

# FUNCTIONAL SERVICING REPORT PROPOSED COMMERCIAL DEVELOPMENT WITHIN FOREST GLADE NORTH PLANNING AREA CATHERINE STREET, WINDSOR, ON

### PREPARED FOR:

ROCK DEVELOPMENTS INC. 19 AMY CROFT DRIVE, UNIT #201 LAKESHORE, ON N9K 1C7

## PREPARED BY:

ALEO ASSOCIATES INC. 325 DEVONSHIRE ROAD, SUITE 500 WINDSOR, ONTARIO N8Y 2L3



DATE: AUGUST 9, 2024 PROJECT No.: 8500

#### **TABLE OF CONTENTS**

1.0	INTRODUCTION	. 1
2.0	WATER SERVICING	. 1
3.0	SANITARY SERVICING	. 1
4.0	STORM SERVICING & STORMWATER MANAGEMENT	. 1
5.0	CONCLUSION	. 2

#### **LIST OF FIGURES**

Figure 1 Site Location

#### **LIST OF DRAWINGS**

A1.0 Site Plan

#### 1.0 INTRODUCTION

Aleo Associates Inc. has been retained by ROCK Developments Inc. to prepare a functional servicing report for the proposed commercial development within the Forest Glade North Planning Area in the City of Windsor.

The property is legally described as Part of Lots 119 to 121, Concession 1, Parts 7, 8, 13 and 14, Plan 12R-26172. Refer to site location in Figure 1.

The property is undeveloped, consisting of a vacant open grass area. The proposed commercial development will consist of two commercial buildings and an asphalt paved parking lot.

This report has been prepared to demonstrate how the proposed commercial development will be serviced for water distribution, wastewater, and storm drainage. The report is provided to the Municipality of Windsor to assess the impact of this development on the existing infrastructure in reviewing the planning applications for which this report is prepared.

#### 2.0 WATER SERVICING

There is an existing 12" diameter municipal PVC watermain located at the Catherine Street cul-dec-sac. This 12" watermain will be extended through the new Catherine Street Road extension and along the frontage of the subject property. A new 8" diameter watermain connection will be made to the new 12" municipal watermain extension and will be used to service the development for both fire and domestic water.

#### 3.0 SANITARY SERVICING

There is an existing 18" diameter municipal concrete pipe sanitary sewer at the end of the Catherine Street culde-sac. The Forest Glade North lands are tributary to this sewer which flows east toward the trunk sewer along Lauzon Parkway. This 18" sewer will be extended through the new Catherine Street road extension and along the frontage of the subject property. The 18" sanitary sewer will be used to service the proposed commercial development through a new 8" diameter connection.

#### 4.0 STORM SERVICING & STORMWATER MANAGEMENT

The land of the subject property slopes from south to north and currently drains by overland flow to the Hawkins Municipal Drain located north of the site. The Hawkins Drain flows east to the Little River Municipal drain with an eventual outfall at the Detroit River.

The stormwater management system design for the Forest Glade North Service area is yet to be completed. At this time it is expected that the proposed development will drain to a municipal storm sewer that crosses through the subject land in an easement. The municipal storm sewer will discharge to a regional retention pond located on the north end of the site. The retention pond will provide both quantity and quality control.

Based on preliminary design of the Forest Glade North storm servicing and stormwater management system, the expected allowable release rate for the site will be equivalent to the flow associated with a 5 year frequency storm at a 90% impervious level. On-site storwater management for quantity control will be required for storm events greater than a 5 year frequency storm. On-site quality control will not be required. Stormwater management design shall follow the latest Windsor/Essex Stormwater Management Standards Manual.

Stormwater from the pond will drain to the Hawkins Municipal Drain through a new piped outlet and the flow will be restricted to the 2-year frequency storm pre-development flow rate.

#### 5.0 CONCLUSION

This functional servicing report has established how the proposed commercial development will be serviced with respect to water distribution, wastewater, and storm drainage without negatively impacting the existing municipal infrastructure.

A summary of the report's conclusions is the following:

- Water servicing for the development can be provided by the existing 12" diameter municipal watermain at the Catherine Street cul-de-sac which will be extended through the Catherine Street road extension.
- The Forest Glade North Planning Lands are tributary to the 18" diameter sanitary sewer along Catherine Street. This 18" diameter sewer will be extended through the Catherine Street road extension and will be used to service the commercial development through a new 8" diameter connection.
- Based on preliminary design of the Forest Glade North storm servicing and stormwater management system, the expected allowable release rate for the site will be equivalent to the flow associated with a 5 year frequency storm at a 90% impervious level.
- On-site stormwater management will be required for quantity control. Quality control will be accomplished at the regional stormwater management pond.
- Stormwater management design shall follow the latest Windsor/Essex Stormwater Management Standards Manual.

## FIGURE 1

SITE LOCATION





	ALEO ASSOCIATES INC.	AUG. 8, 2024  SCALE  NTS	PROPOSED COMMERCIAL DEVELOPMENT FOREST GLADE NORTH PLANNING AREA CATHERINE STREET, WINDSOR, ONTARIO	SHEET No.
325 DEVONSHIRE RD. SUITE 500, TELEPHONE (519) 254-7926		JPA  AUTOCAD REF.  8500.dwg	SITE LOCATION	PROJECT No.

# **DRAWINGS**

