



June 2014

REPORT

Servicing Report 175 St. Lawrence Street Town of Gananoque, Ontario

Submitted to:
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REPORT



Report Number: 1403457 (4000)

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1.0 INTRODUCTION

Golder Associates Ltd. (Golder) was retained by Island Harbour Club Inc. to prepare a servicing report for the proposed mixed-use condominium development (The Island Harbour Club) located at 175 St. Lawrence Street, in the Town of Gananoque, Ontario (the “Site”). This report has been prepared in support of the Application for Development Permit to the Town of Gananoque.

The Site is a rectangular parcel of land approximately 0.58 ha in size, bounded by St. Lawrence Street to the northwest, Kate Street to the southwest, Market street to the northeast, and Water St. to the southeast. At the time of this study, there was a vacant one and two storey building on the north portion of the Site. The remainder of the Site is asphalt paved parking.

The proposed development consists of a mixed-use condominium development with a coffee shop, restaurant, six commercial suites, and 56 residential suites. The footprint of the constructed development is expected to be approximately 0.46 ha around a piazza consisting of a raised sundeck, landscaped planters, gardens, and water fountain features.

The Site will be serviced through municipal water and sanitary services. Stormwater runoff will be collected and transported through existing municipal storm sewers.

2.0 STORMWATER

2.1 Site

The existing Site cover is predominantly asphalt parking with the exception of a building on the north corner. The proposed development will include a greater percentage of permeable surface area, and is expected to result in a net reduction in post-development flows. Therefore, no stormwater detention should be required.

2.2 Pre-Development Drainage

Pre-development drainage on the Site is via sheet flow from various areas of the asphalt parking surface, and intercepted drainage from the rooftop of the north building. The northern building (Area 100) accounts for approximately 0.07 ha of the property and directs eavestrough captured water to the sidewalk at the intersection of St. Lawrence Street and Market Street where it enters a catchbasin adjacent to the curb.

From the asphalt area, drainage generally flows to one of two areas at the Site boundary. Area 101 encompasses approximately 0.51 ha of the property. The majority of this area discharges into the catchbasin at the intersection of St. Lawrence Street and Kate Street, where a 400 mm PVC pipe discharges to another catchbasin across the street, before ultimately being discharged into the St. Lawrence River. Representative slope of the drainage area is approximately 3%.

The remainder of Area 101 is a smaller area in the east portion of the Site draining east to a catchbasin located at the intersection of Market Street and Water Street. This drainage area has a representative slope of 0.15%.

A runoff coefficient of 0.90 has been assigned to all pavement and roof areas.



2.3 Post-Development Drainage

The development proposes to utilize the existing lead from the catchbasin located at the intersection of St. Lawrence Street and Kate Street as the building service. A new catchbasin/maintenance hole will be installed in the low point of the asphalt street for drainage of Kate and St. Lawrence Streets.

Calculations completed by Eastern Engineering Group Inc. (Eastern Engineering Group), based on a 49,000 square feet (0.46 ha) building footprint, estimate stormwater flows of 1,700 gpm (107 L/s).

2.4 Quantity Control

The storm sewer system will ultimately discharge into the St. Lawrence River, which is approximately 20 m away from the west corner of the property boundary. The St. Lawrence Street and Kate Street catchbasin was selected due to its proximity to the eventual discharge point, and because this catchbasin does not receive water from any other upstream sources. As a result, it should be sufficient to manage the volume of stormwater anticipated from the development.

2.5 Quality Control

The proposed site development includes more pervious surfaces than the existing site. As well, large amounts of roof area will be directly connected to the storm service and is expected to have limited particulate. As a result, additional quality control measures should not be required. It is recommended to implement a maintenance and inspection program for the catchbasin at the intersection of St. Lawrence Street and Kate Street.

2.6 Sediment and Erosion Control

Sediment and erosion control measures will be required for construction. These include:

- Minimizing areas to be disturbed;
- Installation of silt barriers on all catchbasins; and,
- Constructing sediment traps and basins.

3.0 SANITARY SERVICING

The sanitary service from the Island Harbour Club will be connected to an existing municipal sanitary MH at the corner of St. Lawrence and Market Street.

Estimated sanitary loads, calculated by Eastern Engineering Group, are 180 gpm (11.36 L/s). They are based on the following:

- One coffee shop with three single washrooms and small kitchen facility;
- One restaurant with one single staff washroom, two public washrooms (two waterclosets each), and kitchen facilities;
- Six commercial suites with two single washrooms and staff room sink in each suite; and,
- 56 residential suites each with two bathrooms, kitchen sink, dishwasher and clothes washer.

It is understood that municipal sanitary service capacity has been confirmed with the Town of Gananoque Public Works Department.



4.0 WATER SERVICING

As requested by the Town, the proposed development will re-use the existing service for the existing building located at the northeast corner of the Site. The existing service is a 200 mm fire service connected to a 350 mm feeder main located along St. Lawrence Street.

Estimated domestic water service demands, calculated by Eastern Engineering Group, are 220 gpm (13.88 L/s). The estimated demands are based on the same conditions as the sanitary service calculations. It is understood that municipal domestic water service capacity has been confirmed with the Town of Gananoque Public Works Department.

5.0 SUMMARY

The development of the Island Harbour Club is proposed using municipal sanitary and water servicing. In general, drainage conditions will remain consistent or improved.

6.0 CLOSURE

We trust that the information presented in this report meets your requirements. Should you have any questions, please contact the undersigned.

GOLDER ASSOCIATES LTD.

Daniel Hsia, B.A.Sc., EIT
Environmental Consultant

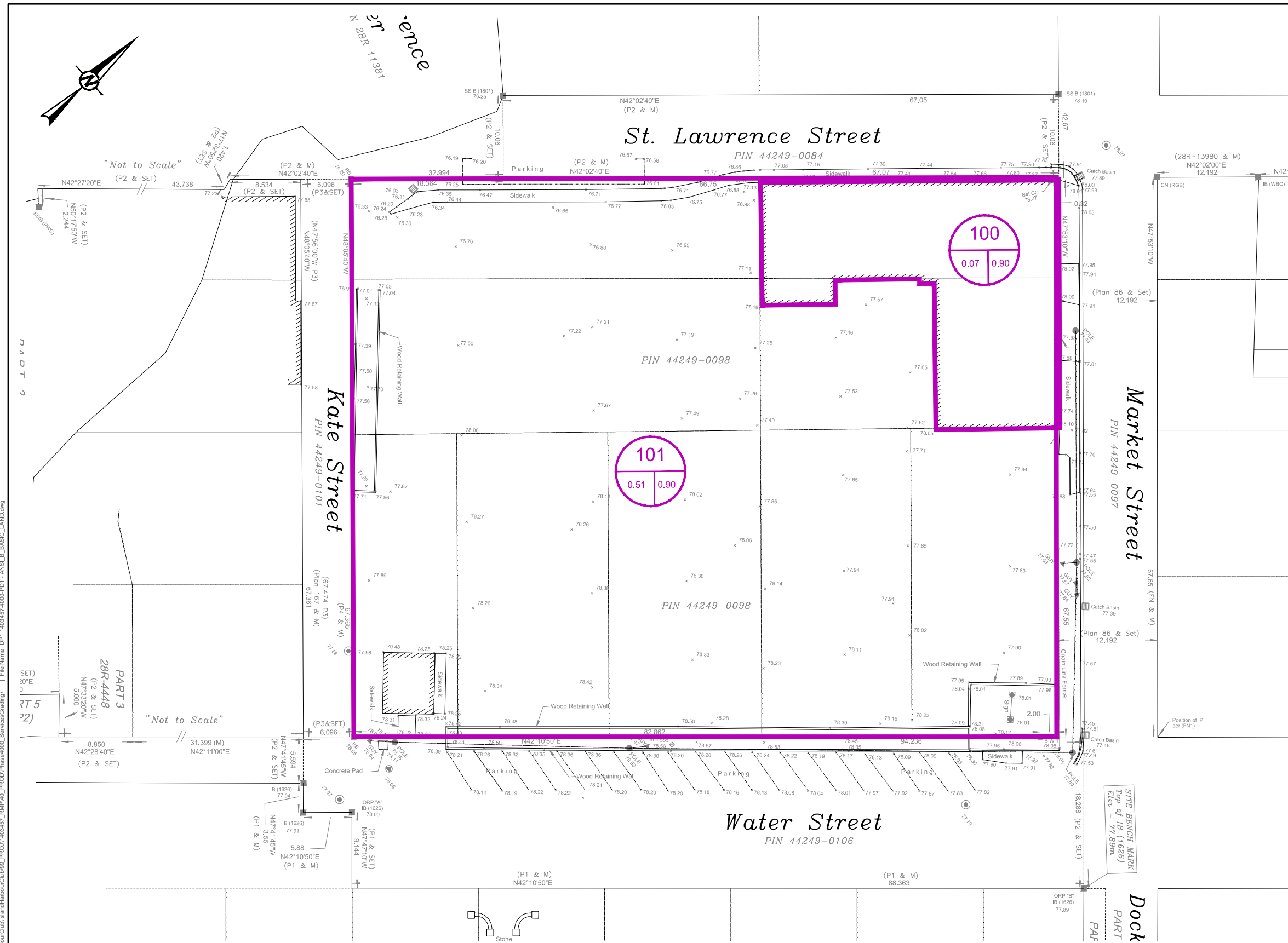


Douglas V. Kerr, B.E.Sc., P.Eng.
Associate, Senior Civil Engineer

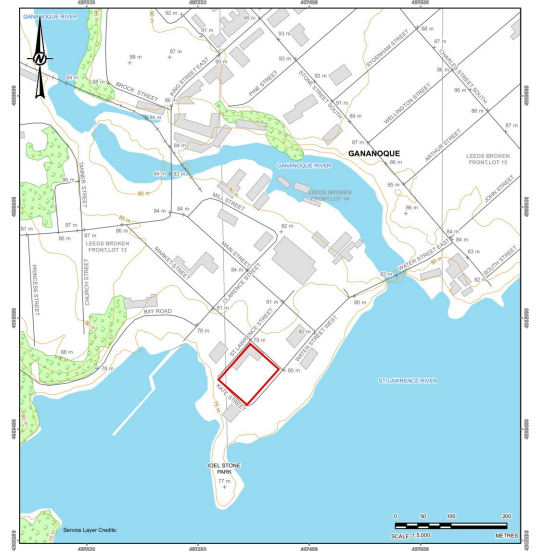
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KEY MAP



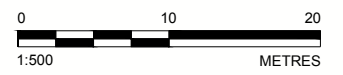
LEGEND

- DRAINAGE AREA BOUNDARY
- DRAINAGE AREA I.D. No.
- XX RUNOFF COEFFICIENT
- XX.XX X.XX AREA (ha)

REFERENCE

1. SURVEY AND TOPOGRAPHICAL INFORMATION PROVIDED IN A DIGITAL FORMAT BY HOPKINS CORMIER & CHITTY SURVEYING CONSULTANTS INC. PROJECT No. 2012-265, SURVEY WAS COMPLETED ON NOVEMBER 30, 2012.
2. ELEVATIONS ARE GEODETIC AND ARE DERIVED FROM BENCHMARK No. 0011920U2236 BEING A BOLT IN THE NORTHEAST WALL OF THE FORMER CUSTOM HOUSE, 0.3 METRES FROM THE EASTERLY CORNER AND IN SECOND COURSE OF STONEMWORK BELOW THE WATER TABLE. SAID BENCHMARK HAVING A VALUE OF 78.38 METRES CGVD-1928:1978.
3. BEARINGS ARE UTM GRID, DERIVED FROM SIMULTANEOUS GPS OBSERVATIONS FROM ORP "A" TO ORP "B", UTM ZONE 18, (75° WEST LONGITUDE) NAD83 (ORIGINAL).

NOT FOR CONSTRUCTION



CLIENT
RMP CONTRACTING AND DEVELOPMENT

PROJECT
GANANOQUE ISLAND HARBOUR CLUB

CONSULTANT	YYYY-MM-DD	2014-05-23
	PREPARED	MLF
	DESIGN	DVK
	REVIEW	
	APPROVED	

TITLE
PRE-DEVELOPMENT PLAN

PROJECT No.	PHASE	Rev.	FIGURE
1403457	4000	A	DP1



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