

D.G. Biddle & Associates Limited

consulting engineers and planners

96 KING ST. E., OSHAWA, ONTARIO L1H 1B6 PHONE (905) 576-8500 FAX (905) 576-9730 e-mail: info@dgbiddle.com

March 12, 2021

Tribute Communities 1815 Ironstone Manor, Unit 1 Pickering, Ontario L1W 3W9

Attention: Mr. Paul Watson

Re: Functional Servicing Report and Stormwater Brief

Temporary Sales Office

Town of Cobourg
Our File:121028

Dear Sir:

In support of the Site Plan Approval for the Temporary Sales Office, North side of Elgin Street east of Brook Road, we herewith submit the following Functional Servicing Report and Stormwater Brief. This document addresses the Town of Cobourg's drainage, servicing and stormwater concerns/requirements. This document includes reporting on Grading, Servicing, Drainage and Erosion and Sediment Controls for the proposed temporary sales office.

Please contact our office at your convenience, should you have any questions or require additional information on the enclosed report.

R.M.P. LAROCOUE

Yours truly,

D.G. BIDDLE & ASSOCIATES LIMITED

R.M. Larocque, P.Eng.

RML/rml Encl.

OVINCE OF ONE

D.G. BIDDLE & ASSOCIATES LIMITED MUNICIPAL ENGINEERS AND PLANNERS

FUNCTIONAL SERVICING REPORT AND STORMWATER BRIEF

FOR

TRIBUTE COMMUNITIES

TEMPORARY SALES OFFICE (north side of Elgin Street east of Brook Road)

TOWN OF COBOURG

PROJECT NO. 121028

DATE: March 2021

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121028-SG-1 - Temporary Sales Office Site Grading Plan 121028-ES-1 - Erosion and Sediment Control Plan

1.0 INTRODUCTION

The proposed Tribute Communities temporary sales office is proposed to be located on the north side of Elgin Street just east of Brook Road North. The temporary sales office is proposed in support of the Tribute residential subdivision located north of Elgin Street generally located just east of the built up community. The sales office will be located in the west portion of a farm field. Locally, the site drains in a westerly direction towards a tributary of Brook Creek.

This report will address sanitary drainage, water supply and stormwater drainage for the temporary sales office and the parking area. Servicing and drainage are to be in general accordance with the requirements of the Town of Cobourg.

2.0 GRADING

2.1 Existing Grading

The subject property is positioned at the western edge of a farm field which displays sheet flows that drain locally from east to west. Further to the west of the sales office property is the receiving watercourse a tributary of Brook Creek.

2.2 Proposed Grading

The temporary sales office grading will capture the development drainage and convey drainage from the parking area and sales office roof to the west via the introduction of shallow swales. The proposed swales will drain from east to west. In order to minimize the size of the proposed swales we have introduced a proposed topsoil berm on the east side of the parking area which will intercept and direct (deflect) the farm field drainage to the north and away from the proposed swale system. The proposed grading will be such that the western limit of disturbed area will be a minimum of 15.0m east of the local Regulatory Flood Elevation of the nearby tributary to Brook Creek.

3.0 WATER SUPPLY

3.1 Existing Water Supply

The property where the sales office is located does not have access to a piped Town watermain or a well for water supply.

3.2 Proposed Water Supply

In order to provide convenience washroom facilities for staff and visitors to the temporary sales office a buried water storage tank is proposed. The water storage tanks will be filled from time to time via hauled water, this water source will not provide a potable water supply to the temporary sales office. For potable water needs a water cooler is proposed to use bottled water.

4.0 SANITARY

4.1 Existing Sanitary Service

The property where the sales office is located does not have access to a piped Town sanitary sewer.

4.2 Proposed Sanitary Service

In order to provide convenience washroom facilities for staff and visitors to the temporary sales office a buried sanitary storage tank, Class 5 sanitary system is proposed. The sanitary storage tanks will have a minimum storage volume of 9000 litres. The sanitary storage tank will receive waste from the temporary sales office washrooms by a piped gravity connection. The use of a storage system is being considered knowing the temporary nature of the sales office which will typically remain in operation for 3 to 5 years.

The storage tanks for the sanitary waste will be constructed with the requisite high level alarms which will alert the temporary sales office staff that the tanks need to be emptied. The sanitary storage tank will be emptied by a Licenced Sewage Hauler, from time to time especially during high level alarm mode. The contact information for the Licenced Sewage Hauler should be displayed at the alarm panel to ensure prompt attention to the high level alarm situation.

5.0 STORMWATER

5.1 Existing Drainage System

As mentioned above, the local drainage pattern of the farm field where the temporary sales office is proposed consists of sheet flows which drain from east to west. The farm field drainage is directed westward toward a tributary of the Brook Creek watershed.

5.2 Proposed Drainage System

The proposed drainage system for the temporary sales office will consist of sheet flows within the proposed parking area which will be guided to shallow swales. The shallow swales will drain from east to west. The temporary sales office roof drainage will also be directed to the shallow swales. The swales will discharge to a proposed stormwater ponding area to the west of the temporary sales office. The stormwater ponding area will be created through the introduction of a topsoil berm complete with a rip rap check dam to permit the slow release of collected rainfall. The stormwater ponding area and the extents of grading for the temporary sales office and parking area will be restricted and situated at a minimum distance of 15.0m east of the Regulatory Floodline associated with the nearby tributary of Brook Creek.

In order to manage and minimize the approaching farm field drainage from the east a shallow topsoil berm is proposed on the east side of the parking area. This shallow berm will intercept and direct (deflect) the farm field drainage to the north and away from the proposed swale system. The topsoil berm will minimize the sizing of the proposed shallow swales and stormwater ponding area.

A new culvert will be required to facilitate access to the temporary sales office for construction as well as for staff/customer parking. A 400mm CSP culvert has been included on the grading plan. The driveway culvert will need to be coordinated through the Town of Cobourg.

6.0 TEMPORARY SEDIMENT AND EROSION CONTROLS

During the construction period, the removal of natural vegetation causes the transport of large amounts of sediment during rainfall events. To minimize the sediment laden storm water leaving the site during construction, it is recommended the following sediment control techniques be implemented.

- 1. Construction Vehicle Access
- 2. Perimeter Enviro Fence
- 3. Good Housekeeping Practices

The above techniques are illustrated on drawing 121028 ES-1.

7.0 CONCLUSIONS

The preceding servicing report and stormwater brief identifies the method in which the proposed temporary sales office can be serviced. The following conclusions have been determined for the temporary sales office servicing and stormwater drainage:

- Water service for the temporary sales office is proposed through the inclusion
 of a below grade storage tank and hauled water. Any potable water needs will
 be supplied through a water cooler and bottled water.
- Sanitary service for the temporary sales office is proposed through the inclusion of a below grade Class 5 sanitary system.
- Stormwater will be managed through the use of berms and swales to direct, collect and convey drainage to the west. The inclusion of the stormwater ponding area will collect and detain stormwater and slowly release drainage to the west.
- Temporary sediment controls will be implemented during construction.

We trust the Town of Cobourg concur with the above reporting and conclusions. We respectfully request that the Town provide the necessary permits and approvals which will allow for the construction of the temporary sales office in support of the Tribute Communities subdivision.