

Planning Justification Report

for 2416987 Ontario Inc. - Lang Construction Inc.

... in support of a 52 unit residential plan of
subdivision and rezoning

... Egan Street, St. Marys, On



December 2019



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1.0 Introduction

The following document is a Planning Justification Report for a plan of subdivision of 52 ground oriented attached dwellings, of mixed housing types, on a net site of 2.04 ha, in the Town of St. Marys, Ontario. The proponent owner is 2416987 Ontario Inc. – c/o Lang Construction Inc. The infill site location is in the north central older part of the Town. It is located along the north side of Egan Street between Wellington Street to the west, and James Street North to the east. See LOCATION MAP - Figure 1.

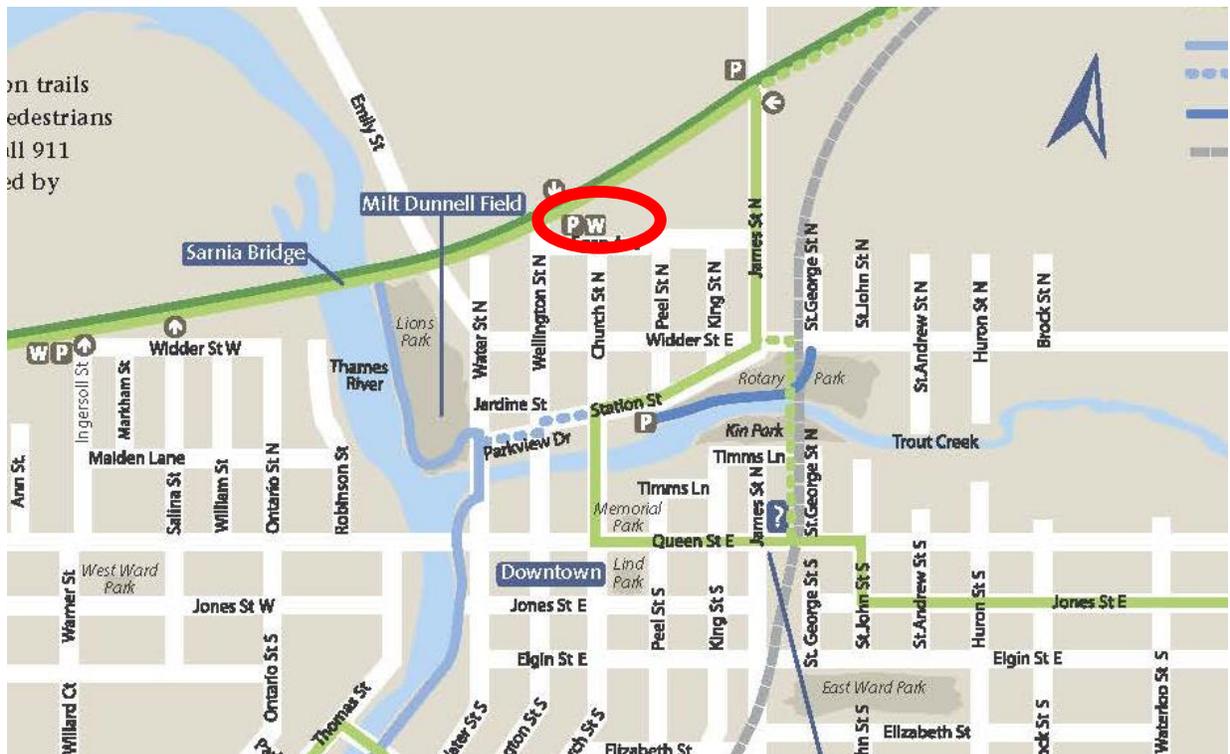


Figure 1 – Location Map showing the approximate location of the site in the red oval. (Source: Town of St. Marys Trail Map and Guide excerpt)

The subject lands are presently designated “Residential” in the St. Marys Official Plan, and zoned Residential RD. The "RD" zone symbol indicates that some form of residential development is contemplated in the future for the lands within the "RD" zone; however timing for development and development standards (i.e. housing type and density) still have to be determined. Permitted Interim Uses are Existing Uses. Therefore, the proposed residential development is not permitted by the existing zone. An application to amend the Zoning Bylaw to a site specific Residential zones is required and being applied for, to which this Report is a part.

This Report demonstrates that the proposed residential development would be in keeping with Provincial and Municipal land use planning policies, is suitable for the subject lands, and would be compatible with neighbouring land uses. In fact, it is the opinion of the writer that the mixed housing form residential development would significantly compliment the older, north central St. Mary's neighbourhood, in terms of land use and offering a wider variety of housing types and design of built form.

2.0 Site Description and Development Proposal

Features of the site are as follows: SEE PHOTOS IN FIGURES 2 THRU 6.

SITE AREA – 2.04 ha

SITEFRONTAGE – 223.9 m

SITE DEPTH - ranges from:

- west boundary along Wellington street – 56.534 m
- east boundary abutting Holy Name of Mary School playground – 117.494 m

SITE SHAPE – irregular rectangular

SITE TOPOGRAPHY – gently undulating to flat but has some fill placed in mounds.

SITE SURROUNDINGS

NORTH – Grand Trunk Trail (multi-use for pedestrians and cyclists) then agricultural crop fields and zoned Open Space

EAST – Holy Name of Mary School playground, single detached residential and St. James Street North, and zoned Institutional-I and Residential - R2-1

SOUTH – Egan Street and then Holy Name of Mary School playground and single detached residential and zoned Institutional-I and Residential R2-1

WEST – Wellington Street then vacant land, and residential and zoned RD and R2.

PAST LAND USES – industrial, but buildings and parking areas etc., have been cleared.

The DEVELOPMENT PROPOSAL

The 56 dwelling unit development Proposal is a Plan of Subdivision (see in Appendix 1) of 6 LOTS and 4 BLOCKS, comprising:

- 4 SEMI-DETACHED BUILDINGS (8 units in total) on Lots 2 thru 5 fronting onto Egan Street - TO BE FREEHOLD.
- 2 buildings comprising 3 TOWNHOUSE DWELLING UNITS each (6 units in total) on Blocks 1 and 8 TO BE STANDARD CONDOMINIUMS. The 6 units would occupy 2171 m² of land.
- 3 FOURPLEX BUILDINGS (8 units in total) on Lots 6 and 7 TO BE A STANDARD CONDOMINIUMS.

- 30 condominium townhouse units on Block 9 served by a private street of 6 m in width, accessing from Egan Street, and would occupy 14,121 m² of land – TO BE CONDOMINIUM (VACANT LAND). Therefore, each unit occupant would own a “unit” with a “front yard”, a “rear yard” and if an end unit, would also own a “side yard”. The UNIT is the land parcel upon which a dwelling unit is erected. The common element would be the private road that the Condominium Corporation would maintain.

The following definitions are taken from the Zoning Bylaw.

3.47.9 Dwelling, Row or Townhouse means a separate building that has been divided vertically into three (3) or more dwelling units each of which has a separate and independent entrance and which are separated from the adjoining unit or units by a common unpierced wall with no interior access between the units.

3.47.10 Dwelling, Semi-Detached means a separate building containing two (2) dwelling units that are divided vertically by a common unpierced wall with no interior access between the units and where each unit has a separate independent entrance directly from the outside.

3.47.6 Dwelling, Fourplex means a separate building containing only four dwelling units which are divided into four parts with each dwelling unit having an independent entrance, either directly or through a common vestibule.

In total, the project would be of 56 new housing units in the Town of St. Marys. A conceptual site plan and elevations of the buildings are contained in the Appendix. As part of and required by the subdivision proposal, is the Town’s initiative to rebuild Egan Street to provide full services and a new roadway with sidewalks, is underway and expected to be constructed during 2020.

Photos of the Subject Site and Surrounding Land Uses:



Figure 2: Subject Lands centre and right, viewing Northwest from Egan Street (Source: KCI, 2019)



Figure 3: Subject Lands, viewed northerly from Egan Street with Holy Name of Mary School playground to the right of chain link fence. (Source: KCI, 2019)



Figure 4: Viewing south along Peel Street from Egan Street (opposite the Site) showing Holy Name of Mary School, and Parish (Source: KCI, 2019)



Figure 5: Viewing east along Egan Street with Site and school playground on left and school on right.



Figure 6 – viewing northerly from Egan and Wellington intersection showing site on right and vacant land on left with Grand Trunk Trail at end of Wellington running across tree-line.

3.0 Planning Policy Framework

Being situated in the Town of St. Marys, the proposal is subject to the Towns' Official Plan, and the Provincial Policy Statement (PPS) which governs land use planning in all Municipalities throughout Ontario. Relevant policies from the aforementioned documents that create the planning policy framework for the proposed development are provided below.

3.1 Provincial Policy Statement (PPS):

The PPS generally *encourages growth and infill development in settlement areas* (Section 1.1.3.1). With respect to land use patterns in settlement areas (Section 1.1.3.2), the PPS states that *land use patterns should be based on densities and a mix of land uses which efficiently use land and resources; and are appropriate for, and efficiently use the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified or uneconomical expansion*. Appropriate opportunities are to be identified for intensification and redevelopment (Section 1.1.3.3).

Housing shall have *an appropriate mix of housing types and densities* (Section 1.4.1). *Healthy, active communities are promoted* (Section 1.5.1). *Full municipal services are the preferred method of servicing* (Section 1.6.6.2). *Long term prosperity should be supported by ... promoting the development of brownfield sites* (Section 1.7.1).

The proposed plan of subdivision supports the principles of building of strong communities and the wise use and management of resources in the Town of St. Marys as follows (Section 1.1):

- *promoting efficient development and land use patterns;*

- *accommodating an appropriate range of and mix of residential ... affordable -- housing.*
- *promoting cost effective land use patterns*
- *ensuring that necessary infrastructure, and public service facilities are or will be available to meet current and projected needs;*

RESPONSE: In the opinion of the writer, the subject housing proposal would be consistent with the PPS because:

- The site is an infill site
- The site development would contribute to intensification
- The site redevelops a former brownfield site
- Full services will be available
- A mix of family type, affordable housing types are being proposed in the form of semi-detached residences and townhouses.

3.2 Town of St Marys Official Plan:

The subject lands are designated RESIDENTIAL on the Land Use Plan Schedule A – see Figure 7 following page.

The two major HOUSING GOALS of the St. Marys Official Plan are providing a range of housing accommodation suitable for all age groups and household incomes, and providing stable, attractive residential areas for all its residents **(Section 2.1)**.

HEALTHY COMMUNITIES policies (Section 2.6) encourages actions/initiatives that support a healthy community such as:

- a) the development of a compact development form in order to encourage and facilitate active transportation (i.e. walking, cycling, etc.);*
- b)*;
- c) subdivision designs that include suitable open space areas, incorporate walkways, and provide space for active living;*
- d)e) and f) encourage the use of and sustain existing trails and open spaces throughout the Town and linkages with those in Perth County.*

The adjacent Grand Trunk Trail and the grid street system support walking and cycling and supporting active living. The overall density of the proposed attached housing development is “compact”.

Section 3.1 of the St Marys Official Plan states:

“St. Marys continues to thrive as a community. Development activities averaging only 11 dwelling units per year in the mid 1980’s has swelled to over 40 dwelling units per year

over the last 15 years....The residential areas of the Town are well maintained and relatively free from conflicting land uses.”

The proposed plan of subdivision helps achieve the following residential objectives of the Official Plan (section 3.1.1.1)which are as follows:

- encourage the provision of an adequate supply and choice of housing
- promote creativity and innovation in new residential development
- provide an attractive and enjoyable living environment within the Town.
- promote housing for Senior Citizens; the handicapped and low income families.
- promote additional housing through intensification and redevelopment.
- encourage a diversification and inter mixing of different housing types and forms.

The proposed residential development would provide a variety of housing forms apart from single detached dwellings and would contribute to attractive affordable housing and a mix of housing types that cater to the local market.

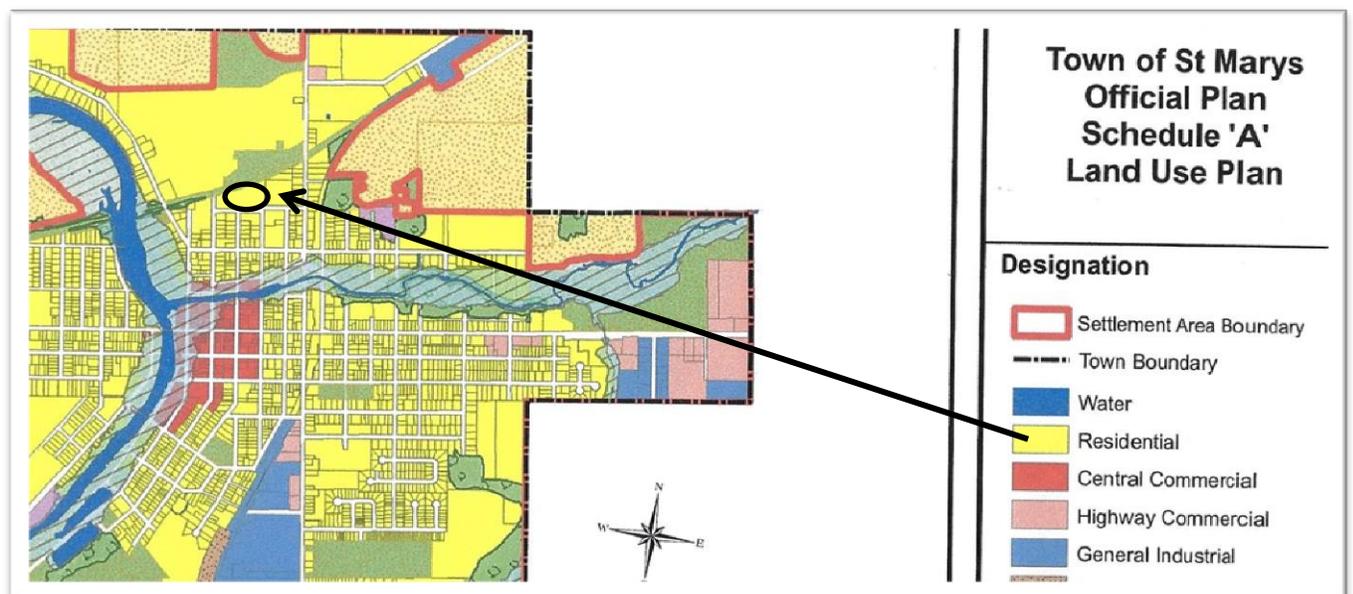


Figure 7: Location of Subject Lands on OP Land Use Schedule (excerpt) noting the RESIDENTIAL land use designation. (Source: Town of St. Marys)

Section 3.1.2.4 is significant in that it states that *Council will favour residential intensification and redevelopment over new green land residential development as a means of providing affordability and efficiencies in infrastructure and public services.*

Section 3.1.2.5 sets out targets that the proposed residential development would help to achieve, specifically:

Semi-detached, duplex dwellings 15-25 units per hectare;

Townhouse dwellings 25-40 units per hectare;

The proposed residential development yields a density of 60 units on 1.4 ha = 34 units per ha.

Section 3.1.2.7 applies based on density exceeding 18 units per hectare, and the following items have been taken into account:

a) not in excess of three full stories

b) not present a hazard to buildings structures and residents;

c) density shall not exceed 75 units per hectare;

d) That the development is serviced by municipal water supply and sewage disposal facilities;

e) is within 100 metres of an arterial or collector road;

f) sufficient on-site parking is provided;

g) adequate buffering, screening or separation distance is provided .

Section 3.1.2.14 encourages the development of affordable housing *with 30% of the new housing units created being considered by Council as affordable to households with incomes in the lowest 60 per cent of income distribution for Perth County households.*

The attached housing forms and compactness of the proposed housing development is likely to contribute to the affordability of housing in St. Marys.

Section 4 .0 sets out policies for LAND DIVISION and states that *All proposed plans of subdivision will be carefully examined* on the basis of the following (summarized)

- they will preclude the satisfactory use, development, or redevelopment of surrounding lands.
- they will adversely affect existing amenities and the predominant character of the area
- The social aspects of residential development, including the mix of housing types and the density of the development, shall be reviewed.
- suitability for the intended purposes and their effect on public facilities, utilities, and services.
- designed in a manner which is sensitive to the contour of the land.
- unique natural assets, including topographic features of vegetation such

as groves of trees, and mature individual trees, should be preserved to the greatest extent possible.

- shall enter into subdivision agreements
- the developer pay a development charge fee
- that adequate services such as schools, municipal recreation facilities, fire protection, water supply, sewage disposal, storm drainage facilities, solid waste disposal facilities, and road maintenance are or can be supplied and that the provision of these services will not adversely affect the financial position of the Town.
- consider energy related factors in its review of proposed plans of subdivision.
- approve only plans of subdivision/condominium that conform to the policies and land use designation of this Plan.

Section 4.1.2 sets out policies on STAGING OF PLANS OF SUBDIVISION

It is the intent of this Plan that development by plan of subdivision in the Town be phased in accordance with the provision of full municipal services. Proponents of plans of subdivision shall indicate their proposed staging and the facilities to be provided with each stage, when required by Council.

Section 7.10 of the Official Plan states that *Council should approve plans of subdivision that conform to the policies of the Official Plan and which, to the satisfaction of Council, can be supplied with adequate services such as schools, fire and police protection, water supply, sewage disposal, storm drainage facilities, road maintenance, solid waste collection and disposal, and where such approval would not adversely affect the financial position of the Town.*

It is understood that the above facilities and services will be provided.

REPOSE: The proposed plan of subdivision respects and is in conformity with the Residential land use designation and related policies of the St. Marys Official Plan, in the opinion of the writer.

Section 7.17.4 of the Official Plan, the following criteria must be addressed when considering a proposed Zoning By-law Amendment:

I. *the need for the proposed use;*

Positive housing demand and continued growth projections for St. Marys are indicative of the need to ensure adequate housing supply for current and new residents. The proposed residential subdivision would provide desirable housing that would help meet this need.

- II. *the extent to which the existing areas in the proposed designation or categories are developed and the nature and adequacy of such existing development in order to determine whether the proposed use is premature;*

The proposed single detached residential development would complement the existing housing stock in the Town of St. Marys, would likely be considered partly “affordable” and therefore fulfil some of the Official Plan housing objectives.

- III. *the compatibility of the proposed use with conforming uses in adjoining areas;*

The proposed subdivision comprising all attached low rise, low density dwellings would be compatible with the surrounding land uses being mostly institutional and low density residential.

- IV. *the effect of such proposed use on the surrounding area in respect to the minimizing of any possible depreciating or deteriorating effect upon adjoining properties;*

The proposed low density residential development would be of high standard to compliment surrounding residential properties and be much more favourable than the prior industrial use.

- V. *the potential effects of the proposed use on the financial position of the Town;*

The proposed subdivision would contribute positively to the tax base of the Town and help support local businesses.

- VI. *the potential suitability of the land for such proposed use in terms of environmental considerations;*

The subject lands have been designated Residential in the Official Plan for a long time. It is timely that a development proposal of this quality is now being made.

- VII. *the location of the area under consideration with respect to the adequacy of the existing and proposed road system in relation to the development of such proposed areas and the convenience;*

There would be adequate road infrastructure to support the planned development. Egan Street is to be rebuilt with full services.

VIII. *the adequacy and availability of municipal services and utilities; and*

Municipal sanitary and water services are available and would be utilized to support the planned subdivision.

IX. *the adequacy of parks and educational facilities and the location of these facilities;*

The subject lands are located centrally in the north part of the Town, close to play grounds, walking trails and within walking distance of Downtown and the River.

4.0 Town of St Marys Zoning By-law

The Town of St Marys Zoning By-law presently zones the subject lands Residential RD.

Section 28.3.1 states:

The "RD" zone symbol indicates that some form of residential development is contemplated in the future for the lands within the "RD" zone; however timing for development and development standards (i.e. housing type and density) have yet to be determined.

Permitted Interim Uses: Existing Uses.

Since the RD zone does not permit semis, plexes or townhouse, an AMENDMENT to THE ZONING BYLAW is required by way of application AND TO WHICH THIS REPORT IS A PART .

Proposed Zoning

The proposed zoning is twofold. The semi-detached and plex units would utilize the RESIDENTIAL R4 zone. The townhouse units (Blocks 1 and 8 and Block 9) would utilize the RESIDENTIAL R5 zone. The 4-plex units would occupy Lots 6, and 7. The definitions of the housing forms from the Zoning Bylaw are as follows:

- **Dwelling, Fourplex** means a separate building containing only four dwelling units which are divided into four parts with each dwelling unit having an independent entrance, either directly or through a common vestibule.
- **Dwelling, Row or Townhouse** means a separate building that has been divided vertically into three (3) or more dwelling units each of which has a separate and independent entrance and which are separated from the adjoining unit or units by a common unpierced wall with no interior access between the units.

- **Dwelling, Semi-Detached** means a separate building containing two (2) dwelling units that are divided vertically by a common unpierced wall with no interior access between the units and where each unit has a separate independent entrance directly from the outside.

The zoning regulations are compared to the three housing types Parts A, B, C and D. A summary of the various minimum lot frontage, depth, and area requirements are provided below:

<u>ZONE</u>	<u>FRONTAGE (MIN.)</u>	<u>DEPTH (MIN.)</u>	<u>AREA (MIN.)</u>
<i>Bold type indicates a regulation that is not satisfied by the Proposal and special provision needed in the Zoning Amendment</i>			
<u>PART A: Blocks 1 and 8 – TOWNHOUSES (3 in a cluster for each block – 6 units)</u>			
R5- townhouse Section 12.4 for the Block	27.5 m (int) for first 3 Units and 29.0 m (corner) - need = 27.5 /29.5 m	37.0 m	1017.5 m² Density not to exceed 50 units per ha max
PROPOSED TOWNHOUSES	32.3m	<u>30.60 m</u>	<u>Block 1 – 985 m²</u> <u>Density – 6 units = 63 upha</u> Block 8 – 1156 m ² <u>Density – 6 units = 52 upha</u>
R5- townhouse (Section 12.5 for Individual lots)	6.0 m – interior 10.75 m - end 12.25 m – corner	37.0 m	222 m ² per unit - interior 397.75 per unit - end 453.25 m ² per unit- corner

PART B: Lots 2 thru 5 – SEMI-DETACHED (8 units)

R4-semi regulations (Section 11.3) for Entire Lot	18.0m	30.0m	540m ²
PROPOSED SEMI-DETACHED	18.06.2	30.45m	560.6m ²
R4-semi regulations (Section 11.4) for Individual Lot	9.0m- interior	30.0m	270m ²

PART C: Block 6 and 7 – 4 PLEXES (8 units)

R4- 4-plexes (section 11.6)	21.0 m	37.0m	777 m2
PROPOSED 4 –plex units	22.5 m	<u>35.0m</u>	878 m2

PART D: Block 9 – TOWNHOUSES (30 units)

R5- townhouse (section 12.4) for entire block	interior - 6.0m end - 10.75	37.0m+	1017.5 m2 Density not to exceed 50 units per ha
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PROPOSED TOWNHOUSE	int - 8.0m end - 10.75m+	>37.0m+	14,120.9m2 Density = 21.3 upha
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R5- townhouse (section 12.4) for Individual unit	interior 6.0 m end – 10.75 m corner – 12 25 m	37.0 m	interior-222m2 per dwelling end –397.75 m2 per dwelling corner – 453.25 per dwelling
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PROPOSED
TOWNHOUSE appears compliant from site plan concept in Report

The bolded and underlined tabulations above indicate where the proposed residential development would not meet the existing zone regulations. They are summarized as follows:

1. The LOT DEPTH for TOWNHOUSES in Blocks 1 and 8 is to be 30.0 m instead of 37.0 m minimum.
2. The LOT DEPTH for the 4-PLEXES is to be 35.0 m instead of 37.0 m minimum.
3. The LOT AREA for the TOWNHOUSE in Block 1 is to be 985 m2 minimum.
4. The DENSITY for the TOWNHOUSE in Block 1 and 8 is to be 63 and 52 upha respectively, maximum.
5. In addition, the Lang team advises that the standard lot coverage maximum of 40% is insufficient and needs to be increased to 50%. This increase was recently supported by

Council in a rezoning application by Meadowridge Properties Inc. rezoning application in St. Marys. The rationale is based on greater efficiency of utilizing land resources, encouraging a wider range of house types, the trend of increasing coverage or no coverage regulation at all depending otherwise on other regulations such as yard setbacks)

The above four regulations would have to be provided by SPECIAL REGULATION.

There is a further need to consider the regulations for the internal large townhouse block in that it is intended to be tenured as a CONDOMINIUM (VACANT LAND). In the Condominium (Vacant Land) legislation, the term “unit” is used to describe the land which the condominium owner would “own”, and then a dwelling unit is placed on the “unit” in which the owner would dwell and own.

There appears to be provisions to regulate a condominium “unit” as there is for the traditional “lot”. The regulations such as setbacks and coverages are provided in in the general regulations of the current Zoning Bylaw through the definition of LOT LINE as set out below. In examining the Zoning Bylaw for St. Marys, three relevant terms of “Lot” and “Condominium” are defined as well, as follows:

1. Lot means:

(a) a parcel of land or contiguous parcels of land under one ownership, having frontage on a public street and which is described in a deed or other document legally capable of conveying an interest in land and which is on record in the Land Registry Office No. 44; or

(b) a parcel of land shown as a whole lot or block on a registered plan of subdivision within the meaning of the Planning Act, having access on a public street, but a registered plan of subdivision for the purpose of this paragraph does not include a registered plan of subdivision which has been deemed not to be a registered plan of subdivision under a by-law passed by the Council pursuant to the Planning Act.

2. Condominium means:

a building or buildings in which each individual unit is held in separate private ownership and all floor space, facilities and outdoor areas used in common by all tenants are owned, administered and maintained by a corporation created pursuant to the provisions of the Condominium Act.

3. Lot Line means:

means any boundary of a lot or the vertical projection thereof. Internal lot lines created by:

(a) a registration of a plan of condominium; or

(b) a plan or plans of condominium registered on all or a portion of a lot which is part of a comprehensively planned development subject to a Development Agreement pursuant to Section 41 of the Planning Act;

(c) shall not be construed to be lot lines for the purposes of zoning regulations provided that all applicable regulations of this by-law relative to the whole lot and its external lot lines, existing prior to any condominium plan registration are strictly observed.

5.0 Conclusion

The proposed 52 – dwelling unit residential subdivision is an infill form of development within an existing and desirable residential neighbourhood. The proposal seeks to maintain the desirability and character of this neighbourhood, and has therefore been designed to be of complimentary use, intensity and built form. Based on the aforementioned planning analysis, the proposal for a 56 unit attached, ground oriented, dwelling subdivision has been demonstrated:

1. to be a logical and suitable development of the subject lands at the given location which would provide desirable housing that is compatible with the surrounding built environment and amenities;
2. to be consistent with the PPS;
3. to conform to the Town of St Mary's Official Plan;
4. to respect the intent and structure of the Town of St Marys Zoning By-law, notwithstanding some special provisions being required; and
5. to be appropriate for the Residential R4 and R5 Zones.

Thus, the proposal represents sound land use planning that is desirable for St. Marys, would contribute to the residential vitality of the Town, and supports the efficient use of land and resources. In turn, it is requested that:

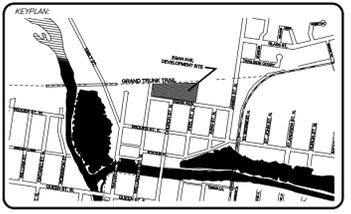
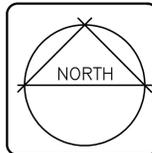
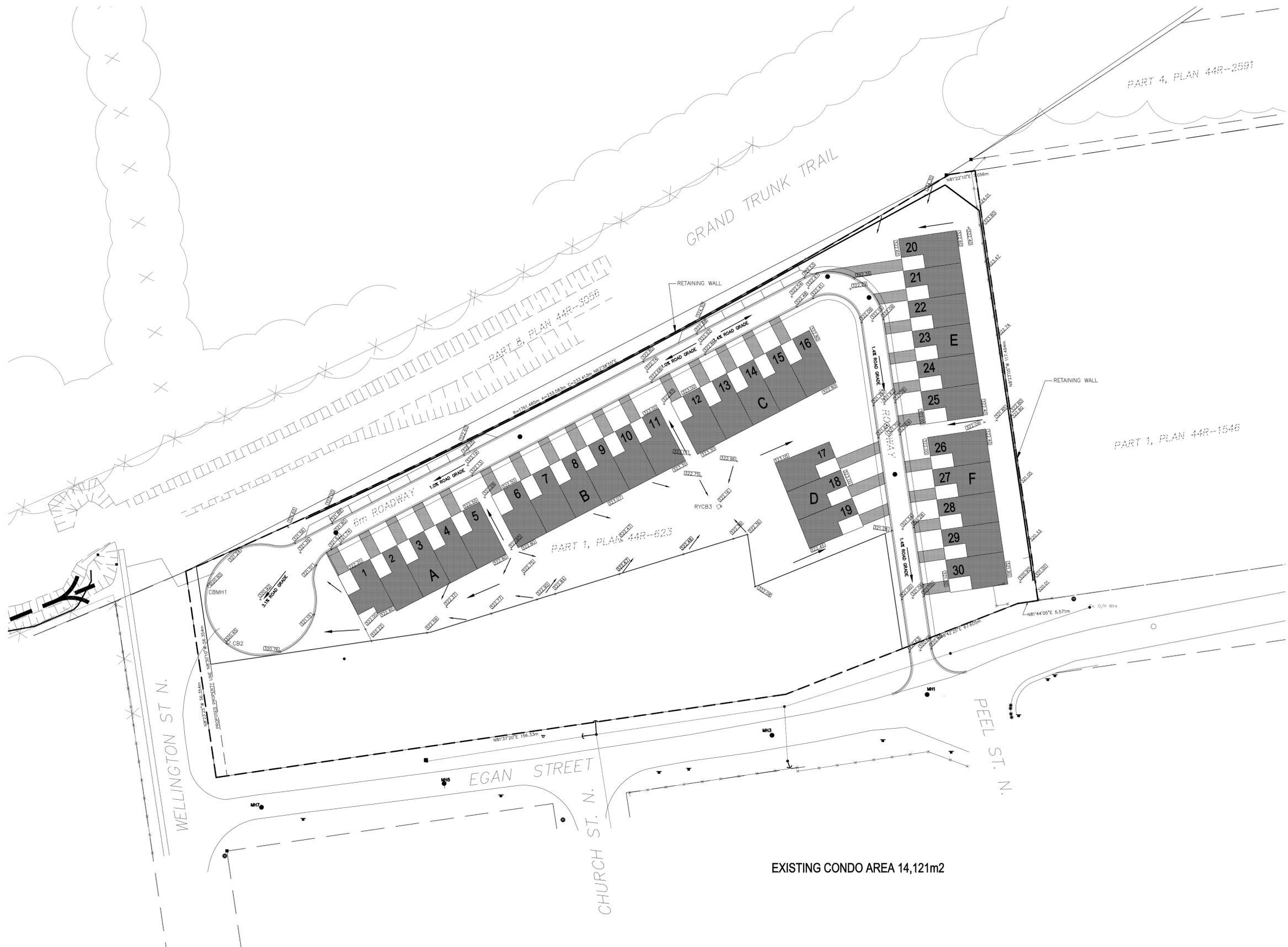
- I. the proposed 60 unit Draft Subdivision application be supported by the Town of St Marys Planning Staff and Council; and
- II. the related Zoning By-law Amendment application to change the zoning of the subject lands from R4 and R5 be supported.

Bibliography

1. Provincial Policy Statement
2. Official Plan, Town of St. Marys
3. Zoning Bylaw, Town of St. Marys
4. Plans and Engineering – Johnson Engineering Consultants

Appendix

1. Draft Plan of Subdivision
2. Conceptual Site Plan of Townhouses
3. Conceptual Architectural Elevations – Townhouses



- NOTES**
- DO NOT SCALE FROM THIS DRAWING
 - ALL DIMENSIONS ARE TO BE CHECKED ON SITE
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.

LEGEND

TYPICAL LEGEND

- REAL EXISTING CONTOUR (BEOGNETIC)
- EXIST. ELEVATION
- EXIST. A DESIGN ELEVATION
- EXIST. CONTOUR ELEVATION
- EXISTING MANHOLE (STN. SAN)
- EXISTING CATCH BASIN
- EXISTING STREETLIGHT
- EXISTING TRANSFORMER
- EXISTING CATCH PIT
- EXISTING SEWER FLOW (STN. SAN)
- EXISTING FIRE HYDRANT
- EXISTING VALVE (GAS OR WATER)
- PROPOSED MANHOLE (STN. SAN)
- PROPOSED CATCH BASIN
- PROPOSED CATCH PIT
- PROPOSED DOUBLE CATCH BASIN
- PROPOSED STORM SEWER FLOW
- PROPOSED SANITARY SEWER FLOW
- PROPOSED WATERMAIN
- FIRE HYDRANT
- VALVE (GAS OR WATER)
- PROPOSED TRANSFORMER
- PROPOSED PIT
- PROPOSED STREETLIGHT
- FLOW DIRECTION OF SURFACE WATER IN A TRAIL
- FLOW DIRECTION OF SURFACE WATER

No.	DATE	NAME	DESCRIPTION
REVISIONS			

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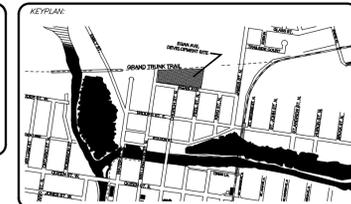
AUTHORITY:
TOWN OF ST. MARYS
 175 QUEEN STREET EAST,
 ST. MARYS, ON.
 N4X 1B6

PROJECT:
EGAN AVENUE DEVELOPMENT,
ST. MARYS, ON

DRAWING TITLE:
CONDO GRADING PLAN

SCALE: 1:500	APPROVED BY:
DATE: OCTOBER 14, 2016	
DESIGNED BY: BRIAN JOHNSON, P. ENG.	
DRAWN BY: KdH	
J.E.C. FILE NO.: 20160057	

EXISTING CONDO AREA 14,121m²



- NOTES**
- DO NOT SCALE FROM THIS DRAWING
 - ALL DIMENSIONS ARE TO BE CHECKED ON SITE
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.

LEGEND

TYPICAL LEGEND

- REAL EXISTING CONTOURS (DELETED)
- EXIST. ELEVATION
- EXIST. A DESIGN ELEVATION
- EXIST. DESIGN ELEVATION
- EXISTING MANHOLE (STL. S&W)
- EXISTING CATCH BASIN
- EXISTING STREETLIGHT
- EXISTING TRANSFORMER
- EXISTING CURB PIT
- EXISTING SEWER FLOW (STL. S&W)
- EXISTING FIRE HYDRANT
- EXISTING VALVE (GAS OR WATER)
- PROPOSED MANHOLE (STL. S&W)
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED DOUBLE CATCH BASIN
- PROPOSED STRAY GARBAGE FLOW
- PROPOSED SANITARY SEWER FLOW
- PROPOSED WATERFLOW
- FIRE HYDRANT
- VALVE (GAS OR WATER)
- PROPOSED TRANSFORMER
- PROPOSED PIT
- PROPOSED STREETLIGHT
- FLOW DIRECTION OF SURFACE WATER IN A SWALE
- FLOW DIRECTION OF SURFACE WATER

No.	DATE	NAME	DESCRIPTION
REVISIONS			

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STRATFORD, ON.
NSA 5Y4

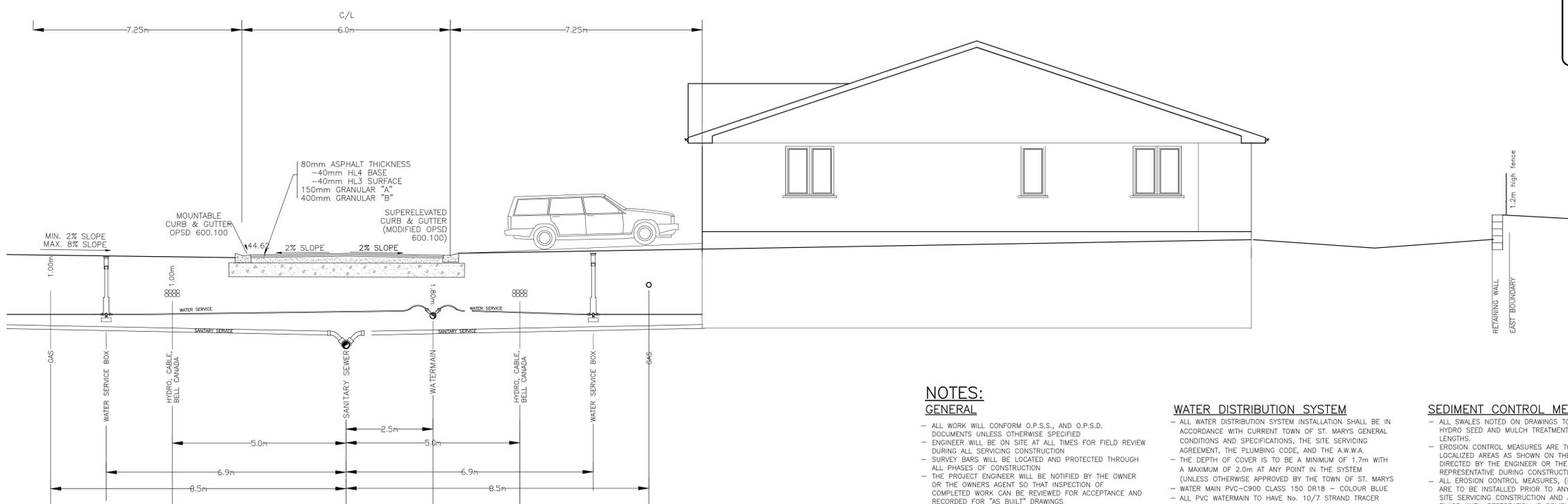
AUTHORITY:
TOWN OF ST. MARYS
175 QUEEN STREET EAST,
ST. MARYS, ON.
N4X 1B6

PROJECT:
EGAN AVENUE DEVELOPMENT,
ST. MARYS, ON

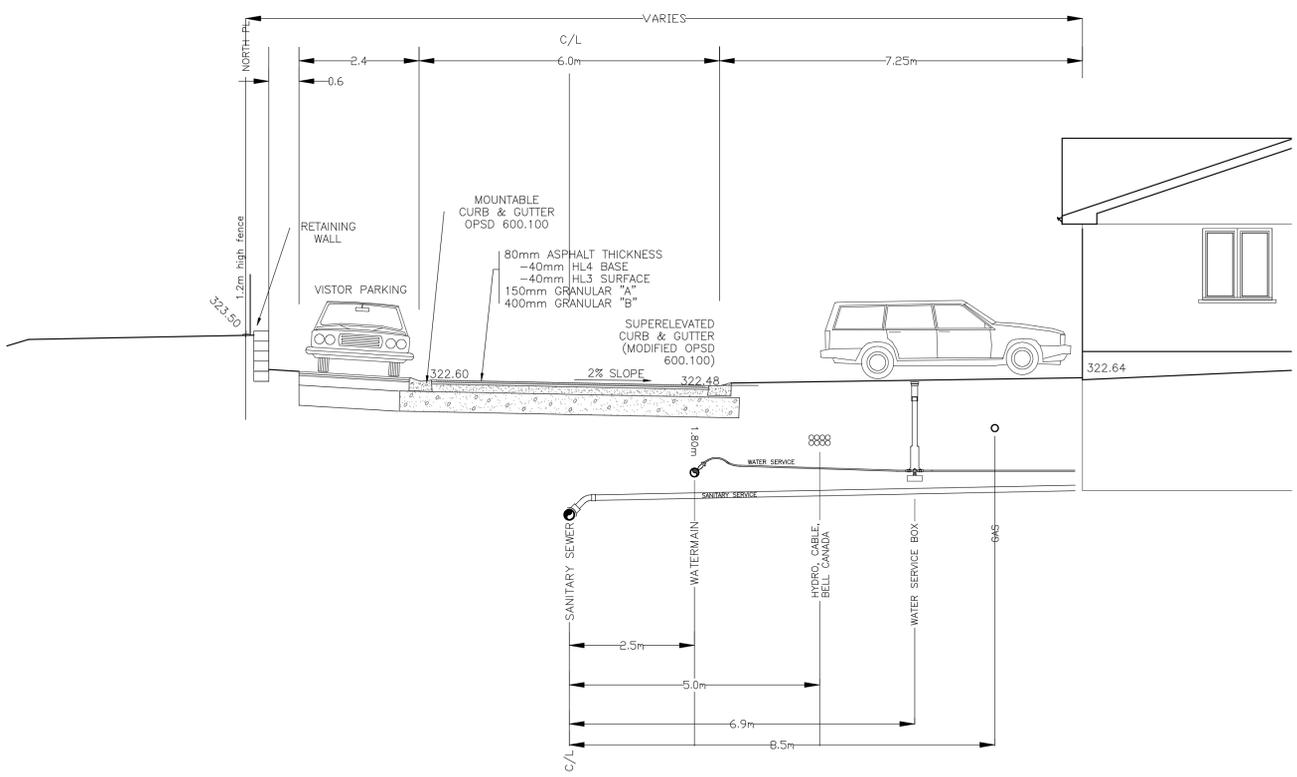
DRAWING TITLE:
CONDO GRADING PLAN

SCALE: nts	APPROVED BY:
DATE: OCTOBER 14, 2016	
DESIGNED BY: BRIAN JOHNSON, P. ENG.	
DRAWN BY: KdH	
J.E.C. FILE NO.: 20160057	

DWG. No. C04 **SHEET No. 4 of 4**



SECTION 0+072.8



SECTION 0+132

NOTES:
GENERAL

- ALL WORK WILL CONFORM O.P.S.S., AND O.P.S.D. DOCUMENTS UNLESS OTHERWISE SPECIFIED
- ENGINEER WILL BE ON SITE AT ALL TIMES FOR FIELD REVIEW DURING ALL SERVICING CONSTRUCTION
- SURVEY BARS WILL BE LOCATED AND PROTECTED THROUGH ALL PHASES OF CONSTRUCTION
- THE PROJECT ENGINEER WILL BE NOTIFIED BY THE OWNER OR THE OWNERS AGENT SO THAT INSPECTION OF COMPLETED WORK CAN BE REVIEWED FOR ACCEPTANCE AND RECORDED FOR "AS BUILT" DRAWINGS
- DESIGN CHANGES WILL BE APPROVED BY THE PROJECT ENGINEER AND THE TOWN OF ST. MARYS (IN WRITING)
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING LOCATES FOR ALL EXISTING UNDERGROUND UTILITIES/SERVICING PRIOR TO THE START OF CONSTRUCTION

ROAD CONSTRUCTION

- ALL ORGANIC OR UNSUITABLE MATERIAL BENEATH THE ROAD ALLOWANCE MUST BE REMOVED AND THESE AREAS BACKFILLED WITH APPROVED FILL MATERIAL. ALL TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR
- EXISTING ASPHALT SURFACES TO BE REPLACED AND MADE GOOD IN ANY AREAS AFFECTED BY NEW CONSTRUCTION (AS SHOWN ON PLANS)
- A MIN. OF 95% PROCTOR DENSITY (S.P.D.) IS REQUIRED IN AREAS WHERE FILL IS REQUIRED TO ESTABLISH THE SUBGRADE ELEVATION
- 98% PROCTOR DENSITY (S.P.D.) IS REQUIRED FOR GRANULAR ROAD BASE (GRAN. 'A' & 'B')
- THE NEW ROAD SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ROAD CROSS SECTION DETAIL DRAWINGS
- A TACK COAT ("COLAS") IS TO BE APPLIED TO ALL STRUCTURES AT TIME OF BASE ASPHALT
- A TACK COAT ("COLAS") IS TO BE APPLIED TO THE ENTIRE BASE ASPHALT SURFACE PRIOR TO TOP COAT APPLICATION
- ALL MANHOLES ARE TO REMAIN AT THE BASE ASPHALT GRADE AND BE RAISED WITH MODULOC RISERS IMMEDIATELY PRIOR TO TOP COAT APPLICATION.

STORM SYSTEM

- 600mm x 1450mm CATCH BASIN SHALL BE IN ACCORDANCE WITH O.P.S.D. 705.020
- CATCHBASIN TO HAVE TWO COURSES OF MODULOC OR APPROVED EQUAL
- CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH O.P.S.D. 400.110
- 6.0m OF 150mm H.D.P.E. PERF. SUBDRAINS WITH FILTER SOCK AND END CAPS SHALL BE INSTALLED AT THE UPSTREAM SIDE OF EVERY CATCHBASIN AT A LEVEL BELOW THE GRANULAR "B"
- DOUBLE C.B. LEADS ARE TO BE 300mm ø
- RAINWATER LEADERS ARE TO BE DISCHARGED TO LAWN
- THE MINIMUM LOT GRADING SLOPE IS TO BE 2% AND THE MAXIMUM SLOPE IS TO BE 8% EXCEPT AT SWALES

SANITARY SYSTEM

- 1200mm MAINTENANCE HOLES SHALL BE IN ACCORDANCE WITH O.P.S.D. 701.010 WITH MONOLITHIC BASE
- MAINTENANCE HOLE BENCHING SHALL BE IN ACCORDANCE WITH O.P.S.D. 701.021
- ALL MAINTENANCE HOLES TO BE COMPLETELY PARGED
- SANITARY MAINS ARE TO BE PVC SDR 35 WITH SLOPES AS SHOWN ON THE CONSTRUCTION DRAWINGS
- SEWER SERVICE CONNECTIONS SHALL BE IN ACCORDANCE WITH O.P.S.D. 1006.02
- SANITARY SERVICES ARE TO BE 125mm P.V.C. S.D.R. 28 (WHITE) WITH A MINIMUM SLOPE OF 2.0%
- FRAME AND COVER SHALL BE IN ACCORDANCE WITH O.P.S.D. 401.01 (B) UNLESS OTHERWISE NOTED.
- ALL SERVICE STUBS ARE TO BE PROVIDED WITH THE FACTORY SLIP FIT END CAPS OR APPROVED EQUAL BY THE TOWN OF ST. MARYS.

BEDDING (GENERAL)

- SEWER BEDDING SHALL CONFORM TO O.P.S.D. 802.010 TYPE 1 OR O.P.S.D. 802.014 FOR FLEXIBLE PIPE AND O.P.S.D. 802.030 CLASS B OR O.P.S.D. 802.034 CLASS B FOR RIGID PIPE
- THE PIPE BED IS TO BE SHAPED TO RECEIVE THE LOWEST SEGMENT OF PIPE
- OUTSIDE DIAMETER OF PIPE IS NOT TO INCLUDE BELL
- TRENCH WIDTH SHALL BE MAINTAINED TO THE LEVEL OF THE TOP OF THE PIPE
- BEDDING TO BE 6mm CLEAR STONE TO SPRING LINE OF PIPE AND SAND BEDDING TO 300mm ABOVE PIPE
- COMPACTION OF BEDDING TO BE 98% STANDARD (MINIMUM) WHERE THE TRENCH IS SHEATHED, TRENCH WIDTH WILL BE DEFINED AS THE DISTANCE BETWEEN THE FACES OF THE SHEATHING. THIS STANDARD IS TO BE APPLIED IN STABLE CONDITIONS OR AFTER THE TRENCH HAS BEEN BROUGHT TO A STABLE CONDITION.

WATER DISTRIBUTION SYSTEM

- ALL WATER DISTRIBUTION SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF ST. MARYS GENERAL CONDITIONS AND SPECIFICATIONS, THE SITE SERVICING AGREEMENT, THE PLUMBING CODE, AND THE A.W.W.A.
- THE DEPTH OF COVER IS TO BE A MINIMUM OF 1.7m WITH A MAXIMUM OF 2.0m AT ANY POINT IN THE SYSTEM (UNLESS OTHERWISE APPROVED BY THE TOWN OF ST. MARYS)
- WATER MAIN PVC-C900 CLASS 150 DR18 - COLOUR BLUE
- ALL PVC WATERMAIN TO HAVE NO. 10/7 STRAND TRACER WIRE WITH TWX INSULATION. PLACED FULL LENGTH OF INSTALLED PVC WATERMAIN AND BROUGHT UP AT EACH MAIN VALVE CURB BOX AND EACH HYDRANT LOCATION AND PLACED ON THE EXTERIOR SIDE OF THE APPURTENANCE.
- MAN-CORPORATION STOPS SHALL BE MODEL NO. H15008 BY MUELLER, MODEL NO. F-1000 BY FORD, OR CAMBRIDGE BRASS SUCCESSOR. - C.C. THREAD INLET/COMPRESSION JOINT OUTLET.
- FITTINGS TO BE DUCTILE IRON AND MECHANICAL JOINT ONLY
- VALVES TO BE 200mm GATE TYPE AND 150mm GATE TYPE AS REQUIRED. RESILIENT SEAT VALVES TO AWMA SPECIFICATIONS.
- ALL MAIN VALVES MUST BE MECHANICAL JOINTS AND OPEN CLOCKWISE.
- VALVE RODS TO BE CANADA VALVE OR APPROVED EQUAL
- VALVE ROD EXTENSION PIECE ACCORDING TO THE MUNICIPALITY OF WEST PERTH WATER SPECIFICATIONS.
- HYDRANTS TO CONFORM TO AWMA C502 - BE AWK DRY BARREL HYDRANT HIGH PRESSURE MODEL 2700 OR BIBBY EQUIVALENT COMPLETE WITH FLANGED BOOT, 2-64mm HOSE CONNECTIONS AND 33-B TYPE PUMPER CONNECTIONS. HYDRANTS SHALL OPEN COUNTERCLOCKWISE. COLOUR SHALL BE YELLOW. UPPER BARREL COLLAR SHALL BE 150mm ABOVE FINISHED GRADE.
- HYDRANTS VALVES ARE REQUIRED ON EACH LOCATION.
- THRUST BLOCKS (AS REQUIRED) AS PER O.P.S.D. 1103.020 (RETAINING GLANDS ARE A SECOND OPTION)
- SERVICE CONNECTIONS TO BE AS PER O.P.S.D. 1104.01
- ALL SERVICE SADDLES TO BE BROAD BAND STAINLESS STEEL.
- SERVICES TO BE 25mm (Ø OR AS NOTED) MUNICIPEX PLASTIC TUBING CERTIFIED TO CSA B137.5 WITH TRACER WIRE, SINGLE LENGTH FROM MAIN TO CURB STOP AT PROPERTY LINE
- CURB STOPS TO BE 25mm CANADA FORD, CAMBRIDGE BRASS OR MUELLER BALL VALVE, COMPRESSION TYPE CONNECTION AS PER THE TOWN OF ST. MARYS WATER SPECIFICATIONS.
- CURB BOX SERVICE RODS TO BE STAINLESS STEEL C/W STAINLESS STEEL COTTER PIN

SERVICES (GENERAL)

- CONTRACTOR TO MARK SERVICE LOCATIONS WITH 38x89x (SUITABLE LENGTH) OF LUMBER EXTENDING FROM THE SERVICE INVERT TO A POINT 1.0m ABOVE FINISHED GRADE.
- SANITARY SERVICES TO BE INSTALLED IN CONFORMANCE WITH 1006.02 WITH FACTORY MADE "TS" TO MEET PLUMBING CODE REQUIREMENTS.

ELECTRICAL DISTRIBUTION SYSTEM

- TO BE INSTALLED ACCORDING TO AN AGREEMENT BETWEEN FESTIVAL HYDRO AND THE DEVELOPER
- TELEPHONE AND CABLE SERVICES WILL BE INSTALLED IN SAME TRENCH AS HYDRO SERVICES WHEREVER POSSIBLE

SEDIMENT CONTROL MEASURES

- ALL SWALES NOTED ON DRAWINGS TO HAVE A 1.2 m WIDE HYDRO SEED AND MULCH TREATMENT FOR THEIR ENTIRE LENGTHS
- EROSION CONTROL MEASURES ARE TO BE USED IN LOCALIZED AREAS AS SHOWN ON THE DRAWINGS AND AS DIRECTED BY THE ENGINEER OR THE ENGINEER'S REPRESENTATIVE DURING CONSTRUCTION (O.P.S.S. 805)
- ALL EROSION CONTROL MEASURES, (i.e. SILTATION FENCING) ARE TO BE INSTALLED PRIOR TO ANY EARTH MOVING OR SITE SERVICING CONSTRUCTION AND ARE TO REMAIN IN PLACE UNTIL RESTORATION IS COMPLETE AND A HEALTHY GRASS COVERING IS ESTABLISHED
- CONSTRUCTION ACTIVITY SHOULD OCCUR IN AN ORDER THAT WILL CAUSE AS LITTLE EROSION POTENTIAL AS POSSIBLE OR MINIMIZE THE POTENTIAL THAT CURRENTLY EXISTS
- ALL EROSION CONTROL MEASURES SHALL BE CHECKED REGULARLY AND CLEANED OR REPLACED AFTER RUN-OFF PRODUCING RAINFALLS AS DIRECTED BY THE ENGINEER OR THE ENGINEER'S REPRESENTATIVE. ALL COLLECTED SEDIMENT IS TO BE DISPOSED OF AT AN APPROVED LOCATION
- PROTECT ALL CATCHBASINS AND MANHOLES FROM SEDIMENT INTRUSION WITH FILTER FABRIC UNDER COVERS. THE SEDIMENT BARRIERS IN THE CATCHBASINS AND MANHOLES MAY BE REMOVED AFTER THE BOULEVARDS HAVE AN ESTABLISHED GRASS COVER AND THE ROADWAY HAS RECEIVED A BASE ASPHALT APPLICATION. KEEP ALL SUMPS CLEAN DURING CONSTRUCTION
- PROTECT ALL PIPE ENDS FROM SEDIMENT INTRUSION WITH MANUFACTURED PIPE CAPS. PREVENT WIND BLOWN DUST DURING CONSTRUCTION WITH AN ACCEPTABLE DUST SUPPRESSANT
- STRAIN BALE FILTERS OR FILTER FENCES SHALL BE INSTALLED IN THE SWALES, AND DOWNSTREAM OF ANY EROSION PRONE AREAS PRIOR TO CONSTRUCTION (AND MAINTAINED) AS DIRECTED BY THE ENGINEER
- AS BUILDING CONSTRUCTION OCCURS, THE BUILDER/CONTRACTOR SHALL BE ENCOURAGED TO INSTALL SILTATION BARRIERS AROUND THE CONSTRUCTION ZONE ON THE LOT UNTIL A LAWN IS ESTABLISHED.
- SITE RESTORATION TO A GRASSSED CONDITION IS TO BE COMPLETED AS EARLY AS POSSIBLE TO REDUCE THE POTENTIAL FOR SOIL EROSION

BOULEVARDS

- DRESS WITH A MINIMUM OF 150 mm THICKNESS OF TOPSOIL (O.P.S.S. 802) WITH A NO. 1 NURSERY SOD TREATMENT (O.P.S.S. 803) FROM THE BACK OF CURB TO THE FACE OF THE RESIDENTIAL UNITS
- THE MINIMUM CROSSFALL SHALL BE 2% FROM THE BACK OF CURB AND THE MAXIMUM CROSSFALL SHALL BE 8%

CURB AND GUTTER

- EXISTING CURB AND GUTTER DISTURBED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED TO MATCH THE EXISTING TYPE OF CURB
- ALL CURB AND GUTTER INSTALLED WITHIN THE NEW DEVELOPMENT SHALL BE 600.100 MOUNTABLE CURB, AND CONSTRUCTED WITH 30 MPa CONCRETE (MIX DESIGN TO BE PROVIDED PRIOR TO PLACEMENT)
- EXPANSION JOINTS SHALL BE PLACED AT END OF CURVED SECTIONS AND 1500mm BOTH SIDES OF CATCHBASINS, OR 6 METRES MAXIMUM SPACING IN ACCORDANCE WITH OPS5 35.3 CODE REQUIREMENTS.

DRIVEWAY RAMPS

- ONE RAMP PER DWELLING UNIT IS REQUIRED IN ACCORDANCE WITH SITE PLAN CONTROL
- THE MINIMUM APPROACH SLOPE IS 2%, THE MAXIMUM APPROACH SLOPE IS 7%
- DRIVEWAY DESIGN SHALL BE ONE OF THE FOLLOWING:
 - 140mm CONCRETE PLACED ON A MINIMUM COMPACTED DEPTH OF 100mm OF GRANULAR "A" BASE
 - 80mm OF HL 3B ASPHALT (PLACED AND COMPACTED IN TWO LAYERS) ON A MINIMUM COMPACTED DEPTH OF 230mm OF GRANULAR "A" BASE
 - INTERLOCKING PAVING STONES LAID ON A BASE PREPARED TO THE MANUFACTURER'S SPECIFICATIONS (MIN. 230mm OF GRANULAR "A" BASE)