

Functional Servicing Memo

Putnam Street Development

Project Location:

3174 Putnam Road, Thames Centre,
Putnam, ON N0L 2B0

Prepared For:

Putnam Road Holdings Inc.
2 Wasaga Road,
Brampton, ON L6X 3A8

Prepared by:

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1.0 Introduction

GRIT Engineering Inc. (GRIT) was retained by Putnam Road Holdings Inc. to complete a Functional Servicing Memo for 3174 Putnam Road in Thames Centre, Ontario.

The subject site is zoned as M1 (General Industrial), generally bounded by Highway 401 to the south, Putnam Road to the west, Breen Road to the north, and Agricultural lands to the east. See Appendix A for the *Sketch Illustrating Conceptual Layout* by Archibald Gray & McKay Ltd., dated September 27, 2022, for the site configuration and location.

This FSR recommends storm, sanitary, and water servicing; along with stormwater management strategies for the individual Sites. This report will discuss the available municipal infrastructure and how the proposed development can be serviced.

2.0 Sanitary Servicing

2.1 Sanitary Servicing

The Subject Site is proposed to be serviced using septic servicing. The design Average Daily Domestic Sanitary Flow is 350 Litres per hectare per day (section 5.1.1 of the *Engineering Design Standards* (EDS)), will be considered during detailed septic system design.

3.0 Water Distribution

3.1 Design Approach

Each Site will be individually serviced, existing infrastructure to be evaluated at the detailed design stage. Based on surrounding properties, it is assumed that no existing water servicing is available fronting Breen Road, therefore individual Site servicing is expected to be achieved using wells.

3.2 Fire-Flow Demand

Fire-Flow Demand will be determined during the detailed design stage for each individual Site, ensuring compliance with The Ontario Building Code (OBC) Volume 2, Section A-3.2.5.7, Section 3.2.5.7(1), and Section 7 of the EDS.

Fire-Fighting measures will be considered for the individual sites at the detailed design stage to satisfy the OBC requirements for fire-fighting.

4.0 Stormwater Management and Storm Servicing

4.1 Stormwater Management Requirements

The subject site is contained within the UTRCA watershed Reynolds-Thames River. Under existing conditions, the subject site flows southeast, into a ditch along the Canadian



Pacific Railway before outletting into Reynolds Creek. Each Site will be individually serviced with an outlet into the Proposed Stormwater Easement as seen in appendix A. The Stormwater Easement is proposed to be 8.0 meters in width. During the detailed design phase, the characteristics of the easement will be determined. The Stormwater management will be assessed on an individual site basis. Quality and Quantity controls will be implemented in accordance with section 4.0 of the EDS.

5.0 Erosion and Sediment Control

Erosion and Sediment Controls (ESC) will be implemented for the site. The proposed measures will include light and heavy-duty sediment control fencing, and silt sacks in the existing and proposed catch basins on-site and in the ROW. All ESC will be installed before construction commences and is to be maintained until the construction is complete with final surfaces and vegetation stabilized with mature growth.

6.0 Conclusions

The proposed Sites can be serviced individually, with the use of septic and well systems, meeting the Municipality of Thames Centre standards. Stormwater management measures will be implemented to safely conveying flows through the proposed easement. It is expected that the Proposed Sites will have sufficient capacity and not adversely impact the surrounding sites. We trust that this FSR satisfies the Municipality's requirements. If there are any questions regarding this FSR, please do not hesitate to contact our office.



7.0 Statement of Conditions and Limitations

This document was prepared for *Putnam Road Holdings Inc.* (the Client) and the *Municipality of Thames Centre* and has been prepared in a manner consistent with that level of care and skill ordinarily exercised by other members of the engineering profession currently practicing in the same or similar locality, under the same or similar conditions, subject to the time limits and financial, physical, or other constraints applicable to the Services.

The recommendations and conclusions provided in this document are applicable only to the specific site, development, design objectives, and purposes that are described in the text and are based on the information that was available and provided to GRIT Engineering Inc. at the time this document was prepared. This document is not intended to be exhaustive in scope and it shall be recognized that the passage of time may alter the opinions, recommendations, and conclusions that are contained in this document. The design is limited to the documents reference and any other drawings or documents prepared by GRIT Engineering Inc. provided separately. GRIT Engineering Inc. accepts no responsibility or liability for the accuracy of any information provided by others.

The information, opinions, conclusions, and recommendations expressed in the document, or any portion thereof, are for the sole benefit of the Client. The document may not be used by a third party without the expressed written consent of GRIT Engineering Inc. and the Client. Any third-party use of the document without express written consent denies any claims in Contract, Tort, and/or any other cause of action in law against GRIT Engineering Inc. and the Client.

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Any referenced benchmarks or other known elevations provided in this document should be verified by a registered surveyor prior to use for any other purposes such as planning, development, layout, and/or construction.

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Yours respectfully,

GRIT Engineering Inc.

A handwritten signature in black ink that reads "K Wintle". The signature is fluid and cursive.

Kieran Wintle, E.I.T.
Civil Designer

Montana Wilson, EMBA, M.Eng, P.Eng, PMP
Founder & CEO



Appendix A

Sketch Illustrating Conceptual Layout by Archibald
Gray & McKay Ltd., dated September 27, 2022

BREEN ROAD (Named by Township of North Dorchester By-Law No. 55-93, Registered as Inst. No. LT363774)
(Original Road Allowance Between Concessions 1 and 2, South of The River Thames)
(20.416 Wide) - P.I.N. 08178-0074

SKETCH ILLUSTRATING
CONCEPTUAL LAYOUT

OF PART OF
LOT 3, CONCESSION 1, SOUTH
OF THE RIVER THAMES

(GEOGRAPHIC TOWNSHIP OF NORTH DORCHESTER)

IN THE
MUNICIPALITY OF
THAMES CENTRE
COUNTY OF MIDDLESEX

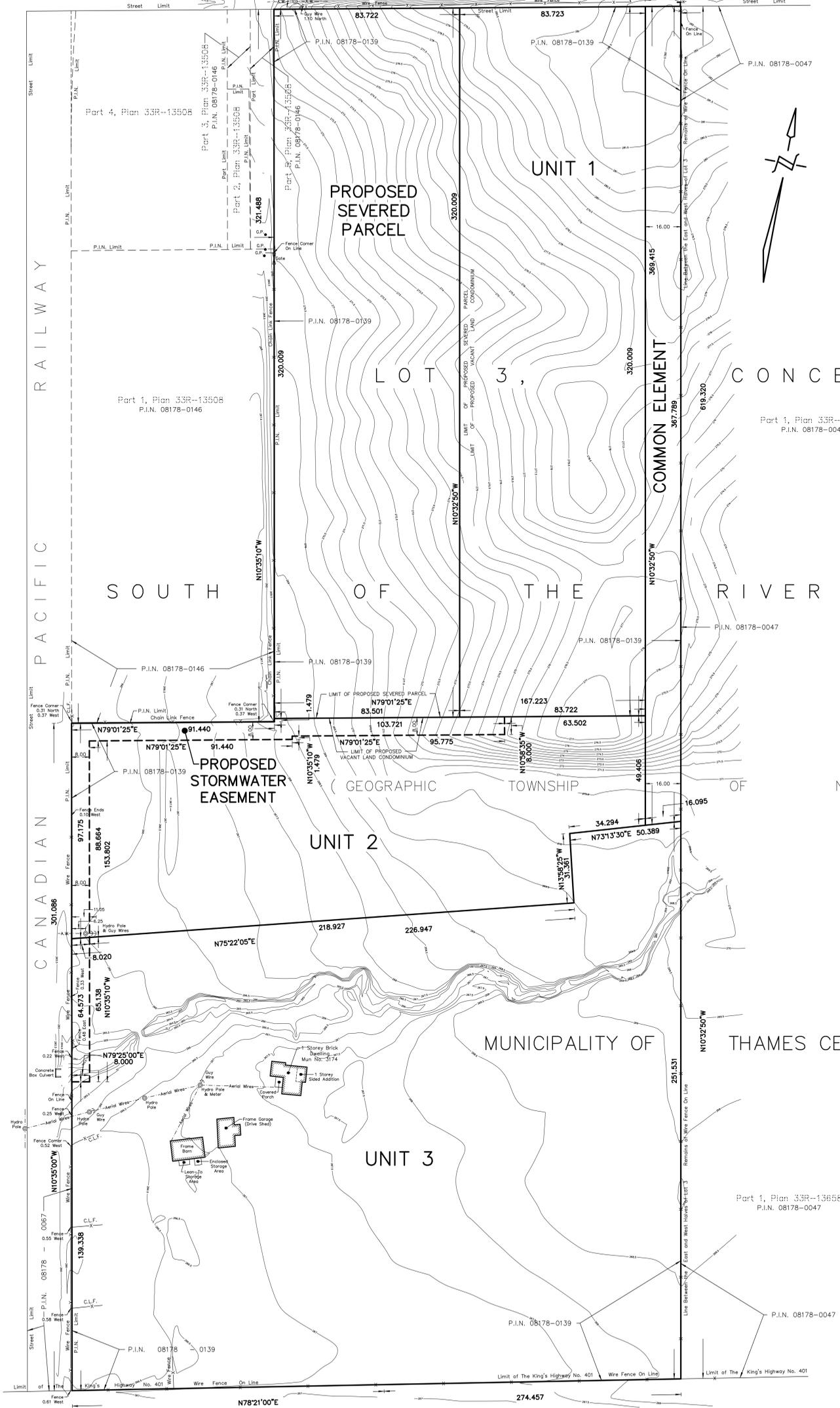
SCALE 1:1000



SCALE IN METRES

2022
ARCHIBALD, GRAY & MCKAY LTD.
ONTARIO LAND SURVEYORS

PUTNAM ROAD
CANADIAN PACIFIC RAILWAY



DESCRIPTION	AREA TABLE	
	HECTARES	ACRES
UNIT 1	2.67910	6.6202
UNIT 2	2.21793	5.4806
UNIT 3	5.95290	14.7099
COMMON ELEMENT	0.58976	1.4573
PROPOSED SEVERANCE	2.67551	6.6113

THE KING'S HIGHWAY No. 401
(Established by Deposited Plan Misc. 296 - MTO Plan No. P-3047-7)
P.I.N. 08178-0069

METRIC: DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES
AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

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CHECKED BY: R.T.W.	COGO FILE: DN2206 SK1 EC.dwg	9-L-5848
PLOT DATE: SEPT 27 2022	FILE No: DORN-01(S)-03-3	