



December 22, 2021

Teak Developments
31 Woodview Crescent
Ottawa, Ontario
K1B 3B1

RE: Technical Memorandum – Sufficiency of Municipal Services
In support of a Zoning Application
Residential Apartment Buildings - 6173 Renaud Road, Ottawa, Ontario

Attention: Mr. George Elias

Introduction

Kollaard Associates was retained by Mr. George Elias of Teak Developments to prepare a technical memorandum with respect to the sufficiency of the existing municipal services to meet the demands of the proposed development at 6173 Renaud Road in support of a Zoning Application.

Background

Kollaard Associates Inc completed a Site Servicing and Stormwater Management Report (SSWM Report) dated June 30, 2020 together with associated studies and civil engineering drawings in support of an application for a residential development at 6173 Renaud Road (City of Ottawa SPC Application File # D07-12-20-0094). This report was reviewed by the City of Ottawa and review comments were provided. The SSWM Report was revised in consideration of the review comments and a revised report dated March 29, 2021 was resubmitted.

The proposed residential development supported by the March 29, 2021 document was to consist of 32 residential units in two blocks of 16 units. The blocks of units were to consist of stacked rowhouse units with 2 rows of 4 back to back units on each level. The rowhouse blocks were located on the east side of the site with parking provided along the west side of the site and between the rowhouse blocks. The proposed development was to be serviced with private sanitary, water and storm services. The private sanitary and storm services were to connect to TrailsEdge Way. The proposed water service was to connect to TrailsEdge Way and be looped to Renaud Road by means of the existing water service. The west parking area had access driveways to both Renaud Road and TrailsEdge Way.



Proposed Development

The proposed development and associated site plan was adjusted as a result of the review comments received following the second submission. In general, the main adjustments to the proposed development and site plan consisted of the following:

- The unit count is reduced to 24 units from 32 units - The typology has changed for the block of units on TrailsEdge Way – they are now back to back townhouses – not stacked townhouses
- Parking has been reduced from 38 to 29 spaces
- Garbage is now an earth bin and is not located abutting either neighboring property
- By reducing the units and parking spaces, the access to Renaud Road was eliminated and replaced with greenspace and tree planting
- The eastern hedge will be preserved

Sufficiency of Municipal Services

Water and Sanitary

The previously submitted SSWM Report was prepared in support of a residential development to consist of 32 units divided between two 16 unit buildings. The currently proposed development will consist of 24 units divided between one 16 unit building and one 8 unit building. The 16 unit building will remain the same as previously proposed. The 8 unit building will be reduced in size.

Since the number of units was decreased, both the water and sanitary demands will be decreased. The maximum fire flow demand will remain unchanged as one of the proposed buildings remains unchanged. Since the previously submitted SSWM Report satisfactorily proved that there was sufficient capacity within the existing municipal services to accommodate the water and sanitary servicing demands of the proposed 32 unit development, there will be sufficient capacity within the existing municipal services to accommodate the water and sanitary requirements of the proposed 24 unit development.

Storm

Previous Proposed 32 Unit Development

The previously submitted SSWM Report was designed with a stormwater management facility intended to attenuate the post development runoff from the site to a maximum of 85L/s/ha in accordance to the Master Servicing Study (MSS) - Gloucester East Urban Community (EUC) Infrastructure Servicing Study Update as prepared by Stantec Consulting Ltd, March 2005 for this community.



The previously proposed development, for which the SSWM Report was prepared, had an impervious ratio of 72.5 percent. Stormwater runoff in excess of the allowable release rate was to be detained on site and stored on the surface of the parking areas and in underground modular storage tanks. Discharge from the stormwater storage was at a restricted rate to TrailsEdge Way.

The previously submitted SSWM Report adequately demonstrated that there was sufficient storage capacity within the proposed stormwater management facility to accommodate the storage requirements resulting from the restriction to the allowable post development runoff rate. The SSWM Report also adequately demonstrated that the post development runoff from the proposed development would be restricted to less than or equal to the maximum allowable runoff rate from the site of 85 L/s/ha.

As indicated in the review comments received following the resubmission, the SSWM Report proved that there was sufficient capacity within the municipal storm sewer to receive the runoff from the site when restricted to the allowable rate of 85 L/s/ha. However, in accordance with the MSS, this capacity is available within the Renaud Road storm sewer not necessarily within the TrailsEdge Way storm sewer.

The SSWM Report did not satisfactorily prove that there is sufficient capacity within the TrailsEdge Way storm sewer. The storm sewer along TrailsEdge Way is currently designated as the receiving service for the storm discharge from the site. Kollaard Associates Inc has placed a request with the City of Ottawa Information Center to obtain the stormwater management plans and report for the TrailsEdge Way subdivision in order to assess the capacity of the existing 825 mm sewer along TrailsEdge Way to either prove or disprove its sufficiency to receive the stormwater discharge from the proposed development at 6173 Renaud Road.

Current Proposed 24 Unit Development

Kollaard Associates will revise the SSWM Report in response to the review comments received from the previous submission and as a result of the revised site plan issued to support the current proposed 24 Unit Development.

The current proposed 24 Unit Development has an impervious area of about 50 percent. This decrease in impervious area will reduce the stormwater storage requirement and runoff volume. It will not have a significant effect to the maximum runoff rate from the site as the maximum runoff rate will continue to be restricted to less than or equal to the maximum allowable rate of 85L/s/ha.



As indicated above, once Kollaard has received the relevant stormwater management documents with respect to the TrailsEdge Way Subdivision, Kollaard will assess the capacity of the existing TrailsEdge Way storm sewer to receive the discharge from the site. Dependent on the results of the assessment, the discharge from the site will either remain directed to TrailsEdge Way or will be redirected to the storm sewer along Renaud Road.

In accordance with the MSS, the municipal storm sewer along Renaud Road has been designed with sufficient capacity to receive the allowable discharge from the proposed development Site. As such, the existing municipal storm services are sufficient to meet the stormwater demands from the site.

CONCLUSIONS

The current proposed development consisting of 24 Units for residential purposes represents a reduction from the sanitary and water requirements placed on the municipal services by the previously proposed 32 unit development.

The previously submitted SSWM Report demonstrates that there is sufficient capacity within the municipal water and sanitary services along TrailsEdge Way to meet the water and sanitary servicing requirements from the proposed 24 unit development since it demonstrated sufficient capacity for the previously proposed 32 unit development.

The previously submitted SSWM Report demonstrates sufficient capacity within the municipal storm sewer along Renaud Road provided the runoff from the site is restricted less than or equal to the allowable runoff rate of 85L/s/ha in accordance with the MSS.

The previously submitted SSWM Report does not prove or disprove capacity within the TrailsEdge Way storm sewer. The proposed storm sewer connect location from the site may have to be relocated from TrailsEdge Way to Renaud Road dependent on results of an additional assessment.



We trust that this memorandum provides sufficient information for your present purposes. If you have any questions concerning this memorandum or if we can be of any further assistance to you on this project, please do not hesitate to contact our office.

Sincerely,
Kollaard Associates, Inc.



Steven deWit, P.Eng.