAWN:
TC	TC	MT

DRAWING TITLE

KEY PLAN

PROJECT-DWG Nos: 23-078 F-01

DATE: August 15, 2023



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
CARVETH CARE

ASTERISK
ENGINEERING CORPORATION
1480 BATH RD, UNIT 201
Kingston, ON.
K7M 4X6
(613) 542-2040 fax 1 613 280-1335
www.asteriskengineering.com

ISSUED FOR	REV	DATE
PRE - APPLICATION	01	2024/06/04

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LEGEND

SCALE:	UNITS:
1:1000	m

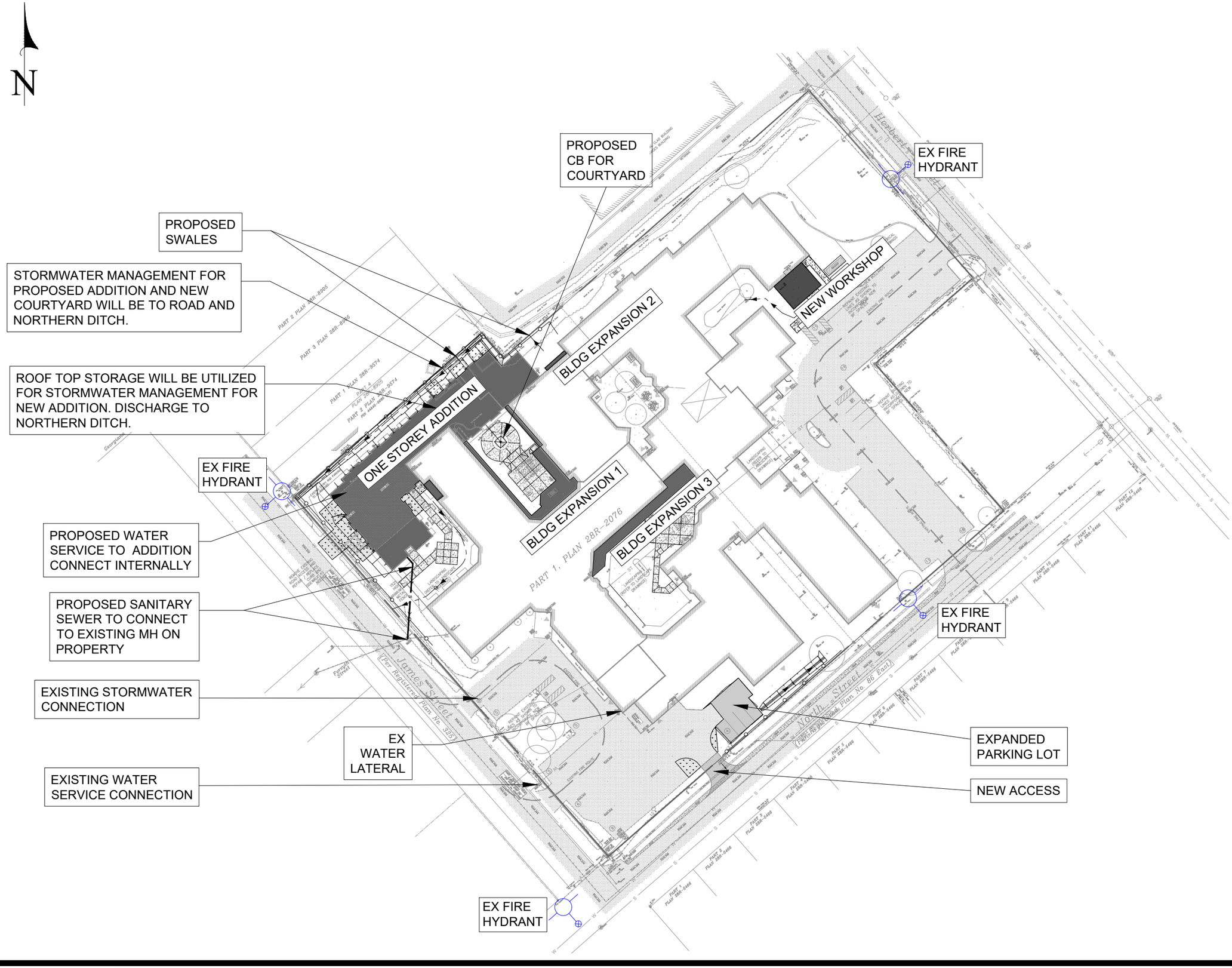
DESIGNED:	CHECKED:	DRAWN:
TC	TC	MT

DRAWING TITLE

SURVEY

PROJECT-DWG Nos: 23-078 F-02

DATE: August 15, 2023



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
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LEGEND

- EXISTING FH
- EXISTING SANITARY MH
- EXISTING STORM MH
- PR STORM CB
- EX SAN SEWER
- EX STM SEWER
- EX WM
- PR SAN SEWER
- PR STORM SEWER
- GRADING
- ENHANCED SWALE
- PR SILT FENCE

SCALE:	UNITS:
1:1000	m

DESIGNED:	CHECKED:	DRAWN:
TC	TC	MT

DRAWING TITLE

SITE PLAN

PROJECT-DWG Nos: 23-078 F-03

DATE: August 15, 2023

PROPOSED SWALE
SEE SECTION A

SWALE
SEE SECTION A FOR DETAILS

SITE BENCHMARK 1
ELEVATION 90.74

PROPOSED
CB

SWALE
SEE SECTION A FOR DETAILS

3
1
0.15m MIN
0.45m MIN
0.45m MIN

*GRASSED AREA
MAX SIDE SLOPE =33% (1:3)

A NORTHERN SWALE PROFILE
N.T.S

KEY PLAN

PART 1 PLAN 28R-2(

BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
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ISSUED FOR	REV	DATE
PRE - APPLICATION	01	2024/06/04

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LEGEND

PROPOSED GRADE
EXISTING

SCALE: 1:750	UNITS: m	
DESIGNED: TC	CHECKED: TC	DRAWN: MT

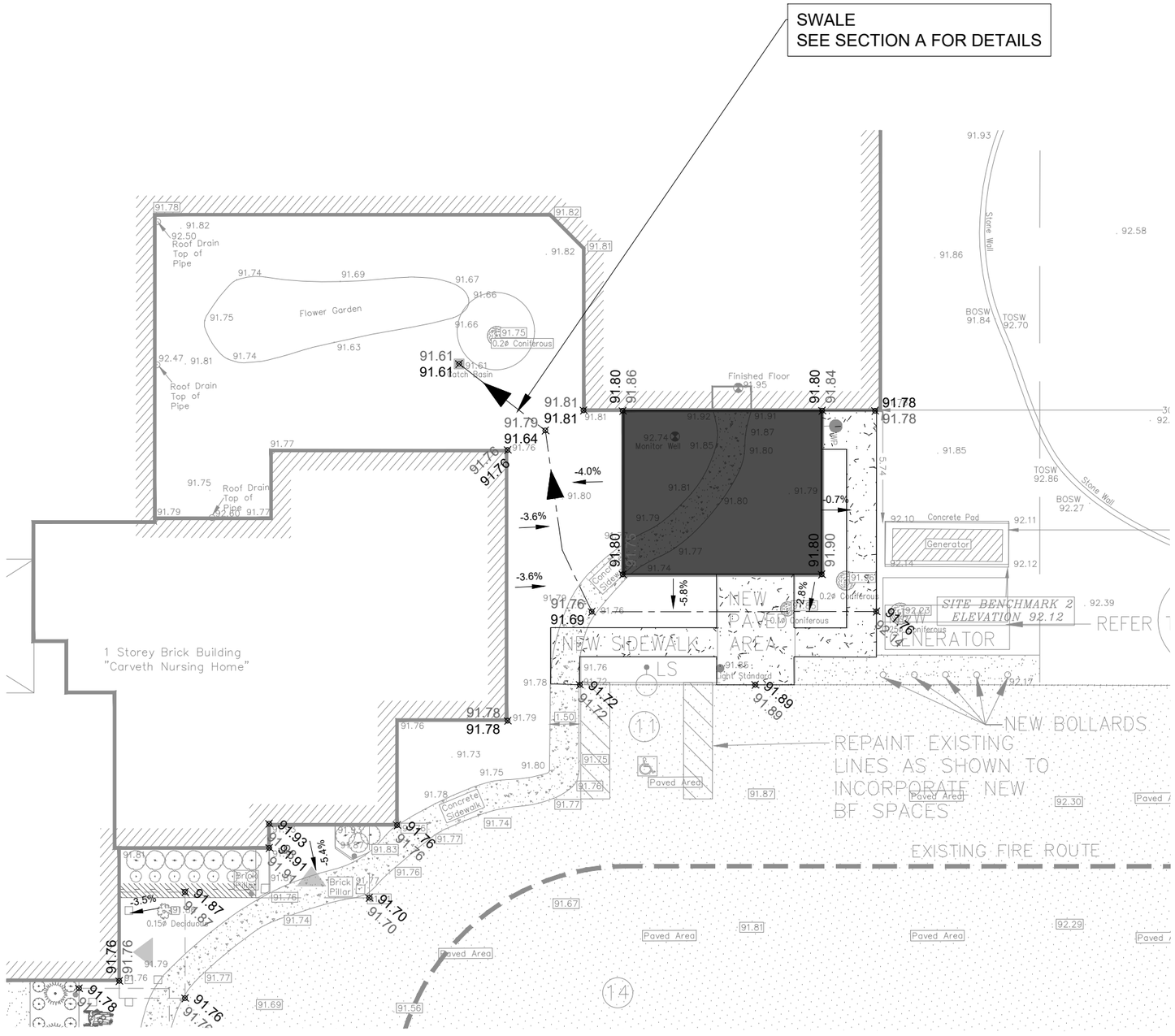
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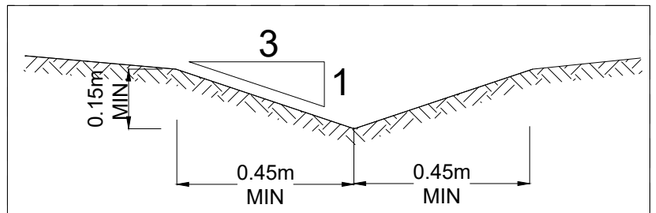
GRADING PLAN
NEW ADDITION AND
EXPANSION 1 AND 2

PROJECT-DWG Nos: 23-078

F-04

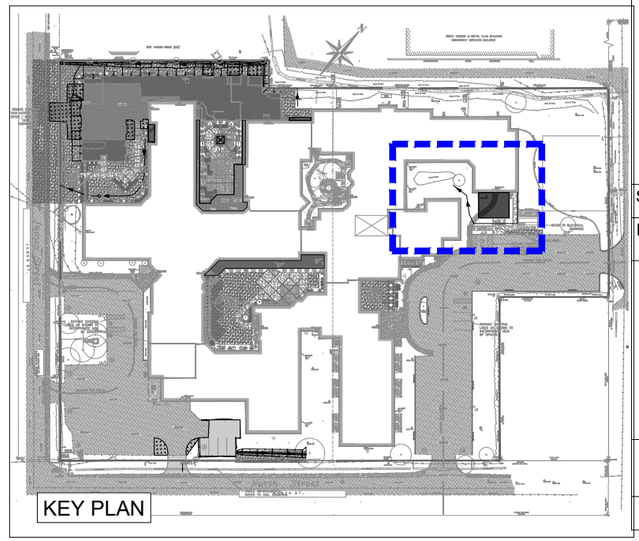
DATE: August 15, 2023





*GRASSED AREA
MAX SIDE SLOPE =33% (1:3)

A NORTHERN SWALE PROFILE
N.T.S



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

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LEGEND

PROPOSED GRADE
EXISTING

SCALE: 1:750	UNITS: m	
DESIGNED: TC	CHECKED: TC	DRAWN: MT

DRAWING TITLE

GRADING PLAN
- NEW WORKSHOP

PROJECT-DWG Nos: 23-078	F-05
DATE: August 15, 2023	

BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
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LEGEND

PROPOSED GRADE
EXISTING

PLAN 28R-2076

1 Storey Brick Building
"Carveth Nursing Home"

LANDSCAPING
(REFER TO
LANDSCAPE
DRAWINGS)

Courtyard

Flower Garden

Paved Area

Concrete Curb

Flagpole

Roof Drain
Top of
Pipe

Finished Floor

EX.
WS

Brick
Pillar

KEY PLAN

SCALE: 1:750	UNITS: m	
DESIGNED: TC	CHECKED: TC	DRAWN: MT

DRAWING TITLE

GRADING PLAN - BUILDING EXTENSION 3 AND LANDSCAPING

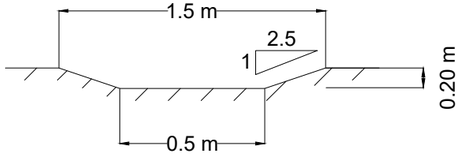
PROJECT-DWG Nos: 23-078	F-06
DATE: August 15, 2023	

ENHANCED SWALE
SEE SECTION B

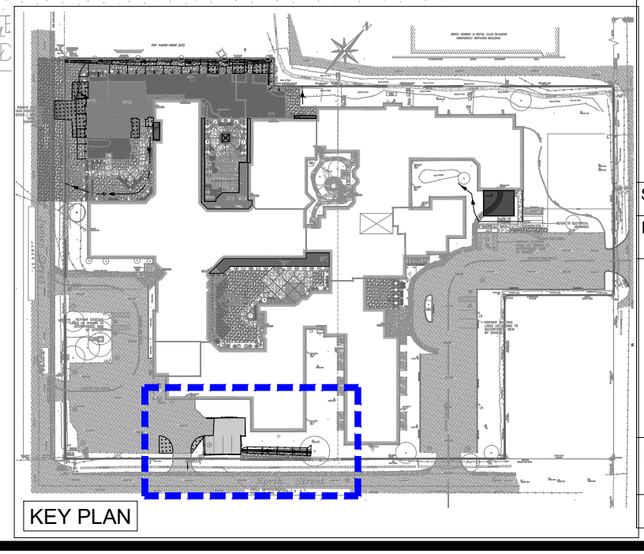
91.64 PR PARKING LOT DISCHARGE

North Street

(Per Regist
REFER TO GRADE



B ENHANCED SWALE PROFILE
N.T.S



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
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LEGEND

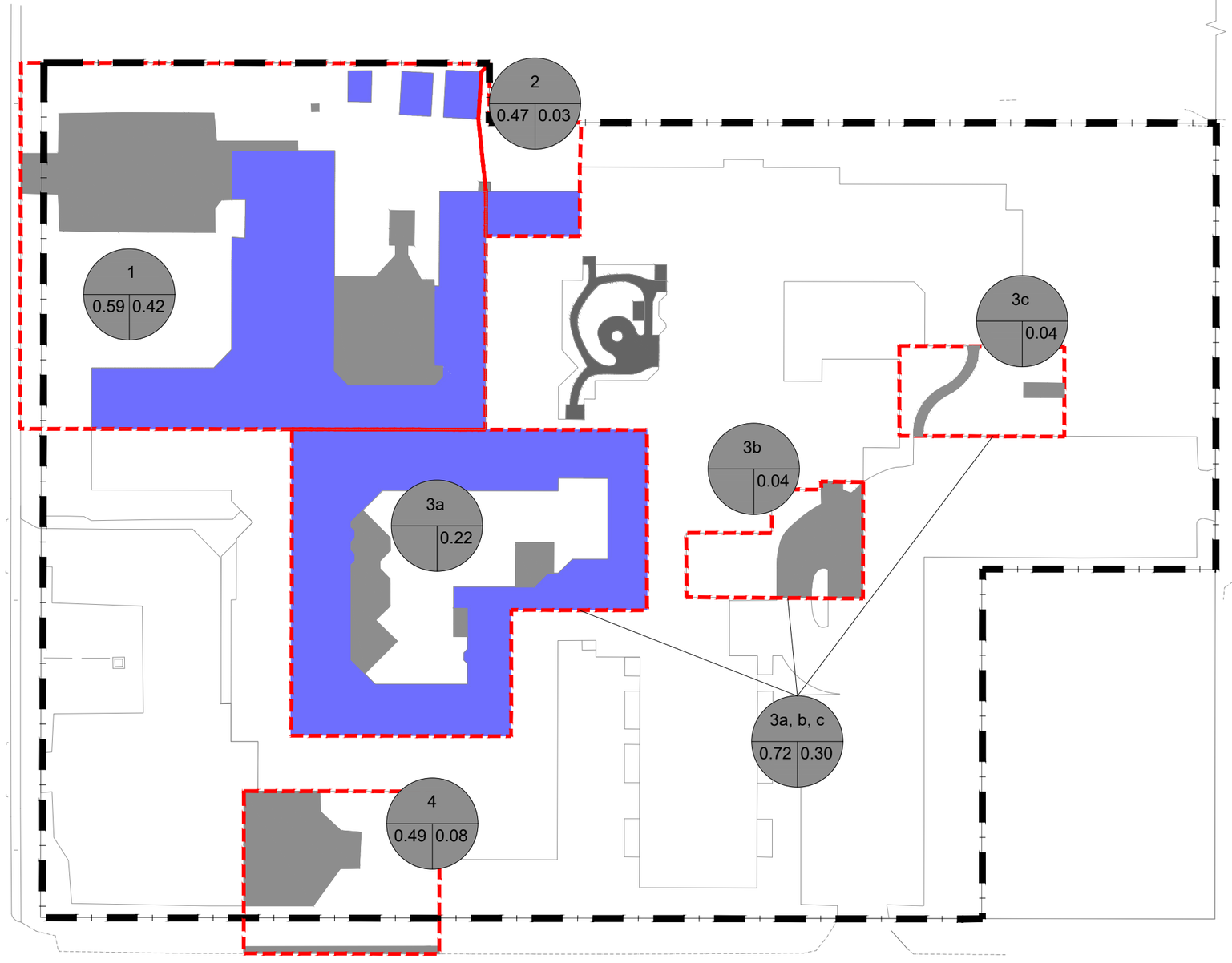
PROPOSED GRADE
EXISTING

SCALE: 1:750	UNITS: m	
DESIGNED: TC	CHECKED: TC	DRAWN: MT

DRAWING TITLE

GRADING PLAN
- NEW PARKING LOT

PROJECT-DWG Nos: 23-078	F-07
DATE: August 15, 2023	



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
CARVETH CARE

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LEGEND

- EXISTING BUILDING
- NEW BUILDING
- CONCRETE - ASPHALT
- TRIBUTARY AREAS
- PROPERTY LINE
- STORM TRIB AREA
- AREA (Ha)
- RUNOFF COEFFICIENT

(1: 0.60 | 1.94)

SCALE:	UNITS:
1:750	m

DESIGNED:	CHECKED:	DRAWN:
TC	TC	MT

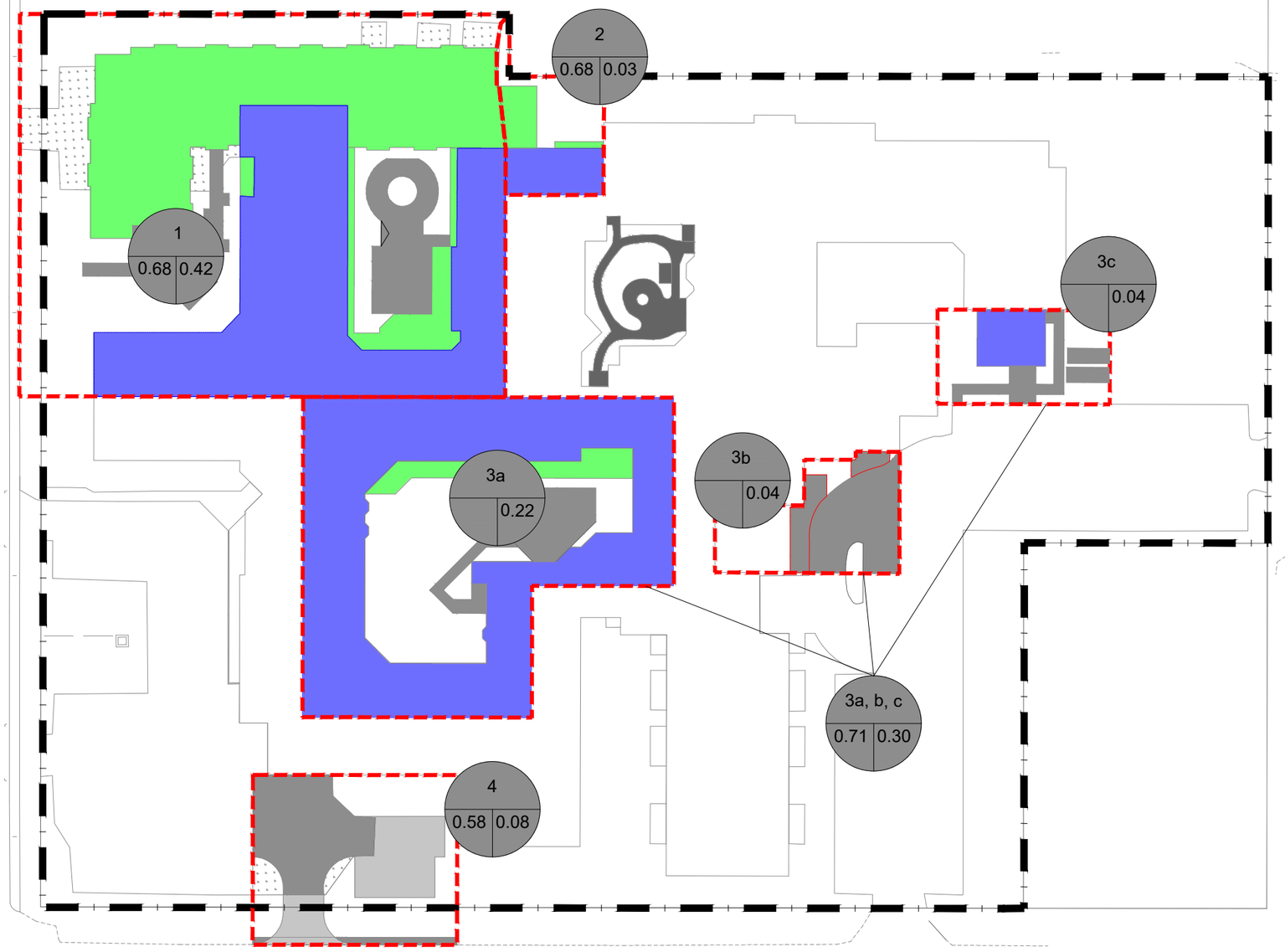
DRAWING TITLE

PRE DEVELOPMENT TRIBUTARY AREAS

PROJECT-DWG Nos: 23-078

F-08

DATE: August 15, 2023



BUILDING ADDITION

375 JAMES ST,
GANANOQUE ON

CLIENT:
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ISSUED FOR	REV	DATE
PRE - APPLICATION	01	2024/06/04

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This drawings are "design drawings" only and are not intended to be used as shop drawings.

LEGEND

- EXISTING BUILDING
- NEW BUILDING
- CONCRETE - ASPHALT
- TRIBUTARY AREAS
- PROPERTY LINE

1 — STORM TRIB AREA
0.60 | 1.94 — AREA (Ha) / RUNOFF COEFFICIENT

SCALE:	UNITS:
1:750	m

DESIGNED:	CHECKED:	DRAWN:
TC	TC	MT

DRAWING TITLE

PRE DEVELOPMENT TRIBUTARY AREAS

PROJECT-DWG Nos: 23-078

F-09

DATE: August 15, 2023

APPENDIX B - TABLES

Table 1

Tributary Area 1

Pre vs Post of New Addition and Courtyards to James St

PRE-DEVELOPMENT FLOWS

2 Year Event - $Q_{Pre\text{-}5yr}$= 2.78*C*I*A

C_{pre}	A (Ha)	
0.25	0.2	Grassed
0.9	0.08	Ash/CC
0.9	0.14	Building

C_{Pre}= 0.59
T_c= 15
i_{5Yr}= 54.29 mm/hr
A= 0.42 Ha

$Q_{Pre\text{-}2yr}$= 37.43 l/s

100 Year Event - $Q_{Pre\text{-}100yr}$= 2.78*C*I*A

C_{pre}	A (Ha)	
0.25	0.2	Grassed
0.9	0.08	Ash/CC
0.9	0.14	Building

CP_{re}= 0.59
T_c= 15
i_{100Yr}= 120.2 mm/hr
A= 0.42 Ha

$Q_{Pre\text{-}100yr}$= 82.85 l/s

POST-DEVELOPMENT FLOWS

2 Year Event - $Q_{Post\text{-}5yr}$= 2.78*C*I*A

C_{Post}	A (Ha)	
0.25	0.14	Grassed
0.9	0.03	Ash/CC
0.9	0.25	Building

C_{Post}= 0.68
T_c= 15
i_{5Yr}= 54.29 mm/hr
A= 0.42 Ha

$Q_{Post\text{-}2yr}$= 43.31 l/s

100 Year Event - $Q_{Post\text{-}100yr}$= 2.78*C*I*A

C_{Post}	A (Ha)	
0.25	0.14	Grassed
0.9	0.03	Ash/CC
0.9	0.25	Building

C_{Post}= 0.68
T_c= 15
i_{100Yr}= 120.2 mm/hr
A= 0.42 Ha

$Q_{Post\text{-}100yr}$= 95.88 l/s

Table 2

Carveth Care

Job No.: 23-037

Tributary Area 2

Pre vs Post to Creek

PRE-DEVELOPMENT FLOWS

2 Year Event - $Q_{Pre-5yr}$= 2.78*C*I*A

C_{pre}	A (Ha)	
0.25	0.02	Grassed
0.9	0	Ash/CC
0.9	0.01	Building

C_{Pre}= 0.47
T_c= 15
i_{5Yr}= 54.29 mm/hr
A= 0.03 Ha

$Q_{Pre-5yr}$= 2.11 l/s

100 Year Event - $Q_{Pre-100yr}$= 2.78*C*I*A

C_{pre}	A (Ha)	
0.25	0.02	Grassed
0.9	0	Ash/CC
0.9	0.01	Building

CP_{re}= 0.47
T_c= 15
i_{100Yr}= 120.2 mm/hr
A= 0.03 Ha

$Q_{Pre-100yr}$= 4.68 l/s

POST-DEVELOPMENT FLOWS

2 Year Event - $Q_{Post-5yr}$= 2.78*C*I*A

C_{Post}	A (Ha)	
0.25	0.01	Grassed
0.9	0	Ash/CC
0.9	0.02	Building

C_{Post}= 0.68
T_c= 15
i_{5Yr}= 54.29 mm/hr
A= 0.03 Ha

$Q_{Post-5yr}$= 3.09 l/s

100 Year Event - $Q_{Post-100yr}$= 2.78*C*I*A

C_{Post}	A (Ha)	
0.25	0.01	Grassed
0.9	0	Ash/CC
0.9	0.02	Building

C_{Post}= 0.68
T_c= 15
i_{100Yr}= 120.2 mm/hr
A= 0.03 Ha

$Q_{Post-100yr}$= 6.85 l/s

Table 3

Carveth Care

Job No.: 23-037

Tributary Area 3a, 3b and 3c

Pre vs Post of Building Expansion, New Courtyard, and New Workshop

PRE-DEVELOPMENT FLOWS

2 Year Event - QPre-5yr= 2.78*C*I*A

Cpre	A (Ha)	
0.25	0.14	Grassed
0.9	0.02	Ash/CC
0.9	0.14	Building

CPre=	0.60	
Tc=	15	
i5Yr=	54.29	mm/hr
A=	0.3	Ha

QPre-5yr= 27.02 l/s

100 Year Event - QPre-100yr= 2.78*C*I*A

Cpre	A (Ha)	
0.25	0.14	Grassed
0.9	0.02	Ash/CC
0.9	0.14	Building

CPre=	0.60	
Tc=	15	
i100Yr=	120.2	mm/hr
A=	0.3	Ha

QPre-100yr= 59.80 l/s

POST-DEVELOPMENT FLOWS

2 Year Event - QPost-5yr= 2.78*C*I*A

CPost	A (Ha)	
0.25	0.09	Grassed
0.9	0.05	Ash/CC
0.9	0.16	Building

CPost=	0.71	
Tc=	15	
i5Yr=	54.29	mm/hr
A=	0.3	Ha

QPost-5yr= 31.92 l/s

100 Year Event - QPost-100yr= 2.78*C*I*A

CPost	A (Ha)	
0.25	0.09	Grassed
0.9	0.05	Ash/CC
0.9	0.16	Building

CPost=	0.71	
Tc=	15	
i100Yr=	120.2	mm/hr
A=	0.3	Ha

QPost-100yr= 70.66 l/s

Table 4

Carveth Care

Job No.: 23-037

TRIBUTARY AREA 4

Pre vs Post New Parking Lot

PRE-DEVELOPMENT FLOWS

2 Year Event - $Q_{Pre-5yr}$= 2.78*C*I*A

C_{pre}	A (Ha)	
0.25	0.05	Grassed
0.9	0.03	Ash/CC
0.9	0	Building

C_{Pre}= 0.49
T_c= 15
i_{5Yr}= 54.29 mm/hr
A= 0.08 Ha

$Q_{Pre-5yr}$= 5.96 l/s

100 Year Event - $Q_{Pre-100yr}$= 2.78*C*I*A

C_{pre}	A (Ha)	
0.25	0.05	Grassed
0.9	0.03	Ash/CC
0.9	0	Building

CP_{re}= 0.49
T_c= 15
i_{100Yr}= 120.2 mm/hr
A= 0.08 Ha

$Q_{Pre-100yr}$= 13.20 l/s

POST-DEVELOPMENT FLOWS

2 Year Event - $Q_{Post-5yr}$= 2.78*C*I*A

C_{Post}	A (Ha)	
0.25	0.04	Grassed
0.9	0.04	Ash/CC
0.9	0	Building

C_{Post}= 0.58
T_c= 15
i_{5Yr}= 54.29 mm/hr
A= 0.08 Ha

$Q_{Post-5yr}$= 6.94 l/s

100 Year Event - $Q_{Post-100yr}$= 2.78*C*I*A

C_{Post}	A (Ha)	
0.25	0.04	Grassed
0.9	0.04	Ash/CC
0.9	0	Building

C_{Post}= 0.58
T_c= 15
i_{100Yr}= 120.2 mm/hr
A= 0.08 Ha

$Q_{Post-100yr}$= 15.37 l/s

Table 5

Carveth Care

Job No.: 23-037

Pre vs Post New Addition (EXCLUDING EXPANSIONS TO EXISTING BUILDING)

PRE-DEVELOPMENT FLOWS

2 Year Event - QPre-5yr= 2.78*C*I*A

Cpre	A (Ha)	
0.25	0.41	Grassed
0.9	0.13	Ash/CC
0.9	0.29	Building

CPre=	0.58	
Tc=	15	
i5Yr=	54.3	mm/hr
A=	0.83	Ha

QPre-5yr=	**72.52**	**l/s**

100 Year Event - QPre-100yr= 2.78*C*I*A

Cpre	A (Ha)	
0.25	0.41	Grassed
0.9	0.13	Ash/CC
0.9	0.29	Building

CPre=	0.58	
Tc=	15	
i100Yr=	120.2	mm/hr
A=	0.83	Ha

QPre-100yr=	**160.53**	**l/s**

POST-DEVELOPMENT FLOWS

2 Year Event - QPost-5yr= 2.78*C*I*A

CPost	A (Ha)	
0.25	0.28	Grassed
0.9	0.12	Ash/CC
0.9	0.43	Building

CPost=	0.68	
Tc=	15	
i5Yr=	54.3	mm/hr
A=	0.83	Ha

QPost-5yr=	**85.27**	**l/s**

100 Year Event - QPost-100yr= 2.78*C*I*A

CPost	A (Ha)	
0.25	0.28	Grassed
0.9	0.12	Ash/CC
0.9	0.43	Building

CPost=	0.68	
Tc=	15	
i100Yr=	120.2	mm/hr
A=	0.83	Ha

QPost-100yr=	**188.75**	**l/s**

Table 6

100YR POST DEVELOPMENT TO MEET PRE DEVELOPMENT

Tc (Min)	i100yr (mm/hr)	QPost-100yr (l/s)	**QPre-5yr** (l/s)	QPost-5yr-QPre-5yr (l/s)	Volume (m3)
5	259.0	406.8	68.0	338.8	101.6
10	159.5	250.6	68.0	182.6	**109.5**
15	120.2	188.8	68.0	120.7	108.6
20	98.3	154.4	68.0	86.3	103.6
25	84.1	132.1	68.0	64.0	96.0
30	74.0	116.3	68.0	48.2	86.8
35	66.5	104.4	68.0	36.3	76.3
40	60.5	95.1	68.0	27.0	64.9
45	55.8	87.6	68.0	19.5	52.7
50	51.8	81.4	68.0	13.3	39.9
55	48.5	76.1	68.0	8.1	26.6
60	45.6	71.6	68.0	3.6	12.9

REQUIRED VOLUME OF STORAGE = 109.5 m^3

Table 7

Job no.: 23-037_Carveth Care			
ENHANCED SWALE SIZING - STORAGE			
Q=2.78*C*I*A			
C=	0.90		
I_{100YR}=	120.2	mm/hr	
A=	0.014	Ha	
Q=	**4.15**	**l/s**	<Flows to be managed
ENHANCED GRASSED SWALE GEOMETRY:			
TOTAL WIDTH=	1.5	m	
DEPTH=	**0.2**	m	
PLATFORM=	**0.5**	m	
SIDE SLOPE=	**2.5**	H :1V	
SWALE SLOPE (S)=	**1.00%**		
SWALE SECTION A-A CAPACITY			
Q=1/n *A* R^(2/3) * S^.5			
n=Roughness - Earth Channel - Weedy			
n=	**0.03**		
R=A/P			
A_{DITCH}=	Crossectional Area		
A_{DITCH}=	0.200	m2	
P=	Wetted Perimmeter		
P=	1.577	m	
R=	0.127	m	
Q=	**0.1683**	**m3/s**	
Q=	**168.28**	**l/s**	< Proposed swale capacity
168.28	**>**	**4.15**	
VELOCITY CHECK AS PER 4HR CHICAGO STORM EVENT			
Q=2.78*C*I*A			
C=	0.90		
I=	25.00	mm/hr	< 4 hour Chicago storm event (25mm event)
A=	0.01	Ha	< Trib Area for Ditch
Q=	**0.86**	**l/s**	
V=	Q/A		
Q=	0.0009	m3/s	
A=	0.200	m2	
V=	**0.00432**	**m/s**	(Must be < 0.50m/s)

140 Allstate Parkway, Unit 210
Markham, Ontario L3R 5Y8
Canada
www.ghd.com

Our ref: 12643571

June 3, 2024

Mr. Brett Gibson
Carveth Care Centre
375 James Street
Gananoque, ON K7G 2Z1

Subject: **Traffic Brief including Vehicle Sweep Path Review**
375 James Street
Carveth Care Centre
Gananoque

Dear Mr. Gibson:

GHD is pleased to provide this Traffic Brief for the proposed additions to the existing Carveth Care Centre in Gananoque. The address of the Carveth Care Centre is 375 James Street and the location is shown in **Figure 1**. The concept plan indicates a relocated workshop and reconfiguration of bed space with no change in the number of beds in the LTC facility. The retirement home component will see one additional unit from 36 to 37 units. The current plan is attached in **Appendix A**.

The proposed additions to the building do not increase or change the number of beds the facility has. The additions are improvements that are needed as part of the Ministry of Long-Term Care renewal program and are a requirement for Carveth Care Centre retention of their Long-Term Bed licenses. The proposed plan is to remove the north parking area (8 or 16 parking spaces) to make room for the building expansion to provide a relocated workshop and more bedroom space and additional retirement home unit for a total of 37 units.

The number of LTC beds and staffing are not changing thus traffic generated by the proposed improvements is not expected to change. However, for the purposes of magnitude the following Trip Generation is an estimate of expected traffic.

1.0 Trip Generation

Table 1 summarizes the expected traffic during the weekday AM and PM peak hours based on Institute of Transportation Engineers' Trip Generation 11th Ed trip rates. Land-use code 253 – Congregate Care was used for the 104 long-term care beds and land-use code 252 – Senior Adult Housing – Single Family was used for the existing 36 and proposed 37 retirement home units. The fitted curve equation was selected over the average trip rates

since it resulted in a slightly higher number of expected vehicles. The details of the trip generation estimates are provided in **Appendix B**.



Figure 1: Site Location

Table 1: Trip Generation of Estimated Vehicles

			Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
Existing	LTC	104 beds	5	4	9	9	10	19
	Retirement	36 units	6	12	18	12	8	20
	Total		11	16	27	19	18	39
Proposed	LTC	104 beds	5	4	9	9	10	19
	Retirement	37 units	6	12	18	12	8	20
	Total		11	16	27	19	18	39
Change			0	0	0	0	0	0

From **Table 1**, the estimated proposed future vehicle trips are the same as existing – no increase or change in the number of vehicles.

2.0 Parking Supply

With the removal of the north parking area, and the addition of accessible spaces and addition of the North Street driveway, the site loses a net 14 parking spaces from existing 102 spaces to the proposed 88 spaces. This is still more than the by-law required 59 parking spaces (calculation in **Appendix C**).

It is my understanding that the loss of 14 parking spaces is not a concern to the owners of the facility because the owners typically allow neighbours to use the parking areas. This indicates that the facility has a surplus of parking. Furthermore, currently only 2 senior residents own vehicles and 35-40 employees plus 10 clinic employees need parking. During the afternoon shift change approximately 65 spaces are used as incoming and outgoing staff overlap for a short 30-minute period, therefore a total of 52-67 spaces are needed leaving 21-36 vacant spaces for visitors. Therefore, the 88 parking spaces are more than sufficient to accommodate residents, employees and visitors and surpass the zoning bylaw requirement.

3.0 Vehicle Sweep Path Review

Using AutoTURN software, the following design vehicles: fire truck, delivery truck and garbage truck, were reviewed to confirm that the vehicle turning sweep paths and parking and drive aisle layout can accommodate these vehicles. The review was acceptable – the proposed site plan poses no conflicts with the design vehicle sweep paths. The details are provided in **Figures AT-1 to 4**, provided in **Appendix D**. Please note that only the west side of the building currently has a fire route as this is the current location of the Siamese Connection. We are advised by OCA Architects Inc and the owner that no revisions to the location of the Siamese connection or the fire route are proposed. At the request of OCA Architects Inc, we have also included an analysis of the east side of the property for a potential fire route which will likely not be required. We note that the east side of the property will meet the fire route requirements should this need to be added at a later time.

4.0 New Driveway on North Street

The proposed new entrance driveway on North Street is primarily for deliveries since the location of receiving is moved to the south side of the building and the proposed driveway will provide the best truck approach for deliveries. The site plan gains a few parking spaces in this area however, existing traffic patterns to the Centre are not likely to change drastically nor significantly.

If you wish to discuss any aspect of the Traffic Brief, do not hesitate to contact the undersigned. We trust that the above information is suitable for your purposes at this time on this project.

Sincerely,

GHD



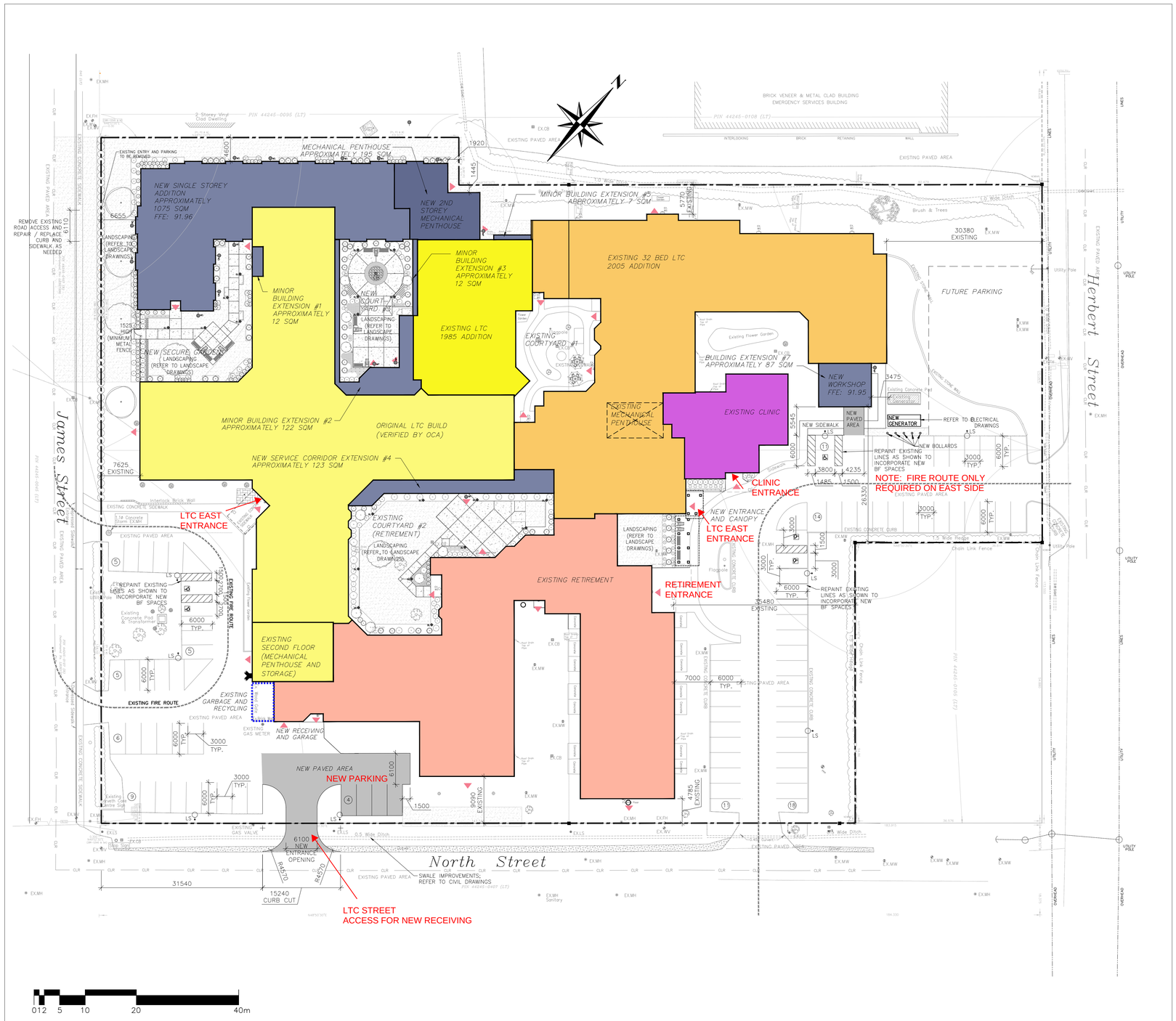
Roland Roovers, P.Eng.
Senior Manager, Transportation Planning
+1 905 752-4348
roland.roovers@ghd.com

Attach. Appendices A-D

RR/hs

Appendix A

Site Plan


James Street
Herbert Street
North Street
NEW SINGLE STOREY ADDITION APPROXIMATELY 1075 SQM FFE: 91.96
NEW 2ND STOREY MECHANICAL PENTHOUSE
MECHANICAL PENTHOUSE APPROXIMATELY 195 SQM
MINOR BUILDING EXTENSION #5 APPROXIMATELY 7 SQM
MINOR BUILDING EXTENSION #3 APPROXIMATELY 12 SQM
MINOR BUILDING EXTENSION #1 APPROXIMATELY 12 SQM
MINOR BUILDING EXTENSION #2 APPROXIMATELY 122 SQM
NEW SERVICE CORRIDOR EXTENSION #4 APPROXIMATELY 123 SQM
EXISTING 32 BED LTC 2005 ADDITION
EXISTING LTC 1985 ADDITION
EXISTING CLINIC
BUILDING EXTENSION #7 APPROXIMATELY 87 SQM
NEW WORKSHOP FFE: 91.95
EXISTING MECHANICAL PENTHOUSE
EXISTING COURTYARD #1
NEW COURTYARD #2
EXISTING COURTYARD #2 (RETIREMENT)
EXISTING RETIREMENT
EXISTING SECOND FLOOR (MECHANICAL PENTHOUSE AND STORAGE)
NEW SECURE GARDEN
FUTURE PARKING
NEW PAVED AREA
NEW GENERATOR
NEW SIDEWALK
NEW BOLLARDS
NEW ENTRANCE AND CANOPY
NEW RECEIVING AND GARAGE
NEW PARKING
CLINIC ENTRANCE
LTC EAST ENTRANCE
RETIREMENT ENTRANCE
LTC STREET ACCESS FOR NEW RECEIVING
NOTE: FIRE ROUTE ONLY REQUIRED ON EAST SIDE
EXISTING FIRE ROUTE
EXISTING GARBAGE AND RECYCLING
REMOVE EXISTING ROAD ACCESS AND REPAIR / REPLACE CURB AND SIDEWALK AS NEEDED
REPAINT EXISTING LINES AS SHOWN TO INCORPORATE NEW BF SPACES
LANDSCAPING (REFER TO LANDSCAPE DRAWINGS)
EXISTING ENTRY AND PARKING TO BE REMOVED
EXISTING PAVED AREA
EXISTING CONCRETE CURB
EXISTING CONCRETE SIDEWALK
EXISTING GAS METER
EXISTING GAS VALVE
EXISTING PAVED AREA
BRICK VENEER & METAL CLAD BUILDING EMERGENCY SERVICES BUILDING
PIN 44245-0096 (LT)
PIN 44245-0108 (LT)
PIN 44245-0406 (LT)
PIN 44245-0407 (LT)
2 Storey Vinyl Clad Dwelling
Brush & Trees
Utility Pole
Chain Link Fence
Interlock Brick Wall
Existing Concrete Pad
Existing Flower Garden
Existing Shed
Existing Sign
Existing Transformer
Existing Concrete Pad
Existing Flagpole
Existing Concrete Curb
Existing Concrete Sidewalk
Existing Paved Area
Existing Gas Meter
Existing Gas Valve
Existing Concrete Curb
Existing Concrete Sidewalk
Existing Paved Area
Existing Concrete Pad
Existing Concrete Curb
Existing Concrete Sidewalk
Existing Paved Area

Appendix B

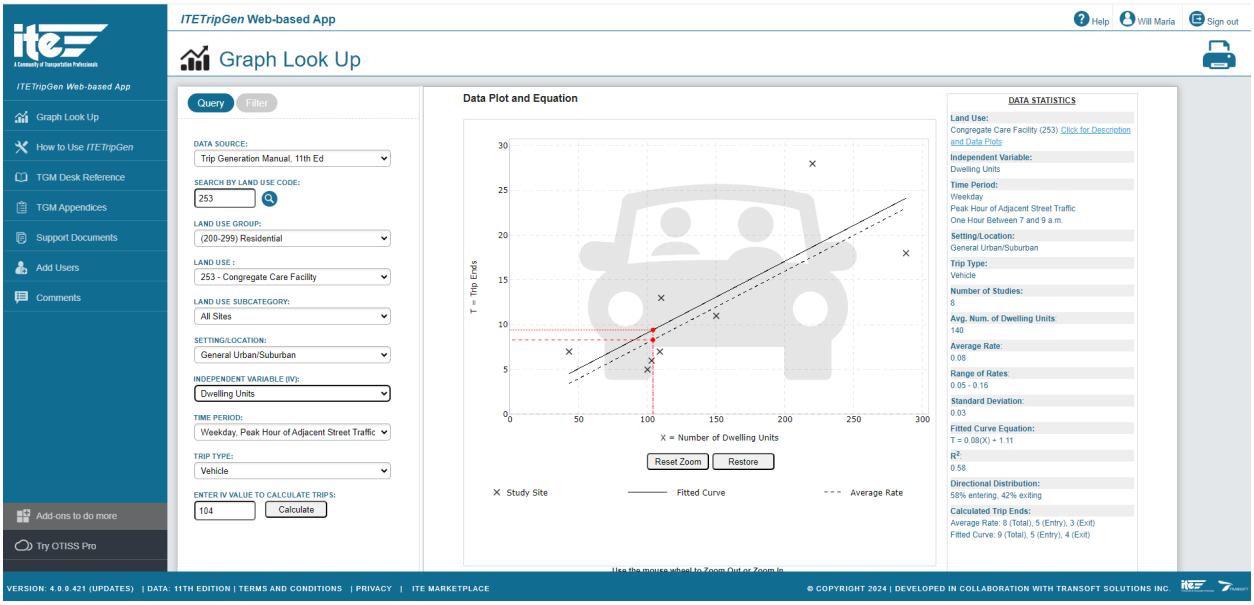
Trip Generation

Carveth Care Centre

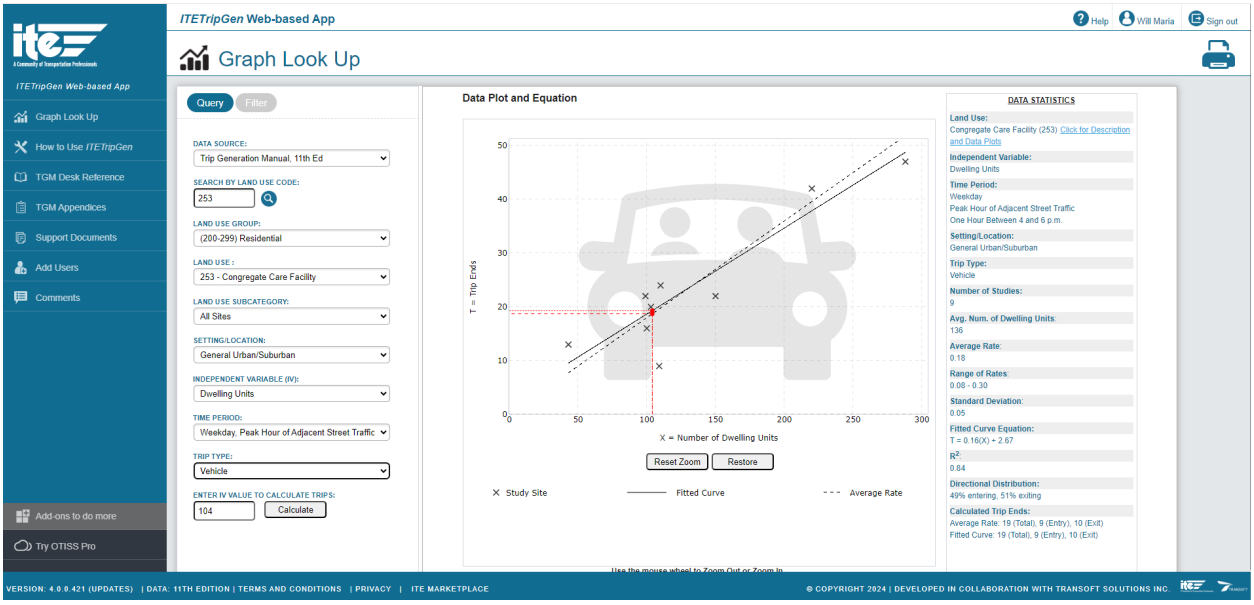
ITE Trip Generation

104 Congregate Care Dwelling Units

AM Peak Hour



PM Peak Hour

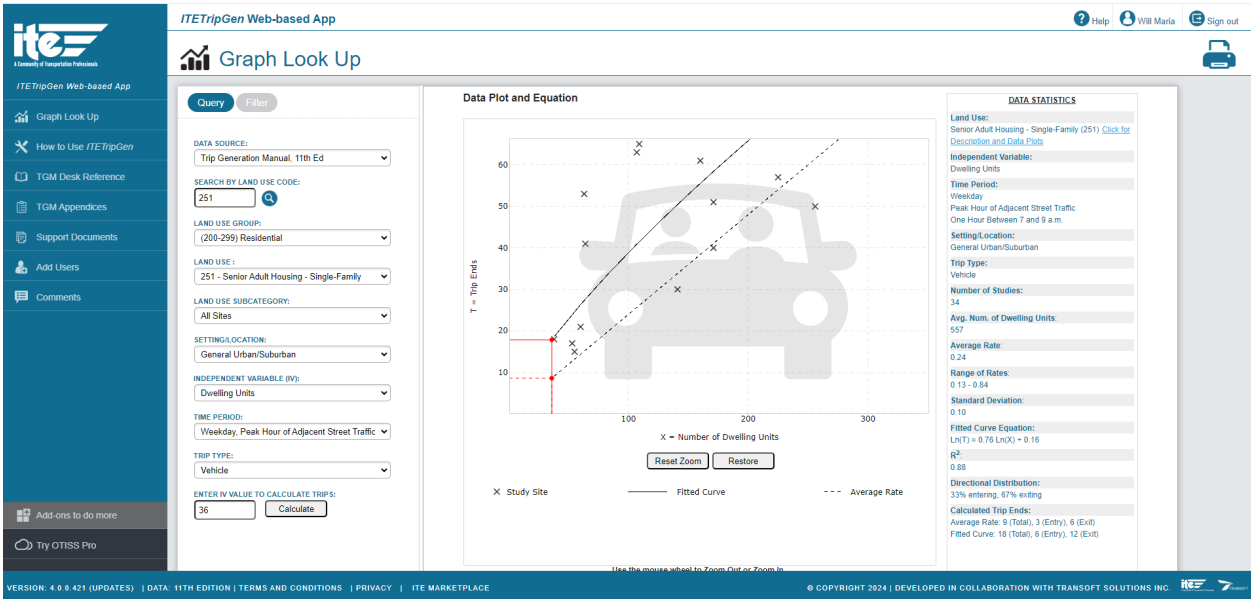


Carveth Care Centre

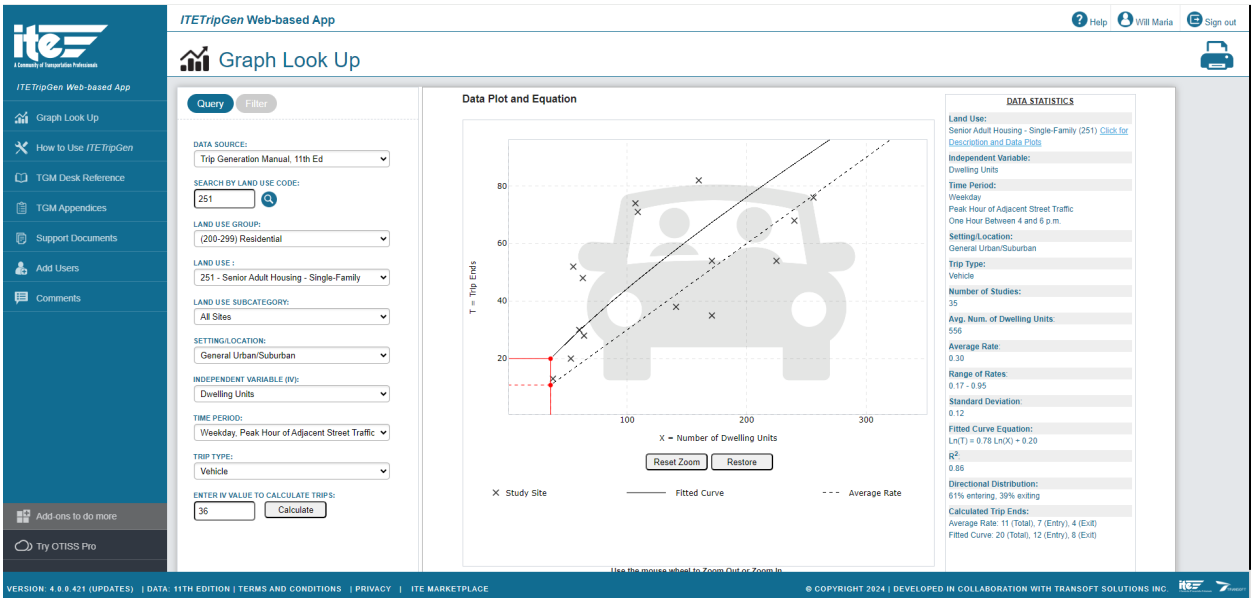
ITE Trip Generation

36 Retirement Dwellings

AM Peak Hour



PM Peak Hour

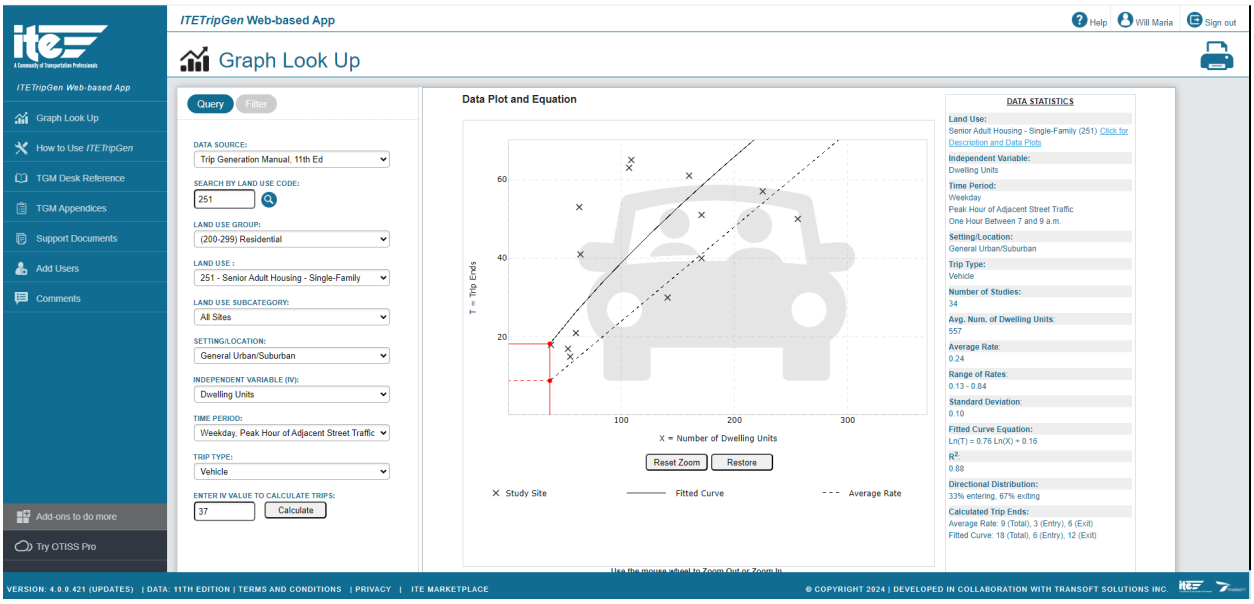


Carveth Care Centre

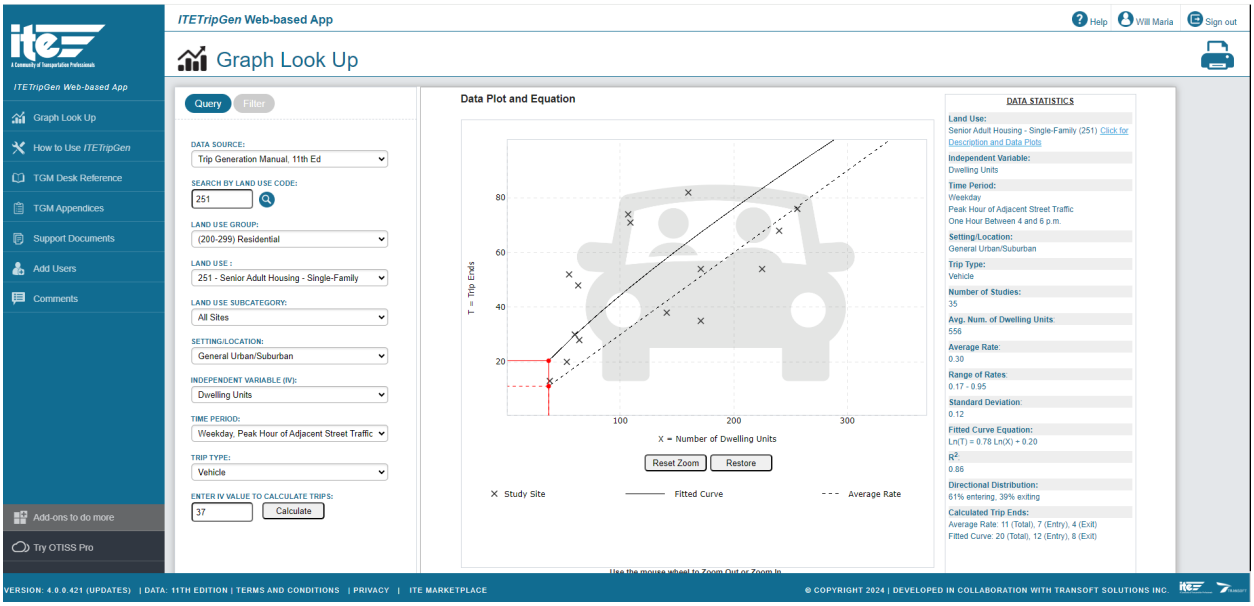
ITE Trip Generation

37 Retirement Dwellings

AM Peak Hour



PM Peak Hour



Appendix C

Zoning Parking Review

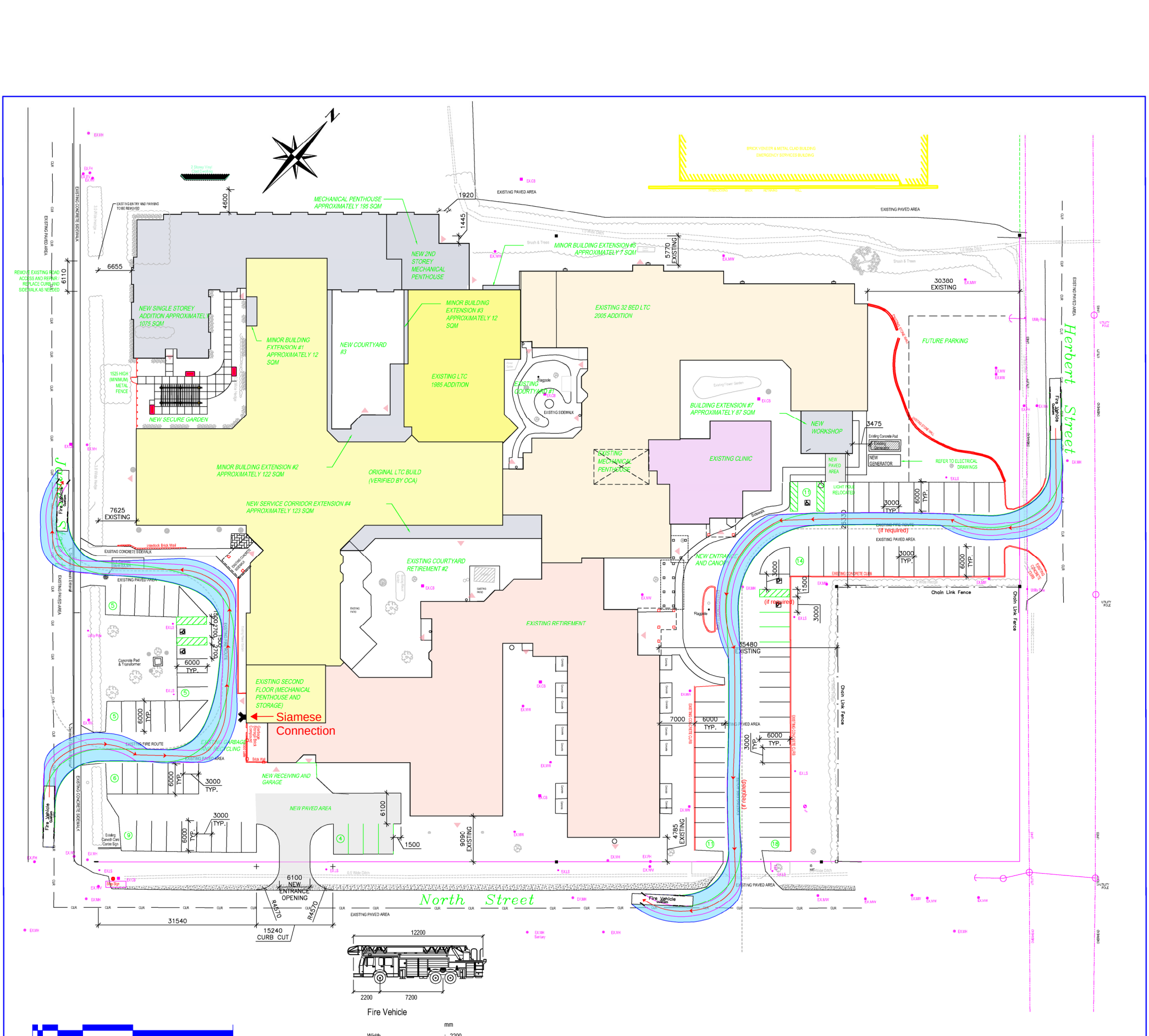
Gananoque Zoning Parking Review

PARKING CALCULATIONS

LTC REQUIRED PARKING	0.16/BED	0.166X104=18 SPACES
RET REQUIRED PARKING	0.5/UNIT	0.5X37=19 SPACES
STAFF PARKING	0..25/STAFF	0.25x40=10 SPACES
CLINIC	6/DOCTOR	6x2=12 SPACES
REQUIRED PARKING		18+19+10+12=59 SPACES
EXISTING PARKING = 102 SPACES		79 EXISTING TO REMAIN SPACES
NEW PARKING		4 NEW SPACES
NEW ACCESSIBLE PARKING SPACES		5 NEW SPACES
TOTAL PARKING		79+4+5=88 TOTAL SPACES
REQUIRED ACCESSIBLE PARKING SPACES		5% = 5 SPACES
PROVIDED ACCESSIBLE PARKING SPACES		5 SPACES
PROPOSED FUTURE PARKING SPACES		19 SPACES

Appendix D

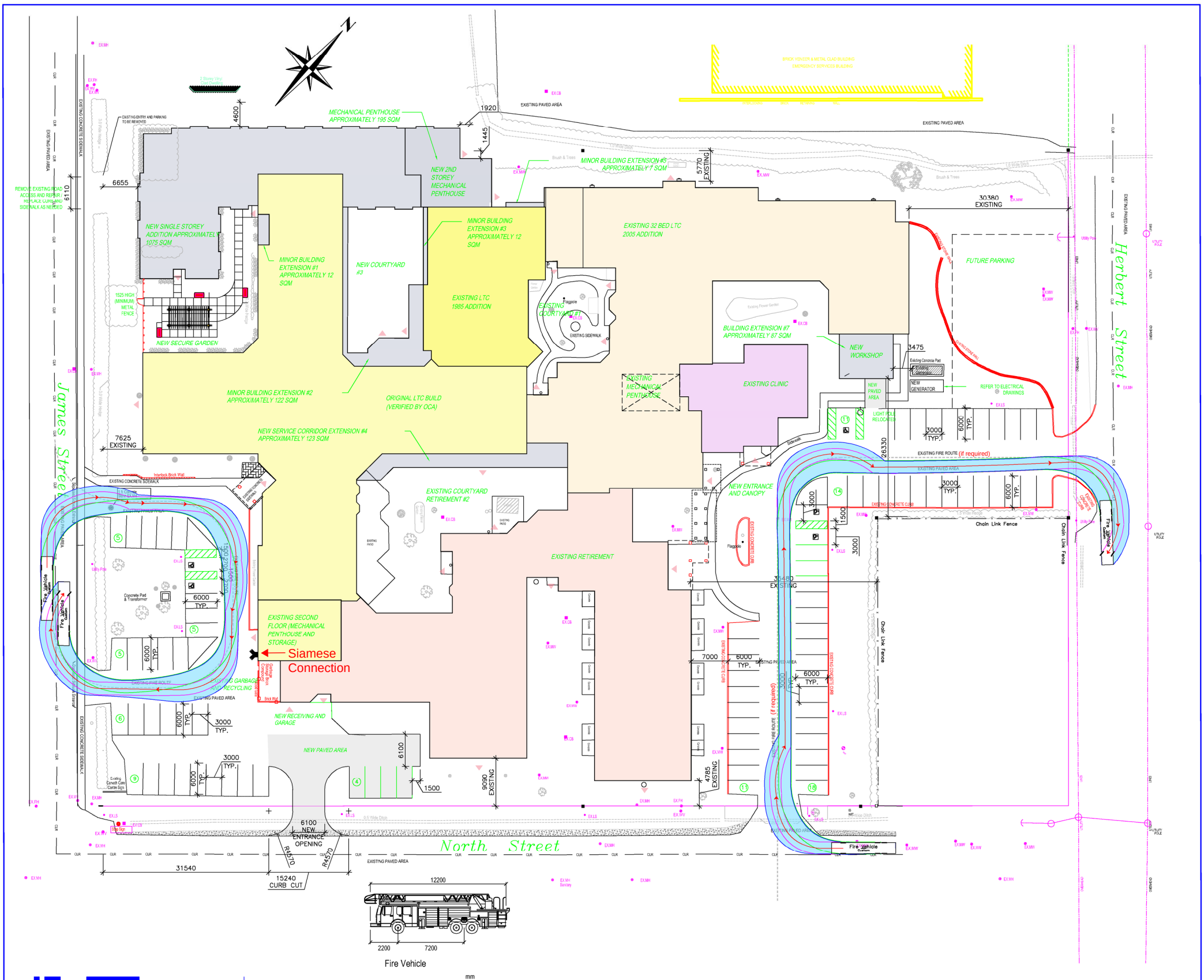
Vehicle Sweep Path Review



CIRCULATION REVIEW - CARVETH CARE CENTRE, GANANOQUE

FIRE TRUCK - 1

Figure AT-1	
Project No.	12643571
Date	May 30, 2024

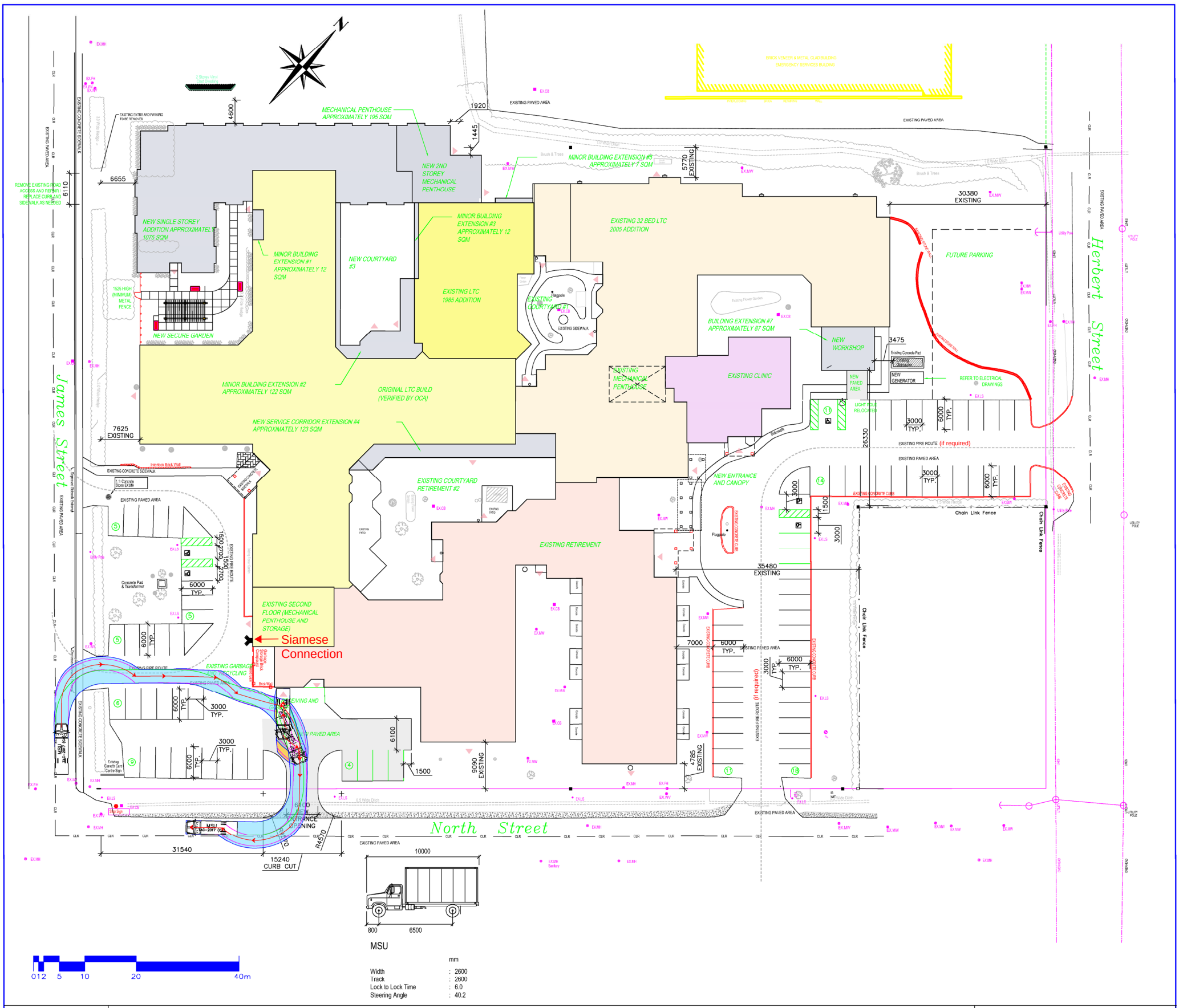


GHD

CIRCULATION REVIEW - CARVETH CARE CENTRE, GANANOQUE

FIRE TRUCK - 2

Figure AT-2	
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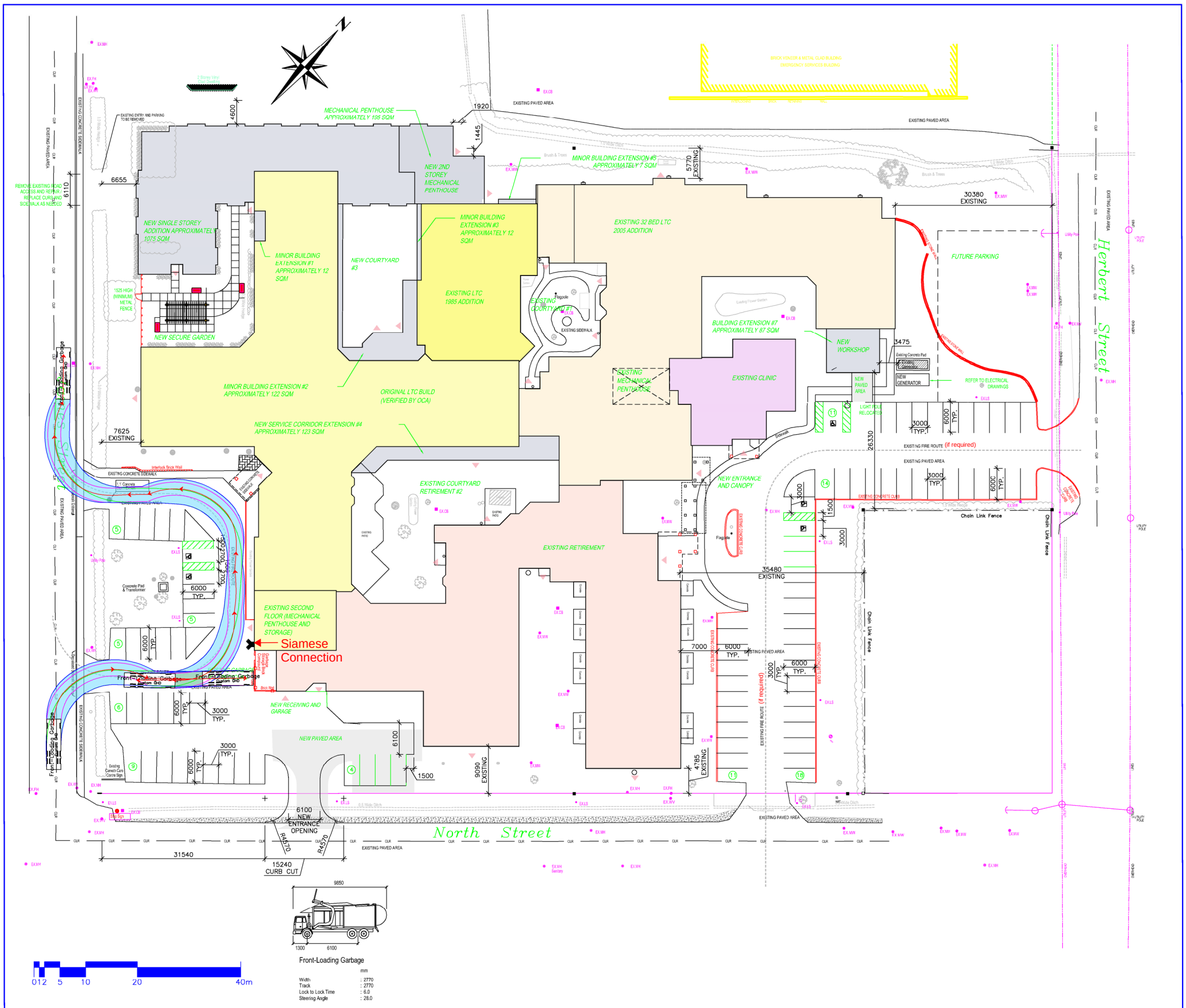


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CIRCULATION REVIEW - Carveth Care Centre, Gananoque

MEDIUM-SINGLE UNIT (MSU) TRUCK

Figure AT-3	
Project No.	12643571
Date	May 30, 2024



CIRCULATION REVIEW - Carveth Care Centre, Gananoque

GARBAGE TRUCK

Figure AT-4	
Project No.	12643571
Date	May 30, 2024