

Development Application for Site Plan Control Approval

Complete Application

The application must be completed by the owner or authorized agent. Where the application is being made by an agent, the owner's written authorization is required. If the lands subject to this application are owned by more than one owner, the authorization of all owners is required. Submission of this application constitutes consent for authorized municipal staff to inspect the subject lands.

It is the responsibility of the applicant to research and evaluate the site and the proposal to ensure that the development will conform to the interests of the health, safety and welfare of future residents. The required technical studies should be carried out prior to submission of the application.

Online Application Process

All applications must be submitted online via the County's CityView Portal. The portal can be accessed here: [Welcome - CityView Portal](#). The applicant will submit the materials required as part of a complete application. Once the County confirms receipt of a complete submission, the applicant will be contacted and provided further direction for payment options.

Pre-Consultation Meeting:

Pre-consultation is highly recommended for site plan applications. The purpose of a pre-consultation meeting is to provide the applicant with an opportunity to present the proposed development, discuss opportunities and constraints, and for the County and Agency staff to identify the submission requirements. The requirements, as detailed in the pre-consultation meeting notes, are valid for one year after the meeting date.

User Fees:

The planning application fee will be determined when the application can be deemed complete according to Norfolk County Community Planning user fees: [User Fees | Norfolk County](#)

Cash, debit, credit or cheque payable to Norfolk County in the amount set out in the user fees By-Law that will be accepted and deposited once the application has been deemed complete.

An additional agency plan review fee may apply. Please see below for more information and forward fees directly to the applicable agency, as required:



Grand River Conservation Authority

[Plan Review fees | Grand River Conservation Authority](#)

Long Point Region Conservation Authority

[Planning Fees - Long Point Region Conservation Authority](#)

Development Application Process

Additional studies required for the complete application shall be prepared at the applicant's sole expense. Peer reviews may be necessary to review particular studies at the applicant's expense. In these cases, Norfolk County staff will select the company to complete the peer review.

The County will refund the original fee if applicants withdraw their applications before circulation. If your drawings are recirculated, there will be an additional fee. If more than three reviews of engineering drawings are requested due to revisions by the owner or failure to revise engineering drawings as requested, the County will charge an additional fee.

Contact Us

For additional information or assistance completing this application, please contact a Planner at 519-426-5870 or planning@norfolkcounty.ca.

The information submitted on this form is collected under the authority of the Freedom of Information and Protection of Privacy Act (FIPPA) and Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) for Norfolk County employees to use for the purpose of preparing and registering a development agreement.

Questions about the collection of personal information through this form may be directed to the Agreement and Development Coordinator or Information and Privacy Coordinator, Corporation of Norfolk County, 50 Colborne Street South, Simcoe ON.

**For Office Use Only:**

File Number	_____	Public Notice Sign	_____
Related File Number	_____	Application Fee	_____
Pre-consultation Meeting	_____	Conservation Authority Fee	_____
Application Submitted	_____	Well & Septic Info Provided	_____
Complete Application	_____	Planner	_____

Check the type of planning application(s) you are submitting.

- ☒ Site Plan – Regular
☐ Site Plan – Major
☐ Site Plan Minor or Amendment
☐ Site Plan for On-Farm Diversified Use

Please describe the proposed development

It is proposed to build a new 3-storey, 115,100 sq. ft. long-term care facility (160 beds).

Property Assessment Roll Number: 3310337040190310000

A. Applicant Information

Note: It is the responsibility of the owner to notify the Planner of any changes in ownership or authorized applicant within 30 days of such a change

Registered Owner(s)	1000246784 ONTARIO INC. (Southbridge Health Care LP)
Address	766 Hespeler Road, Suite 301
Town and Postal Code	Cambridge, ON N3H 5L8
Phone Number	(519) 498-5656
Cell Number	_____
Email	kkakish@southbridgecare.com

Name of Authorized Applicant	Novatech (Attn: Devin Rajala)
Address	240 Michael Cowpland Drive, Suite 200



Town and Postal Code	Ottawa, ON K2M 1P6
Phone Number	613-254-9643 Ext. 348
Cell Number	
Email	d.rajala@novatech-eng.com

Name of Authorized Agent	Novatech (Attn: Devin Rajala)
Address	240 Michael Cowpland Drive, Suite 200
Town and Postal Code	Ottawa, ON K2M 1P6
Phone Number	613-254-9643
Cell Number	
Email	d.rajala@novatech-eng.com

Please specify to whom all communications should be sent. Unless otherwise directed, all correspondence and notices in respect of this application will be forwarded to the owner and agent noted above.

☒ Owner ☒ Agent ☐ Applicant

Names and addresses of any holder of any mortgagees, charges or other encumbrances on the subject lands:

B. Location, Legal Description and Property Information

1. Legal Description (include Geographic Township, Concession Number, Lot Number, Block Number and Urban Area or Hamlet):

Part Lot 15, Concession 1 Woodhouse subject to an easement in gross as in NK115294 Norfolk County

Municipal address: 125 Dover Coast Boulevard

Date of acquisition of the subject property (if known): Aug 23, 2022

Present Official Plan Designation(s): Urban Residential

Present Zoning: Urban Residential Type 5 Zone (R5), Special Provision 14.886

2. Is there a special provision or site specific zone on the subject lands?

☒ Yes ☐ No If yes, please specify the corresponding number:

Special Provision "14.886" applies to the subject lands, which permits a long-term care facility as a permitted use in addition to those uses permitted in the R5 zone.

3. Present use of the subject lands:

Vacant

4. Please describe **all existing** buildings **and** structures on the subject lands and whether they will be retained, demolished or removed.

Vacant

5. If an addition to an existing building is being proposed, please explain what it will be used for. If new fixtures are proposed, please describe.

N/A

6. Please describe **all proposed** buildings **and** structures/additions on the subject lands.

One 3-storey, 115,100 sq. ft. long-term care facility

7. Are any existing buildings on the subject lands designated under the *Ontario Heritage Act* as being architecturally and/or historically significant?

Yes ☐ No ☒

If yes, identify and provide details of the building:

8. If known, the length of time the existing uses have continued on the subject lands:

N/A

9. Existing use of abutting properties:

Low-density residential (southwest), vacant(north), highway (north), golf course (south)

10. Are there any easements or restrictive covenants affecting the subject lands?

☒ Yes ☐ No

If yes, describe the easement or restrictive covenant and its effect:

Municipal servicing easement in gross as in NK115294 Norfolk County

1. Has the subject property ever been or currently is the subject of a Planning Act application:

- Plan of Subdivision ☒ Yes ☐ No
- Official Plan Amendment ☐ Yes ☐ No
- Zoning Bylaw, or Zoning Order Amendment ☒ Yes ☐ No
- Site Plan ☒ Yes ☐ No
- Consent/Minor Variance ☐ Yes ☐ No

If yes, please indicate the file number and the status of the application Site Plan Control: SPPL2022203 (inactive)

C. Zoning Review (chart must be completed in metric units)

1. Please provide a review of the zoning by-law compliance for the proposed development

	Zoning by-law Requirement	Proposed
Lot frontage (m)	30 m	83.7 m
Lot depth (m)	N/A	123 m (+/-)
Lot width (m)	N/A	202 m
Lot area (m ²)	N/A	22,382 m ²
Lot coverage %	N/A	16%
Front yard (m)	3 m	34.2 m
Rear yard (m)	9 m	19.9 m
Left Interior side yard (m)	3 m	22.9 m
Right Interior side yard (m)	3 m	N/A
Exterior side yard (corner lot) (m)	3 m	94.1 m (NW), 19.9 m (SE)
Landscaped open space %	N/A	58%

Entrance access width (m)	7.3 m	7.3 m
Exit access width (m)	7.3 m	7.3 m
Size of fencing or screening		Min. 1.6 m
Type of fencing		Vinyl chain-link
Building Size		10,685.70 m2 (GFA)
Number of storeys	3 storeys	3 storeys
Building height (m)		13 m
Total ground floor area (m ²)		3,569.4 m2
Total gross floor area (m ²)		10,708.2 m2
Total usable floor area (m ²)		3,125.4 m2

Off Street Parking and Loading Facilities

Number of off street parking spaces	42 spaces	91 spaces
Number of visitor parking spaces	0 spaces	91 spaces (staff & visitors)
Number of accessible parking spaces	2 spaces (1 Type A; 1	6 spaces (4 Type A; 2 Type B)
Number of off street loading facilities	None required	1 space

2. Please provide the following information for **proposed residential use** (if applicable)

Number of buildings existing: N/A

Number of buildings proposed: N/A

Is this a conversion or addition to an existing building? ☐ Yes ☐ No

If yes, please describe: _____

Number of existing dwelling units per lot: 0

3. Please provide the following information for **proposed Commercial/Industrial Uses** (if applicable)

Number of buildings existing: 0

Number of buildings proposed: N/A

Is this a conversion or addition to an existing building? ☐ Yes ☒ No

If yes, describe: _____



Indicate the gross floor area by the type of use (for example: office, retail, or storage):
Seating Capacity (for assembly halls or similar):

N/A

Total number of fixed seats: N/A

Describe the type of business(es) proposed: N/A

Total number of staff proposed initially: N/A

Total number of staff proposed in five years: N/A

Maximum number of staff on the largest shift: N/A

Is open storage required: ☐ Yes ☒ No

Is a residential use proposed as part of, or accessory to commercial/industrial use?

☐ Yes ☒ No

If yes, please describe: _____

4. Please provide the following information for **proposed institutional use** (if applicable)

Describe the type of use proposed: Long-term care facility

Seating capacity (if applicable): N/A

Number of beds (if applicable): 160 beds

Total number of staff proposed initially: TBD

Total number of staff proposed in five years: TBD

Maximum number of staff on the largest shift: Unknown

Indicate the gross floor area by the type of use (for example: office, retail, or storage):

Long-term care facility: 10,708 m²

5. Describe Recreational or Other Use(s) (if applicable)

N/A

D. Previous Use of the Property

1. Has there been an industrial or commercial use on the subject lands or adjacent lands? ☐ Yes ☒ No ☐ Unknown

If yes, specify the uses (for example: gas station or petroleum storage):

2. Is there reason to believe the subject lands may have been contaminated by former uses on the site or adjacent sites?

☐ Yes ☐ No ☒ Unknown

Please provide the information you used to determine the answers to the above questions:

3. If you answered yes to any of the above questions in Section D, a previous land use inventory showing all known former uses of the subject lands, and/or when applicable, the adjacent lands, is required.

Is the land use inventory of former land uses attached? ☐ Yes ☒ No

E. Provincial Planning Statement

1. Is the requested amendment consistent with the Provincial Planning Statements issued under subsection 3(1) of the *Planning Act*, R.S.O. 1990, c. P. 13?

☒ Yes ☐ No

If no, please explain:

2. Complete the following Environmental Features, Infrastructure and Development Context table as required:

Environmental Features, Infrastructure and Development Context	On-site	Within 500 metres
Class I Industrial Use ¹	☐	☐
Class II Industrial Use ¹	☐	☐
Class III Industrial Use ¹	☐	☐

Landfill site	☐	☐
Sewage treatment plant and waste stabilization plant	☐	☐
Significant wetlands	☐	☐
Significant fish habitat, valley lands, areas of natural and scientific interest, wildlife habitat	☐	☐
Sensitive groundwater recharge areas, headwaters and aquifers	☐	☐
Erosion hazards	☐	☐
Floodplains	☐	☐
Active railway line	☐	☐
Existing and/or planned controlled access highways or freeways	☐	☐
High voltage electric transmission line	☐	☐
Agricultural operations	☐	☐
Mineral aggregate resource area	☐	☐
Mineral aggregate operations	☐	☐
Existing pits and quarries	☐	☐
Significant built and /or cultural heritage resources	☐	☐
Significant archaeological resources	☐	☐
Hazardous sites ⁴	☐	☐
Source Water Protection (Wellhead Protection Area (WHPA) A, B or C; Issue Contributing Area; Intake Protection Zone	☐	☐

¹ Class 1, 2,3 Industrial Use – Refer to [D-6-1 Industrial Categorization Criteria](#) of the Ministry of the Environment Conservation and Parks

⁴ Hazardous sites - means property or lands that could be unsafe for development and site alteration due to naturally occurring hazards.

- It is the owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals, including the Endangered Species Act, 2007. Have the subject lands been screened to ensure that development or site alteration will not have any impact on the habitat for endangered or threatened species further to the Provincial Planning Statement ?

☒ Yes ☐ No

If no, please explain: _____

F. Servicing and Access

1. Indicate what services are available or proposed:

Water Supply

Municipal piped water ☒

Individual wells ☐

Communal wells ☐

Storm Drain

Storm sewers ☐

Open ditches ☐

Other (describe below): ☐

Sewage Treatment

Municipal sewers ☒

Communal system ☐

Septic tank and tile bed in good working order ☐

Other (describe below): ☐

Existing or proposed access to subject lands

Municipal road ☒

Provincial highway ☐

Unopened road ☐

Name of road/street

Barrett Court

Other (describe below): ☐

G. Other Information

1. Does the application involve a local business? ☒ Yes ☐ No

If yes, how many jobs are provided on the subject lands? _____

2. Is there any other information that you think may be useful in the review of this application? If so, explain below or attach on a separate page.

See attached Planning Justification letter for further information.

H. Supporting Material to be submitted by Applicant

1. Site Plan Control applications will require the following supporting materials:

- i. An electronic version in PDF format
- ii. Securities prepared by the applicant's engineer when applicable
- iii. An estimate for Parkland dedication by a certified land appraiser
- iv. Property Identification Number (PIN) and legal description printout provided by the Land Registry Office

2. General required information for the site plan drawings

- ☐ Concept/Layout Plan
- ☐ All measurements in metric
- ☐ Scale, legend and north arrow
- ☐ Legal description and municipal address
- ☐ Development name
- ☐ Drawing title, number, original date and revision dates
- ☐ Owner's name, address and telephone number
- ☐ Engineer's name, address and telephone number
- ☐ Professional engineer's stamp
- ☐ Existing and proposed easements and right of ways
- ☐ Zoning compliance table – required versus proposed
- ☐ Parking space totals – required and proposed
- ☐ All entrances to parking areas marked with directional arrows
- ☐ Loading spaces, facilities and routes (for commercial developments)
- ☐ All dimensions of the subject lands
- ☐ Dimensions and setbacks of all buildings and structures
- ☐ Location and setbacks of septic system and well from all existing and proposed lot lines, and all existing and proposed structures
- ☐ Gross, ground and useable floor area
- ☐ Lot coverage
- ☐ Floor area ratio
- ☐ Building entrances, building type, height, grades and extent of overhangs
- ☐ Names, dimensions and location of adjacent streets including daylighting triangles
- ☐ Driveways, curbs, drop curbs, pavement markings, widths, radii and traffic directional signs
- ☐ All exterior stairways and ramps with dimensions and setbacks
- ☐ Retaining walls including materials proposed
- ☐ Fire access and routes

- ☐ Location, dimensions and number of parking spaces (including visitor and accessible) and drive aisles
- ☐ Location of mechanical room, and other building services (e.g. A/C, HRV)
- ☐ Refuse disposal and storage areas including any related screening (if indoors, need notation on site plan)
- ☐ Winter snow storage location
- ☐ Landscape areas with dimensions
- ☐ Natural features, watercourses and trees
- ☐ Floodline boundaries
- ☐ Fire hydrants and utilities location
- ☐ Fencing, screening and buffering – size, type and location
- ☐ All hard surface materials
- ☐ Light standards and wall mounted lights (plus a note on the site plan that all outdoor lighting is to be dark sky compliant)
- ☐ Business signs (make sure they are not in sight lines)
- ☐ Sidewalks and walkways with dimensions
- ☐ Pedestrian access routes into site and around site
- ☐ Bicycle parking
- ☐ Architectural elevations of all building sides

All other requirements as per the pre-consultation meeting will apply. All final plans must include the owner's signature as well as the engineer's signature and seal.

3. The following additional plans, studies and reports, including but not limited to, **may** also be required as part of the complete application submission:

- ☐ Zoning Deficiency Form
- ☐ On-Site Sewage Disposal System Evaluation Form (to verify location and condition)
- ☐ Architectural Plan
- ☐ Buildings Elevation Plan
- ☐ Cut and Fill Plan
- ☐ Erosion and Sediment Control Plan
- ☐ Grading and Drainage Control Plan (around perimeter and within site) (existing and proposed)
- ☐ Landscape Plan
- ☐ Photometric (Lighting) Plan

- ☐ Plan and Profile Drawings
- ☐ Site Servicing Plan
- ☐ Storm water Management Plan
- ☐ Street Sign and Traffic Plan
- ☐ Street Tree Planting Plan
- ☐ Tree Preservation Plan
- ☐ Archaeological Assessment
- ☐ Heritage Impact Assessment
- ☐ Environmental Impact Study
- ☐ Functional Servicing Report
- ☐ Geotechnical Study / Hydrogeological Review
- ☐ Minimum Distance Separation Schedule
- ☐ Noise or Vibration Study
- ☐ Record of Site Condition
- ☐ Stormwater Management Report
- ☐ Traffic Impact Study – please contact the Planner to verify the scope required



I. Development Agreements

A development agreement may be required prior to site plan control applications. Should this be necessary for your development, you will be contacted by the agreement administrator with further details of the requirements including but not limited to insurance coverage, professional liability for your engineer(s), additional fees and securities.

J. Transfers, Easements and Postponement of Interest

The owner acknowledges and agrees that if required, it is their solicitor's responsibility on behalf of the owner to disclose the registration of all transfer(s) of land and/or easement in favour of the County and/or utilities. Also, the owner further acknowledges and agrees that it is their solicitor's responsibility on behalf of the owner to undertake the registration of postponements of any charges in favour of the County.

K. Permission to Enter Subject Lands

Permission is hereby granted to Norfolk County officers, employees or agents, to enter the premises subject to this application for the purpose of making inspections associated with this application, during normal and reasonable working hours.

L. Freedom of Information

For the purposes of the *Municipal Freedom of Information and Protection of Privacy Act*, I authorize and consent to the use by or the disclosure to any person or public body any information that is collected under the authority of the *Planning Act, R.S.O. 1990, c. P. 13* for the purposes of processing this application.

Owner/Authorized Applicant Signature

Date



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Owner/Authorized Applicant Signature

May 12, 2026

Date



M. Owner's Authorization

If the authorized applicant/agent is not the registered owner of the lands that is the subject of this application, the owner(s) must complete the authorization set out below.

I/We Southbridge Health Care LP am/are the registered and authorized owner(s) of the lands that is the subject of this application.

I/We authorize Novatech to make this application on my/our behalf and to provide any of my/our personal information necessary for the processing of this application. This shall be your good and sufficient authorization for so doing.

May 12, 2026

Owner

Date

Owner

Date

N. Declaration

I, Devin Rajala of Novatech

solemnly declare that:

all of the above statements and the statements contained in all of the exhibits transmitted herewith are true and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of *The Canada Evidence Act*.

Declared before me at:

Novatech

Owner/Authorized Applicant Signature

In Ottawa

This 15 day of May

A.D. 20 26

A Commissioner, etc.

TERRI-LYN FINDLAY,
a Commissioner, etc., Province of Ontario,
for Novatech Engineering Consultants Ltd.
Expires February 2, 2028.



Port Dover LTC Facility

Geotechnical Investigation Report

Project Location:

Dover Coast Boulevard and Barrett Court
Port Dover, ON

Prepared for:

Southbridge Health Care LP
301-766 Hespeler Road
Cambridge, ON N3H 5L8

Prepared by:

MTE Consultants Inc.
365 Home Street
Stratford, ON N5A 2A5

May 8, 2026

MTE File No.: 67157_001



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1.0 INTRODUCTION

MTE Consultants Inc. (MTE) was retained by Southbridge Health Care LP to conduct a geotechnical investigation for a new Long Term Care (LTC) facility in Port Dover, Ontario. The property is located west of the Dover Coast Boulevard and Barrett Court intersection as shown on **Figure 1 in Appendix A**.

It is understood that the development will include a 3-storey slab-on-grade LTC building. It is also understood that parking areas and drive aisles will be constructed and that the proposed building will be provided with full municipal services. The design details of the development are referenced from the Lawrence Architects Site Plan Drawing A1.0, dated March 6, 2026.

The site is currently vacant and the area of the proposed building currently slopes down from north to south approximately 1.3 m (Elevation 191.4 to 192.7 m) at the borehole locations.

The purpose of this geotechnical investigation is to determine the soil and groundwater conditions in the area of the proposed development, and provide geotechnical engineering recommendations for site grading, site servicing, pavement design, subdrainage, foundations, and slab-on-grade construction.

2.0 FIELD AND LABORATORY PROGRAM

The fieldwork for this investigation was carried out on August 23rd and 24th, 2018 and involved the drilling of thirteen boreholes (Boreholes BH101-18 to BH113-18) to depths ranging from 4.4 to 11.3 m. The number and depth of boreholes were requested by the client. The locations of the boreholes were surveyed by MTE OLS Ltd. and are shown on the Site Plan, **Figure 1 in Appendix A**.

Private and public utility companies were contacted prior to the start of drilling activities in order to isolate underground utilities near the boring locations.

The boreholes were advanced with a D50T track mounted drill rig equipped with continuous flight hollow stem augers supplied and operated by London Soil Test Ltd.

Representative soil samples were recovered throughout the depths explored. Standard Penetration Tests (SPT) were carried out during sampling operations in the boreholes using conventional split spoon equipment. The SPT N-values recorded are plotted on the borehole logs in **Appendix B**.

Cohesive soil samples were tested using a pocket penetrometer to determine approximate shear strengths. The results of the penetrometer testing are plotted on the appended borehole logs.

Upon completion of drilling, the boreholes were backfilled with soil cuttings and bentonite in accordance with Ontario Regulation 468/10 (formerly O. Reg. 903) under the provinces Water Resources Act. No monitoring wells were installed as part of this investigation as no free groundwater was noted at the time of drilling.

The fieldwork was monitored throughout by a member of our geotechnical engineering staff, who directed the drilling procedures; conducted SPT and pocket penetrometer tests; documented the soil stratigraphies; monitored the groundwater conditions; and transported the recovered soil samples back to our office for further classification.

All of the soil samples collected were submitted for moisture content testing and two soil samples were submitted for particle size distribution analyses. The results of the laboratory testing are provided in **Appendix C**. The remaining soil samples will be stored for a period of 1 month and will be discarded of at that time without prior request from the client to extend storage time.

3.0 SOIL CONDITIONS

Reference is provided to the appended borehole logs for soil stratigraphy details, SPT N-Values, results of pocket penetrometer testing, moisture content profiles, and groundwater observations and measurements. Soil conditions encountered at the site typically include fill overlying native silty clay.

The subsurface soil and groundwater conditions were established at the borehole locations only. Subsurface conditions should be expected to vary, in some instances significantly, between and beyond the borehole locations. The stratigraphic boundaries shown on the borehole logs have been inferred from non-continuous sampling and, as such, are approximate and typically represent transitions between soil types and do not necessarily represent exact planes of geological change.

3.1 Fill

Fill was encountered surficially in all of the boreholes and ranges in composition from brown sand and silt with some clay, to grey silty clay with trace sand. The fill ranges in thickness from 0.8 to 1.5 m (average thickness of 1.0 m) and was moist to very moist at the time of fieldwork.

3.2 Silty Clay

Native silty clay was encountered beneath the fill in all of boreholes and extends to the termination depth of the boreholes. The results of two particle size distribution analyses conducted on the clay are provided in **Appendix C** and summarized in the following table;

Table 1 – Results of Silty Clay Particle Size Distribution Analyses

Borehole Number	Sample Depth (m)	Sand (%)	Silt (%)	Clay (%)
BH104-18	2.29-2.90	1	30	69
BH111-18	3.05-3.66	1	36	33

SPT N-values measured in the silty clay ranged from 6 to 26 blows per 300 mm penetration of the split spoon sampler. The shear strength measured with a pocket penetrometer ranges from 50 to above 200 kPa indicating a firm to hard consistency. Insitu moisture contents in the clay ranged from 9 to 25% indicating moist to very moist or drier than the plastic limit to wetter than the plastic limit conditions.

4.0 GROUNDWATER CONDITIONS

Groundwater observations and measurements were carried out in the open boreholes at the time of drilling and are summarized on the borehole logs. No free groundwater was noted at the time of drilling. The grey colour of the soil at a depth of 2.3 to 3.0 m below ground surface (Elevation 188.0 to 190.1 m) is indicative of permanent saturated conditions and groundwater is not expected to drop below these levels.

It should be noted that the groundwater levels can vary and are subject to seasonal fluctuations and local variations.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 General

The project involves the design and construction of a 3-storey slab-on-grade LTC building. It is understood that parking areas and drive aisles will be constructed and that the proposed building will be provided with full municipal services.

The subsurface stratigraphy at the site comprises fill overlying native silty clay. No free groundwater was noted at the time of drilling on August 23 and 24, 2018.

This section of the report provides geotechnical engineering recommendations for the preliminary design of the project. These recommendations are intended for use by the project designers and are based on our interpretation of the factual information obtained. Where comments are made related to construction, they are provided to draw attention to aspects that could affect the design. Contractors bidding on or carrying out the work should make their own interpretation of the factual information contained in this report and make their own interpretation of, and draw their own conclusions from, that information to assess how it may affect means and methods, equipment selection, staging, costing and the like.

The following subsections of this report contain geotechnical recommendations pertaining to development of the property including site preparation, foundation design, slab-on-grade construction, site servicing, and pavement design and subdrainage.

5.2 Site Preparation

The first construction activity that will be required for the proposed development will be grading. Prior to carrying out any engineering fill operations the surficial fill must be removed from the development area and stockpiled. The average fill thickness in the boreholes is 1.0 m.

It is noted that the movement of excess soil from a project site is regulated under O.Reg. 406/19 and the associated Rules for Soil Management and Excess Soil Quality Standards. The Regulation and Rules have been enacted with various phase in dates between January 2021 and 2025. Depending on the proposed timing and final design of the project, excess soil management may be captured under the Regulation and associated Rules.

The subgrade should be inspected and proof rolled in the presence of qualified geotechnical personnel to verify if the subgrade will provide support as intended in the original design. The primary purpose of the inspection is to identify poorly performing areas which should be sub-excavated.

It is understood that the finished floor elevation (FFE) of the proposed building is to be at Elevation 193.2 m. It is envisioned that an imported fill program will be conducted for the development.

Structural fill used for raising grades beneath the building should comprise granular material such as OPSS 1010 Granular 'B' or 'A'. The height of structural fill in areas may be as much as 2.0 to 2.5 m after existing fill removal. Subgrade fill material beneath the proposed pavement areas and services should meet the requirements of OPSS Select Subgrade Material. Any imported fill should be tested and verified by a geotechnical engineer prior to placement.

Structural fill pads should extend a minimum 1.0 m beyond the edge of the footing envelope of any building and down to subgrade at an angle of 45 degrees to the horizontal. Full time testing by geotechnical personnel is required during fill placement and compaction to monitor material quality, lift thickness, and verify the compaction by in-situ density testing (as per the 2024 Ontario Building Code).

It is noted that due to the upper fine grain native silty clay soils at the site, imported fill operations should be carried out during the drier summer months. The fine grained native silty clay soils are susceptible to disturbance from inclement weather.

The majority of the native soils are suitable for reuse as engineered fill in landscape and parking lot areas. All fill should be placed in maximum 300 mm thick lifts and compacted to the following percentages;

Table 2 – Engineered Fill Requirements

Fill Use	Minimum Compaction Required
Imported Structural fill to support buildings	100% SPMDD
Subgrade fill beneath pavements or services	95% SPMDD
Bulk fill in landscape areas	90% SPMDD

The subgrade soils are very susceptible to disturbance due to the silt and clay content, and it is recommended that construction traffic on the subgrade be minimized.

In order to minimize the effects of weather and groundwater, the fill operations onsite works should be carried out in the dry summer months.

5.3 Foundation Design

It is understood that the proposed building will be a slab-on-grade structure and constructed with conventional strip and/or pad footings. It is also understood that the FFE of the building will be 193.2 m.

The proposed building will be constructed in the vicinity of Boreholes BH104-18 to BH107-18, BH109-18, BH110-18, and BH112-18. Surficial fill was encountered in these boreholes and extended to an average depth of 1.0 m. It is anticipated that the fill will be removed during site grading activities but in any case, the fill should be removed from the proposed building area footprint.

It is understood that the FFE of the building will be at Elevation 193.2 m. If the building is constructed with conventional strip and/or pad footings, then it is anticipated that the footings will not extend beyond Elevation 192.0 m and the footings will be founded on the imported granular structural fill. The structural fill should be placed as per the instructions provided in Section 5.2.

Conventional spread/pad footings founded on the granular structural fill may be designed for a factored geotechnical bearing resistance at Ultimate Limit States (ULS) of 225 kPa, and soil bearing resistance for 25 mm of settlement at Serviceability Limit States (SLS) of 150 kPa.

The footing areas must be inspected by qualified geotechnical personnel to ensure that the soil conditions encountered at the time of construction are suitable to support the design resistances prior to pouring concrete. Any loose disturbed, organic and deleterious material identified during the inspection should be removed from the footing areas and replaced with structural fill or concrete.

The founding soils are susceptible to disturbance by construction activity, especially during wet weather and care should be taken to preserve the integrity of the material as bearing strata. A mud slab is recommended to be placed on the excavated footing areas to preserve the bearing strata immediately after excavation.

All footings in unheated areas must be provided with a minimum 1.2 m of earth cover after final grading in order to minimize the potential of damage due to frost action, as per Ontario Provincial Standard Drawing OPSD 3090.101, dated November 2010. If construction is undertaken during the winter, the subgrade soil and concrete should be protected from freezing.

Where spread footings are constructed at different elevations, the difference in elevation in the individual footing should not be greater than one half of the clear distance between the footings. The lower footing should be constructed first so that if it is necessary to construct the lower footings at a greater depth than anticipated, the elevation of the upper footings can be adjusted accordingly.

A Site Classification 'D' should be used for earthquake load and effects in accordance with Table 4.1.8.4.-B of the 2024 Ontario Building Code.

All excavations at the site should be carried out in conformance with the Ontario Occupational Health and Safety Act and Regulations for Construction Projects. The structural fill and native soils encountered at the site are classified as Type 3 soils, and temporary side slopes through this material must be cut at an inclination of 1 horizontal to 1 vertical or less from the base of the excavation, exclusive of groundwater effects.

In general, the granular structural fill excavated from the foundation trench areas is considered suitable for reuse as foundation wall backfill. The native silty clay soil is not considered suitable for reuse as foundation wall backfill, if encountered. The native silty clay is highly susceptible to soil adfreezing.

To minimize the risk of frost damage we recommend the foundation walls be backfilled with free draining granular material. The backfill should be placed in 300 mm thick lifts and compacted to at least 95% standard Proctor maximum dry density (SPMDD) on the outside of the building; and 100% SPMDD on the inside of the building. The backfill must be brought up evenly on both sides of walls not designed to resist lateral earth pressure.

5.4 Concrete Slab-on-Grade Floors

It is understood that the floor slabs for the proposed building are to be constructed using conventional concrete slab-on-grade techniques, following removal of any unsuitable fill, topsoil, and organic soils, and inspection of the subgrade soils.

Any additional material required to raise grades below the floor slabs should comprise sand and gravel and be compacted to 100% SPMDD. A minimum 150 mm thick layer of Granular 'A' material uniformly compacted to 100% SPMDD should be provided directly beneath the slab for leveling and support purposes.

A modulus of subgrade reaction of 35 MPa/m should be used in the design of the floor slab.

No special underfloor drains are required provided the exterior grades are lower than the floor slab and positively sloped away from the building.

If a moisture-sensitive floor finish is to be applied to the slab, then we recommend that a 15 mil polyethylene moisture vapour barrier be installed directly beneath the slab. The purpose of the vapour barrier is to reduce moisture transfer by diffusion. Joints in the vapour barrier should be lapped not less than 100 mm.

The water to cement ratio and slump of the concrete utilized in the floor slab should be strictly controlled to minimize shrinkage of the slab. Control joints should be sawed into the slabs at regular intervals within 12 hours of initial concrete placement in order to prelocate shrinkage cracks.

Concrete testing should be performed onsite to determine the slump, temperature, and air entrainment; and concrete cylinders should be cast for compressive strength testing.

5.5 Elevator Pits

It is anticipated that elevator pits will be constructed for the building. The pits will likely be waterproofed and therefore must be designed to resist uplift due to hydrostatic pressure. The magnitude of the hydrostatic uplift may be calculated using the following formula:

$$P = \gamma \times d$$

where:

P = hydrostatic uplift pressure acting on the base of the structure (kPa)

γ = unit weight of water - use 9.81 kN/m³

d = depth of base of the structure below the design high water level (m)

5.6 Site Servicing

5.6.1 Excavations and Dewatering

The building will receive full municipal services. It is anticipated that the invert levels for the new pipes will be at conventional depths.

Temporary excavations to conventional depths for installation of underground pipes at this site must comply with the Ontario Occupational Health and Safety Act and Regulations for Construction Projects. The predominant native soils encountered in the boreholes would be classified as Type 3 soils (O. Reg. 213/91, s. 226 (4)). Above the groundwater is it anticipated the side slopes are temporarily stable at 1 horizontal to 1 vertical. Flatter slopes may be required if loose conditions are encountered.

Trench side slope must be continuously inspected especially after periods of heavy rainfall or snow melt to identify areas of instability. Surface water should be directed away from entering the trench.

Minor groundwater seepage could occur perched within the fill and upper native soils; however, it is anticipated that conventional sump pumping techniques will be sufficient to control the inflow. It will be necessary to flatten the excavation side slopes where groundwater seepage is occurring to ensure stability. Every excavation that a worker may be required to enter shall be kept reasonably free of water (O. Reg. 213/91, s. 230).

It is recommended test pits be excavated during the tendering stage of the project to familiarize potential contractors of the soil and groundwater conditions at the site.

5.6.2 Pipe Bedding

The subgrade soils beneath the new services will comprise native soils. Prior to installation of the new services the subgrade should be inspected by a geotechnical engineer. The bedding material may need to be thickened where sub-excavation is at or above the soft or spongy soil from the base of the service trench.

Pipe bedding for sewer services should be conventional Class 'B' pipe bedding comprising a minimum 150 mm thick layer of OPSS Granular 'A' aggregate below the pipe invert. Granular 'A' type aggregate should be provided around the pipe to at least 300 mm above the pipe and the bedding aggregate should be compacted to a minimum 95% SPMDD.

A well-graded clear stone such as Coarse Aggregate for HL4 Asphaltic Concrete (OPSS 1003) could be used in the sewer trenches as bedding below the spring line of the pipe to facilitate sump pump dewatering, if necessary. The clear stone should be compacted with a plate tamper and fully wrapped with a non-woven geotextile to prevent the migration of fine particles from the saturated soils.

5.6.3 Trench Backfilling

The trenches above the specified pipe bedding should be backfilled with inorganic on-site soils placed in 300 mm thick lifts and compacted to at least 95% SPMDD. Where trenches enter the proposed building the backfill should be compacted to 100% SPMDD or 5 MPa lean-mix concrete may be used. Based on the results of insitu moisture content tests carried out on the native deposits, it may be difficult to achieve the specified density on all the trench backfill. Any additional material required to be imported at the site should meet OPSS Select Subgrade Material specifications.

To minimize potential problems, backfilling operations should follow closely after excavation so that only a minimal length of trench is exposed. Care should be taken to protect side slopes of excavations by diverting surface run-off away from the excavations. If construction extends into the winter, then additional steps should be taken to minimize frost and ensure that frozen material is not used as backfill.

All materials and construction services required for the work should be in accordance with the relevant sections of the Ontario Provincial Standard Specifications.

5.7 Pavements

Pavements will be constructed for the new drive aisle and parking areas at the site. The pavement subgrade soils will comprise compacted subgrade fill or native silty clay. The following pavement component thicknesses are recommended based on the proposed pavement usage, the frost-susceptibility and strength of the subgrade soils:

Table 3 – Pavement Design

Pavement Component	Ligh Duty Areas	Heavy Duty Areas
HL3 Surface Hot Mix Asphalt	40 mm	40 mm
HL4 or HL8 Binder Hot Mix Asphalt	50 mm	80 mm
OPSS 1010 Granular 'A' Base	150 mm	150 mm
OPSS 1010 Granular 'B' Subbase	350 mm	400 mm

Samples of aggregates should be checked for conformance to OPSS 1010 prior to utilization on site and during construction. The Granular 'B' subbase and Granular 'A' base courses must be compacted to 100% SPMDD, as verified by insitu density testing.

The asphaltic concrete paving materials should conform to the requirements of OPSS 1150. The asphalt should be placed and compacted in accordance with OPSS 310. The Performance Graded Asphalt Cement designation for the asphaltic concrete is 58-28.

The surface asphalt should be placed in one lift. The binder asphalt for the light duty areas should be placed in one lift and the binder asphalt for the heavy duty areas should be placed in two lifts.

The pavement design is based on the assumption that construction will be carried out during the drier time of the year and that the subgrade soil is stable as determined by proof-rolling inspected by qualified geotechnical personnel. If the subgrade is wet and unstable, additional granular subbase will be required.

All materials and construction services required for the work should be in accordance with the relevant sections of the Ontario Provincial Standard Specifications.

It is recommended to install subdrains beneath the low areas of pavement and connected to catchbasins. The purpose of the subdrains is to remove excess subsurface water in order to improve overall pavement serviceability and increase the pavement life. Consideration should be given to providing continuous subdrains along the perimeter edges of the parking areas to promote drainage of the granular materials.

The work of subdrain installation shall be in accordance with OPSS 405 and OPSD 216.021. The subdrain shall be 100 or 150 mm diameter perforated pipe conforming to OPSS 1801 or 1840, and wrapped with geotextile conforming to OPSS 1860.

5.8 Corrosion Potential and Sulphate Attack on Concrete Potential

MTE retained KGS Environmental Group Inc. of Scotland, Ontario to complete two test pits (TP101-23 and TP102-23) within the proposed building footprint on July 7, 2023. The test pits were advanced to a depth of 2.4m within the native silty clay. MTE collected a representative soil sample from each test pit that were submitted to an accredited analytical laboratory for analysis of pH, soil conductivity, redox potential, and sulphides concentration. The results were evaluated using the criteria described by ANSI/AWWA. The ANSI/AWWA rating system considers a total score value of 10 or greater indicative of increased potential for corrosion of buried steel.

The analytical results for soil corrosion potential are summarized in the following table.

Table 4 – Soil Corrosion Potential

Parameter	TP101-23 1.8 - 2.4 mbgs		TP102-23 1.8 - 2.4 mbgs	
	Result	ANSI/AWWA Point Value	Result	ANSI/AWWA Point Value
Resistivity (ohm-cm)	1200	10	1100	10
pH	7.67	0	7.68	0
Redox Potential (mV)	350	0	330	0
Sulphides (mg/kg)	0.6	2	1.8	3.5
Moisture	19	0	16	0
Total ANSI/AWWA Rating	12		13.5	

Based on the ANSI/AWWA rating system, corrosion protection may be required for buried steel.

The analytical results for sulphate are summarized in the following table.

Table 5 – Sulphate Soil Test Results

Test Pit ID	Sample Depth (mbgs)	Moisture Content (%)	pH	Soluble Sulphate (ug/g)
TP101-23	1.8 - 2.4	19	7.67	760
TP102-23	1.8 - 2.4	16	7.68	860

It is the responsibility of the structural engineer to determine the appropriate cement type based on the testing results.

5.9 Construction Inspection and Testing

MTE recommends that geotechnical inspection and testing procedures be conducted throughout the various phases of the project.

Engineer site visits should be conducted to confirm geotechnical bearing resistances for footings. Soil compaction testing should be carried out on structural fill beneath the proposed building, foundation wall backfill, subslab granular fill, service pipe bedding, and trench backfill. Laboratory and field testing of the pavement structure components (granulars and asphaltic concrete) should be conducted, as well as concrete testing for foundations, curbs and sidewalks.

MTE offers soil compaction, concrete, and asphalt testing, as well as soil inspection services through our local offices.

6.0 HYDROGEOLOGICAL CONSIDERATIONS

Based on our review of the borehole logs, the following hydrogeological findings are provided.

The observed stratigraphy generally consisted of surficial fill underlain by native cohesive silty clay soils with trace to some sand and occasional sand seams encountered. All boreholes were dry upon completion of drilling on August 23 and 24, 2018.

6.1 Source Protection

The Source Protection Information Atlas (Ministry of Environment, Conservation and Parks, 2021) was used to confirm that the Site is not within:

- i. an Intake Protection Zone (IPZ);
- ii. a Wellhead Protection Area (WHPA);
- iii. a Highly Vulnerable Aquifer (HVA); or
- iv. a Significant Groundwater Recharge Area (SGRA).

Properties adjacent to the Site rely on piped water supply as their primary source of drinking water. Shallow construction dewatering activity is not anticipated to impact nearby private wells.

No watercourses are mapped on Site. Seven ponds belonging to the neighboring golf course appear to be offline with the closest pond located approximately 80 m southeast of the Site boundary. No other potential groundwater receptors have been identified within 500 m of the Site. Lake Erie is located approximately 650 m south of the Site at the closest approach.

6.2 Construction Dewatering

Excavations for services and foundations will generally encounter silty clay soils with occasional sand seams that are water bearing. The volume of water released from the sand seams should be relatively minor and should not require an Environmental Activity and Sector Registry (EASR) for water takings exceeding 50,000 L/day during construction. Should unanticipated groundwater conditions be encountered during a test pit program or during construction necessitating an EASR registration, MTE should be notified of the conditions encountered and retained to prepare a Water Taking and Discharge Plan to support an EASR registration.

6.3 Infiltration

Following development, the increase in the impervious surface area at the Site is anticipated to decrease infiltration and increase runoff relative to the existing conditions.

Appropriate low impact development (LID) measures may mitigate the anticipated decrease in post-development infiltration. Subject to site limitations, specific mitigation measures may include:

- Reduction of the amount of impervious surface area, where feasible;
- Storage of precipitation for subsequent use to satisfy landscape irrigation requirements;
- Topsoil thickening to provide additional storage;
- Promote diffused infiltration of stormwater so that, where feasible, runoff from impervious surfaces sheet flows over adjacent pervious surfaces that are managed to optimize infiltration capacity;
- Construction of bioretention cells and/or bioswales within proposed greenspaces, boulevards, or landscaped areas to allow for the diversion of overland flow and subsequent infiltration, where feasible; and
- Use of permeable pavements, where feasible (i.e., driveways, parking lots, sidewalks, patios, etc.).

In-situ infiltration testing in areas considered for infiltration is highly recommended to assess feasibility and provide a site-specific infiltration rate of the soils in those areas to inform the design. The testing program should include profiling of infiltration rates with depth at multiple locations within the footprint for each proposed infiltration system.

7.0 LIMITATIONS OF REPORT

Services performed by **MTE Consultants Inc.** (MTE) were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the Geotechnical Engineering & Consulting profession practicing under similar conditions in the same geographic area where the services are provided. No other warranty or representation expressed or implied as to the accuracy of the information, conclusions or recommendations is included or intended in this report.

This report was completed for the sole use of the Client. This report is not intended to be exhaustive in scope or to imply a risk-free site. As such, this report may not deal with all issues potentially applicable to the site and may omit aspects which are or may be of interest to the reader.

In addition, it should be recognized that a soil sample result represents one distinct portion of a site at the time it is collected, and that the findings of this report are based on conditions as they existed during the time period of the investigation. The material in the report reflects our best judgment using the information available at the time the report was written. The soil and groundwater conditions between and beyond the test holes may differ from those encountered in the test holes. Should subsurface conditions arise that are different from those in the test holes MTE should be notified to determine whether or not changes should be made as a result of these conditions.

It should be recognized that the passage of time may affect the views, conclusions and recommendations (if any) provided in this report because groundwater conditions of a property can change, along with regulatory requirements. All design details were not known at the time of submission of this report and it is recommended MTE should be retained to review the final design documents prior to construction to confirm they are consistent with our report recommendations. Should additional or new information become available, MTE recommends that it be brought to our attention in order that we may determine whether it affects the contents of this report.

Any use which another party makes of this report, or any reliance on, or decisions to be made based upon it, are the responsibility of such parties. MTE accepts no responsibility for liabilities incurred by or damages, if any, suffered by another party as a result of decisions made or actions taken, based upon this report. Others with interest in the site should undertake their own investigations and studies to determine how or if the condition affects them or their plans. The contractors bidding on this project or undertaking the construction should make their own interpretation of the factual information and draw their own conclusions as to how subsurface conditions may affect their work.

The benchmark and elevations provided in this report are primarily established to identify differences between the test hole locations and should not be used for other purposes such as, planning, development, grading, and excavation.

Respectfully submitted,
MTE Consultants Inc.



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A handwritten signature in black ink, appearing to read "Brett Thorner", followed by a long horizontal line.

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Director, Geoscience Sector
519-204-6510
BThorner@mte85.com

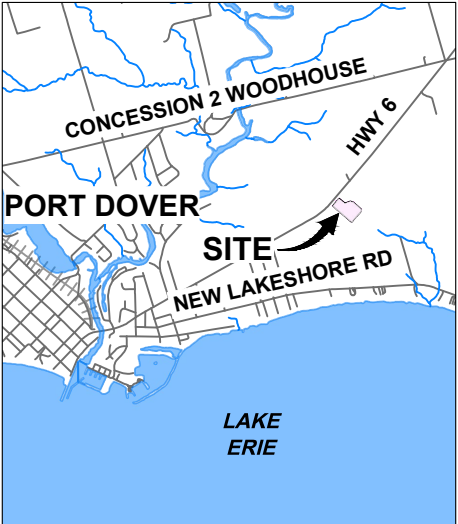
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https://mte85.sharepoint.com/sites/67157_001/Shared Documents/Report/Final Report/67157_001_2026-05-08_rpt_Geotechnical Investigation_Port Dover.docx

Appendix A

Figures

Figure 1 – Site Plan



KEY PLAN (nts)

LEGEND

- SITE
- ⊕ BOREHOLE
- (191.9m) ELEVATION (m AMSL)

REFERENCES

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NOTES

THIS FIGURE IS SCHEMATIC ONLY AND TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.





Engineers, Scientists, Surveyors

PROJECT **GEOTECHNICAL INVESTIGATION
DOVER COAST BOULEVARD
AND BARRETT COURT
PORT DOVER, ONTARIO**

TITLE **SITE PLAN**

Drawn SS/DCH	Scale 1:1,250	Figure 1
Checked	Project No. 67157_001	
Date 2026-05-07	Rev No. 0	

Appendix B

Borehole Logs

Abbreviations and Symbols

MTE Boreholes BH101-18 to BH113-18





The following are abbreviations and symbols commonly used on borehole logs, figures and reports.

Sample Types

AS	Auger Sample
CS	Chunk Sample
BS	Bulk Sample
GS	Grab Sample
WS	Wash Sample
SS	Split Spoon
RC	Rock Core
SC	Soil Core
TW	Thinwall, Open
TP	Thinwall, Piston

Soil Tests

PP	Pocket Penetrometer
FV	Field Vane
SPT	Standard Penetration Test
CPT	Cone Penetration Test
WC	Water Content
WL	Water Level

Penetration Resistance

Standard Penetration Test, N (ASTM D1586)	The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in.) required to drive a 50 mm (2 in.) open spilt spoon sampler for a distance of 300 mm (12 in.).
Dynamic Cone Penetration Resistance	The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in.) required to drive an uncased 50 mm (2 in.) diameter, 60o cone attached to "A" size drill rods for a distance of 300 mm (12 in.).

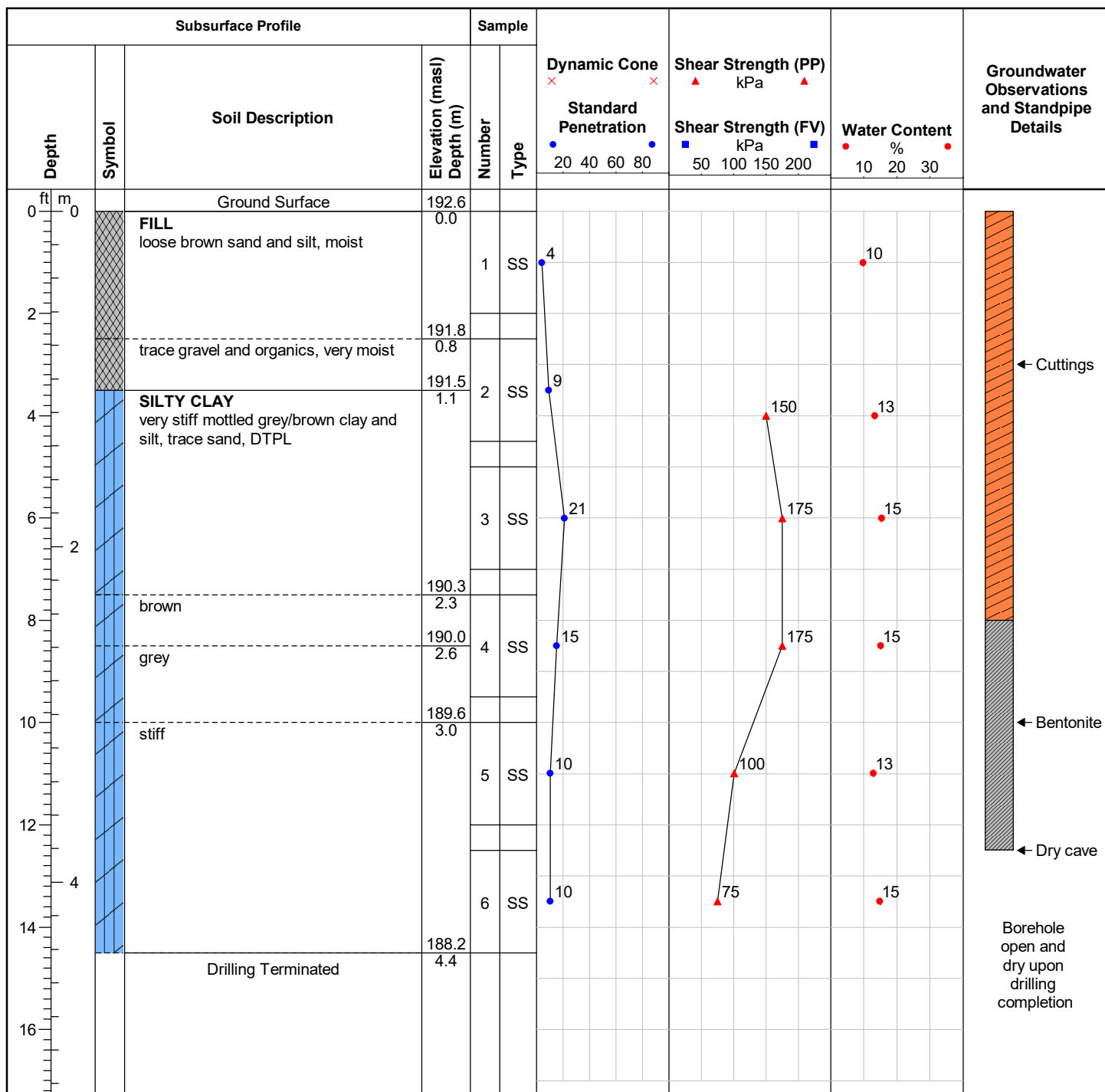
Soil Description

Cohesive Soils	Undrained Shear Strength (Cu)	
Consistency	kPa	psf
Very Soft	0 to 12	0 to 250
Soft	12 to 25	250 to 500
Firm	25 to 50	500 to 1,000
Stiff	50 to 100	1,000 to 2,000
Very Stiff	100 to 200	2,000 to 4,000
Hard	Above 200	Above 4,000

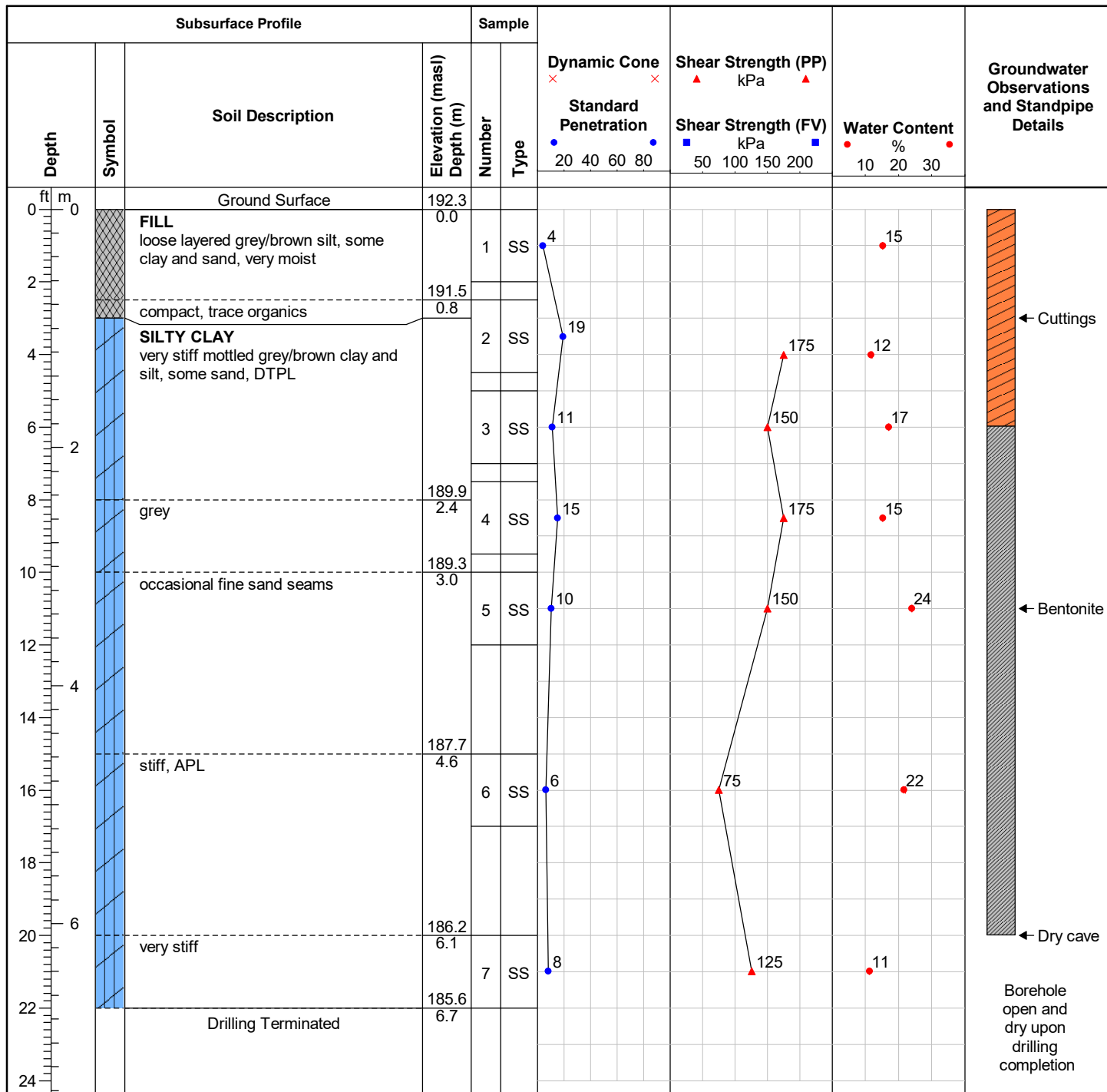
Cohesionless Soils	
Relative Density	SPT N Value
Very Loose	0 to 4
Loose	4 to 10
Compact	10 to 30
Dense	30 to 50
Very Dense	Above 50

WH	Sampler advanced by static weight of hammer
WR	Sampler advanced by static weight of drilling rods
PH	Sampler advanced by hydraulic force
PM	Sampler advanced by manual force

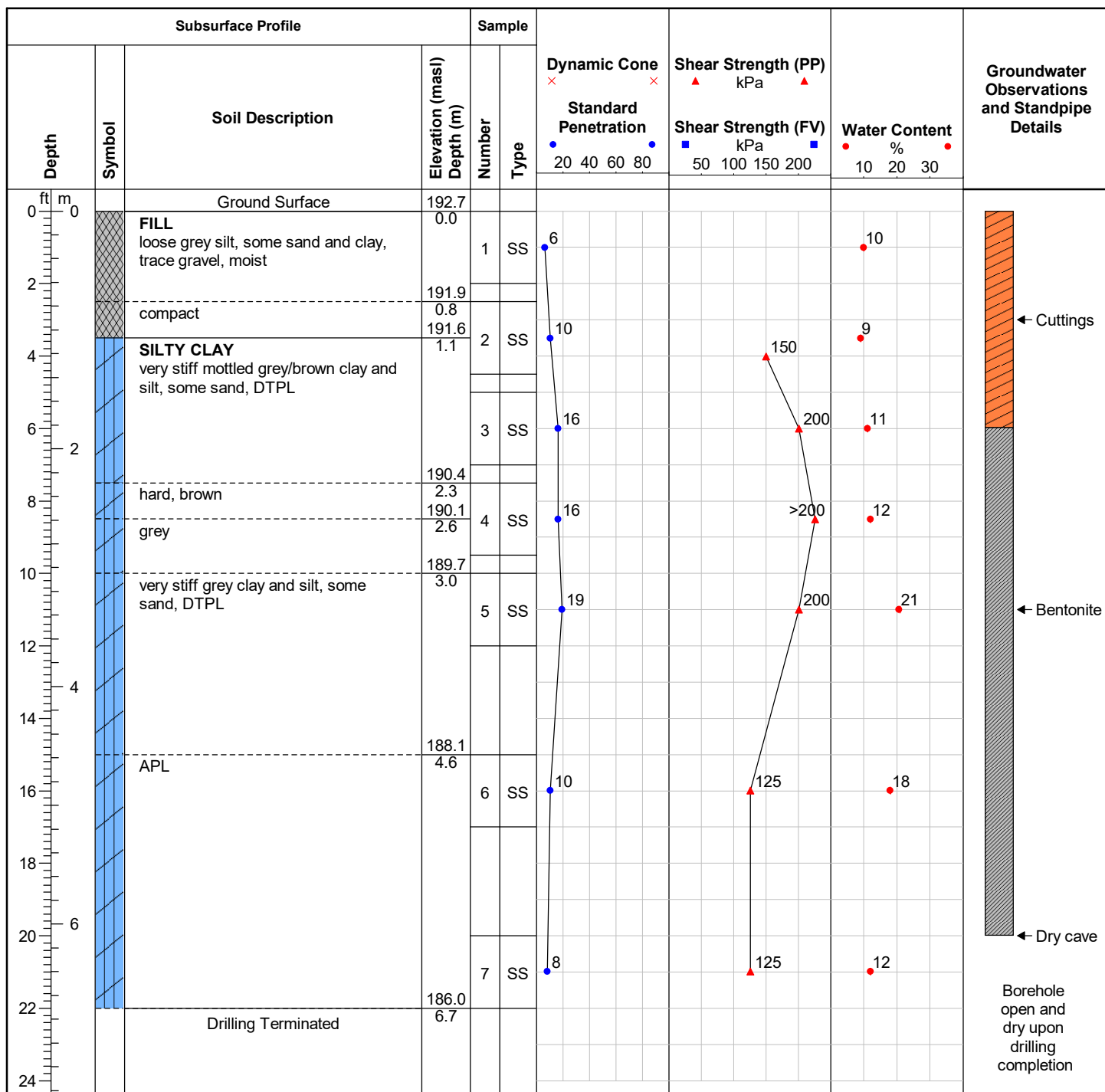
DTPL	Drier than Plastic Limit
APL	About Plastic Limit
WTPL	Wetter than Plastic Limit
mbgs	Metres below Ground Surface

ID Number: BH101-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalgliesh**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

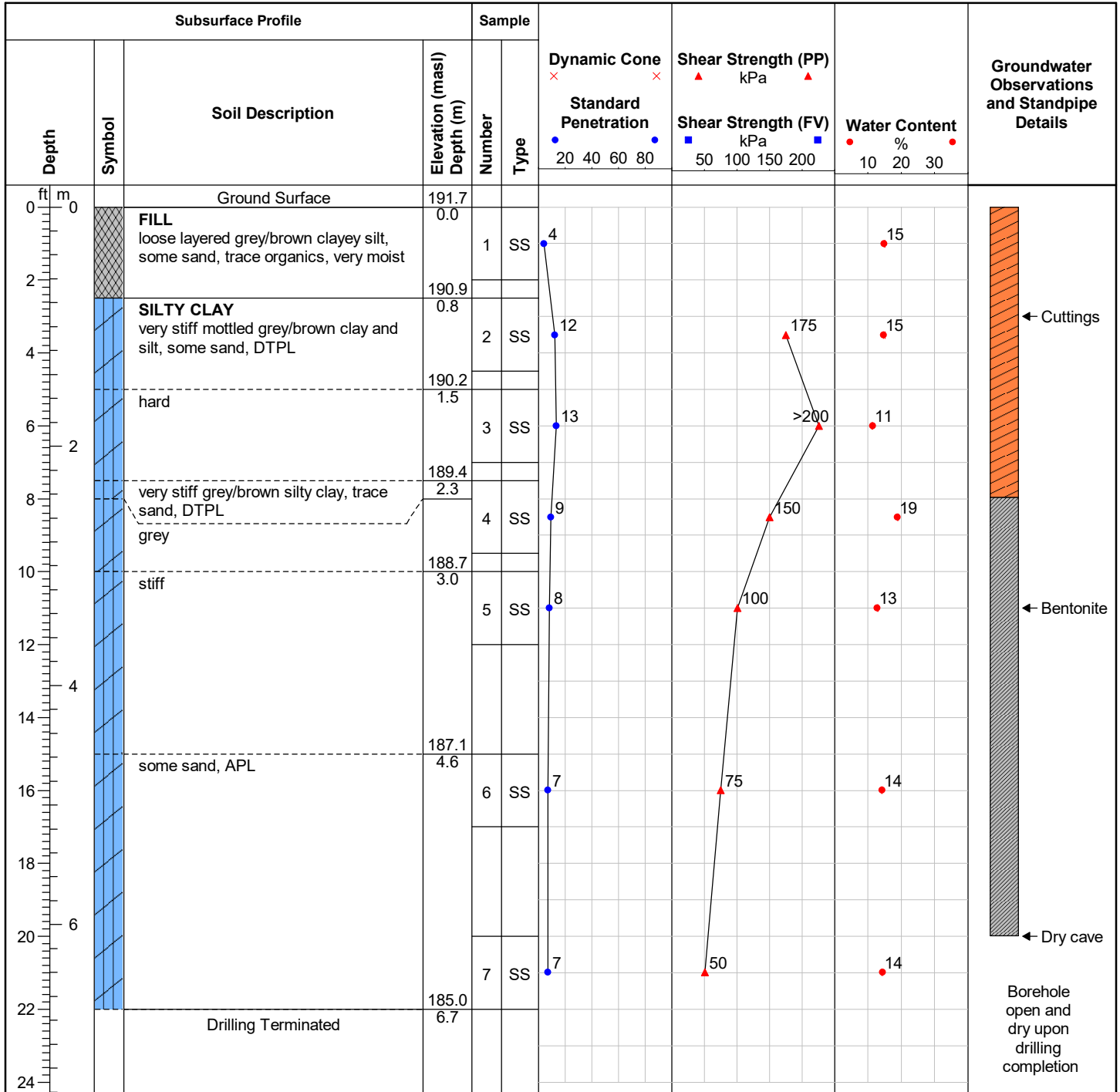
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ID Number: BH102-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

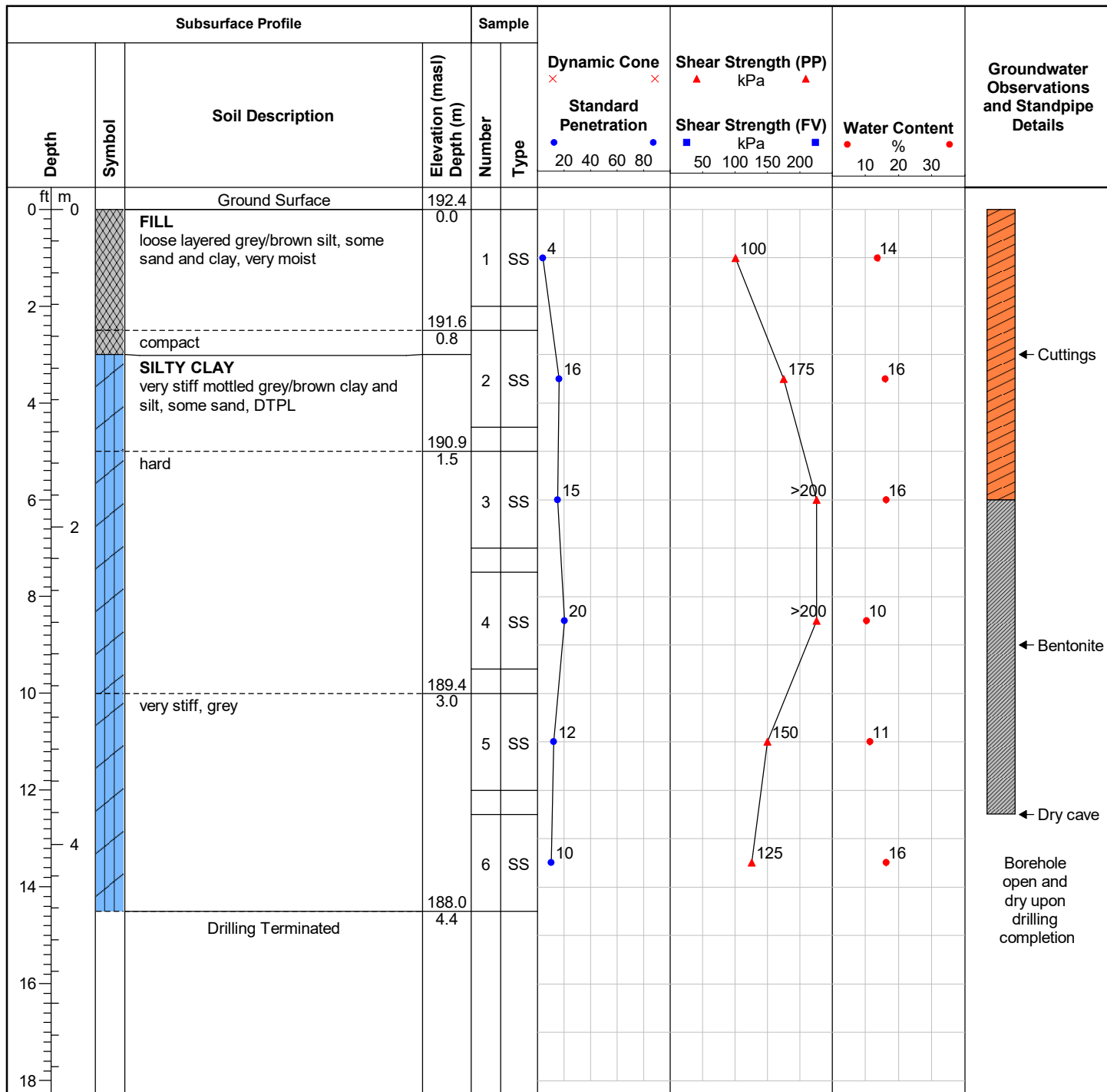
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ID Number: BH103-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

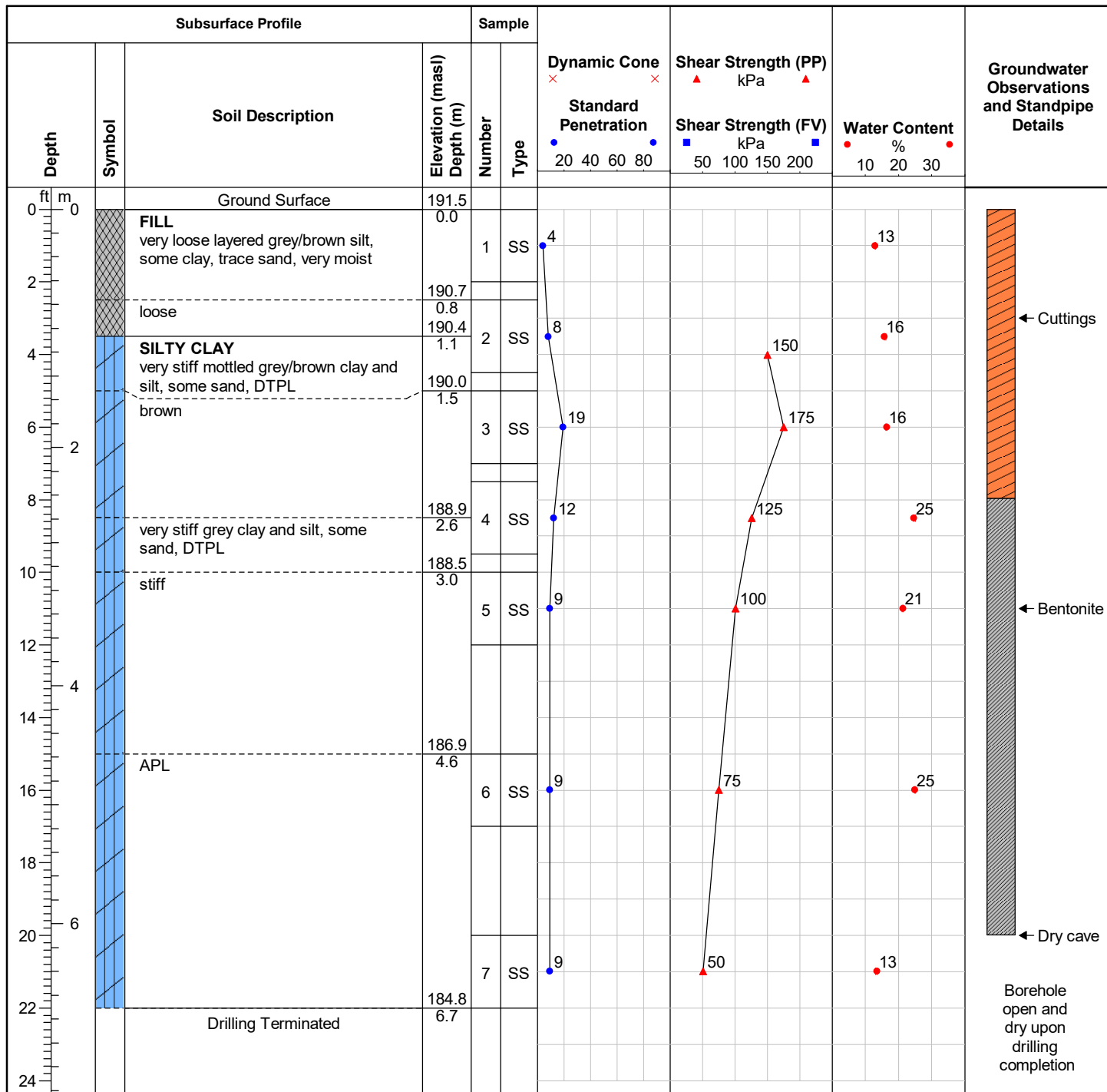
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ID Number: BH104-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

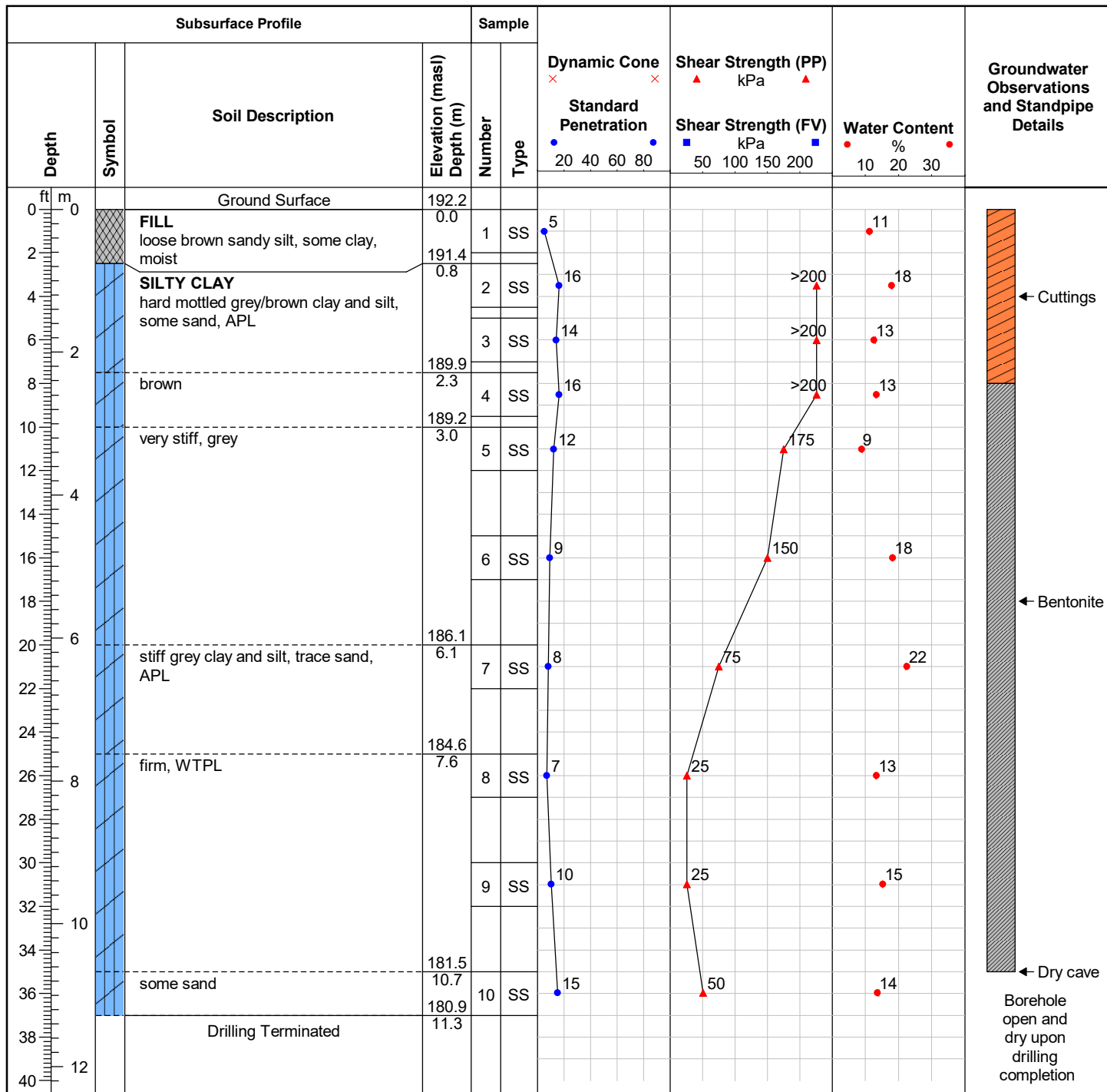
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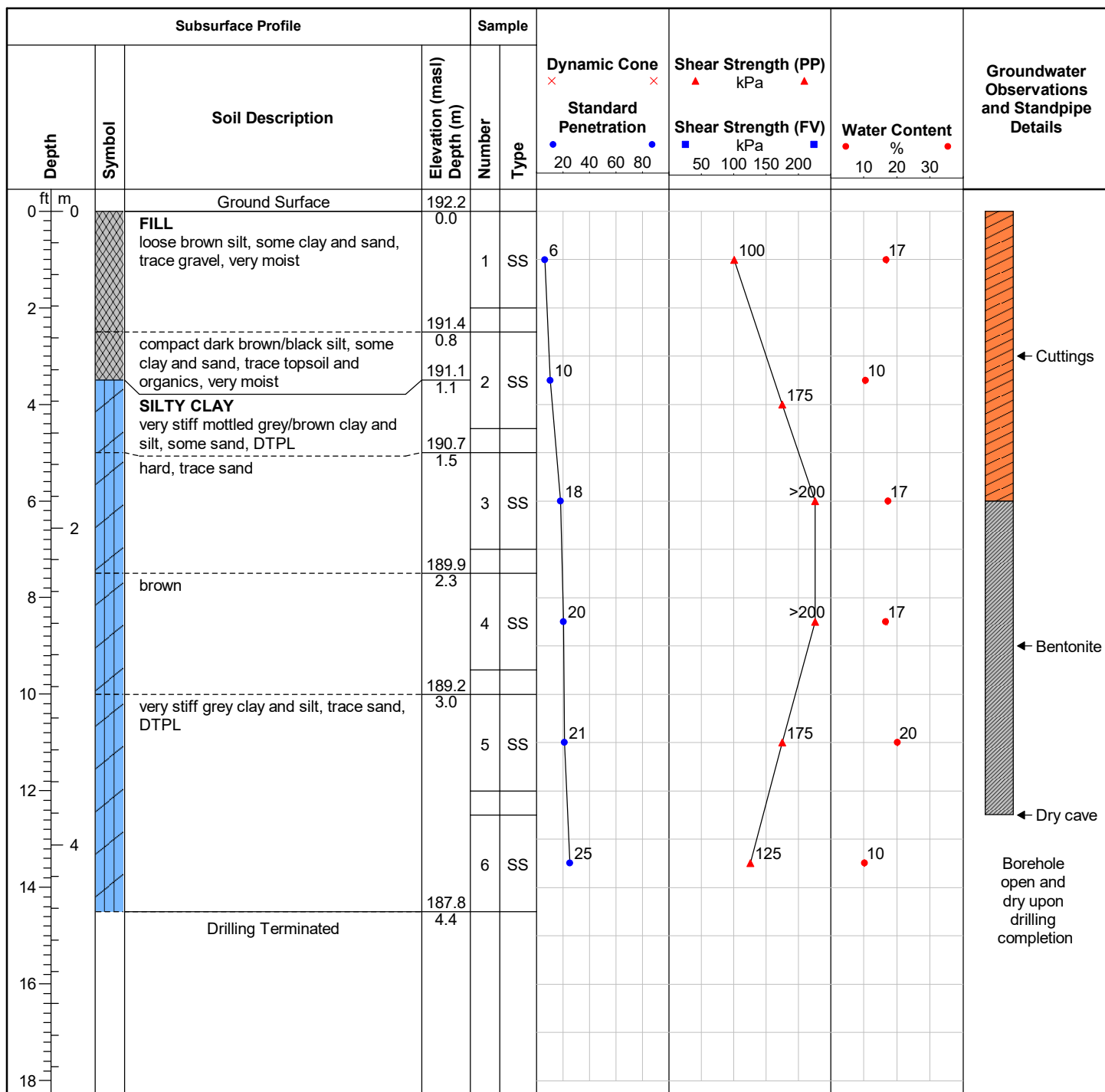
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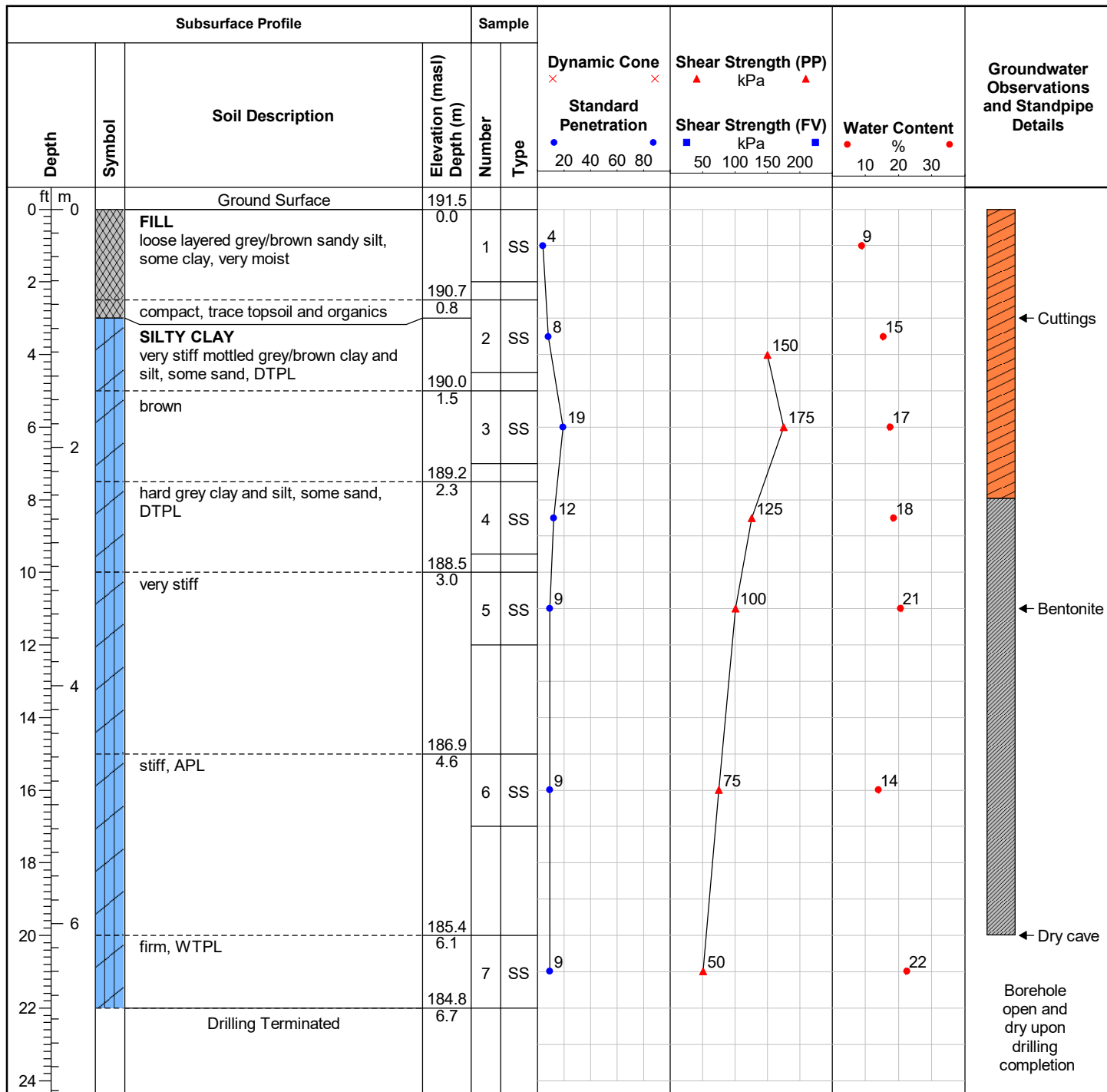
Sheet: 1 of 1

ID Number: BH107-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/24/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

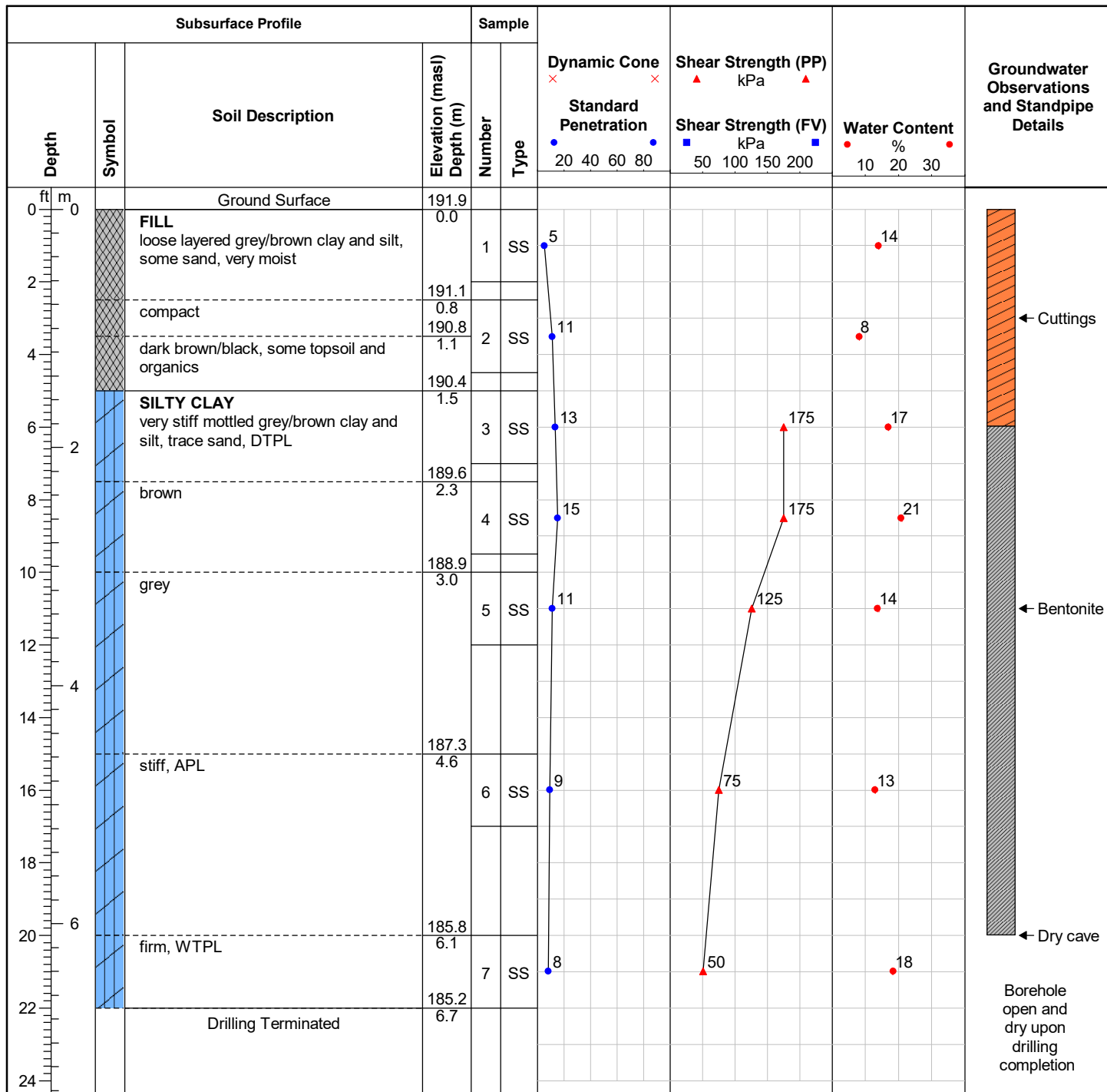
Sheet: 1 of 1

ID Number: BH108-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalgliesh**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

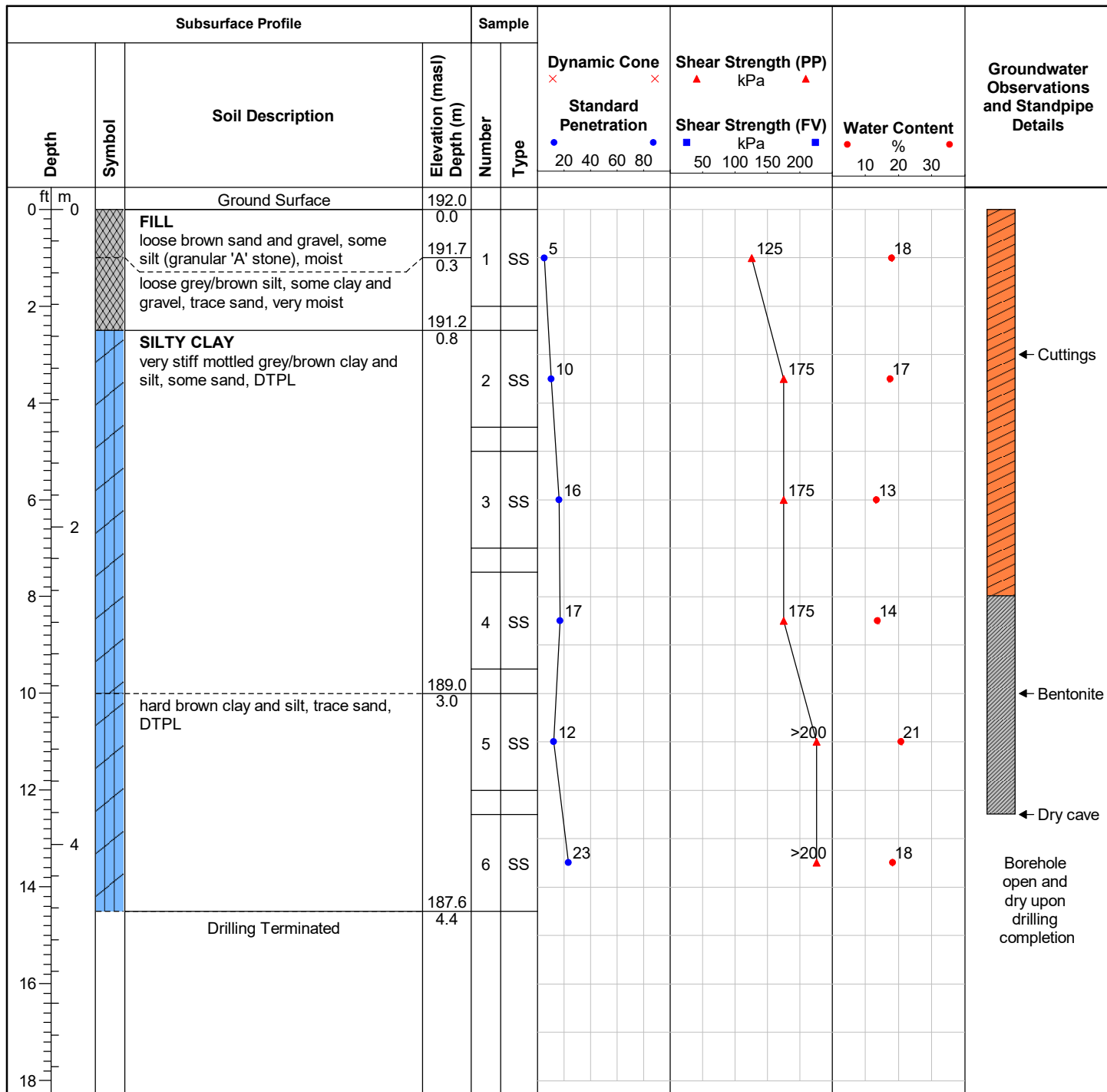
Sheet: 1 of 1

ID Number: BH109-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/24/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

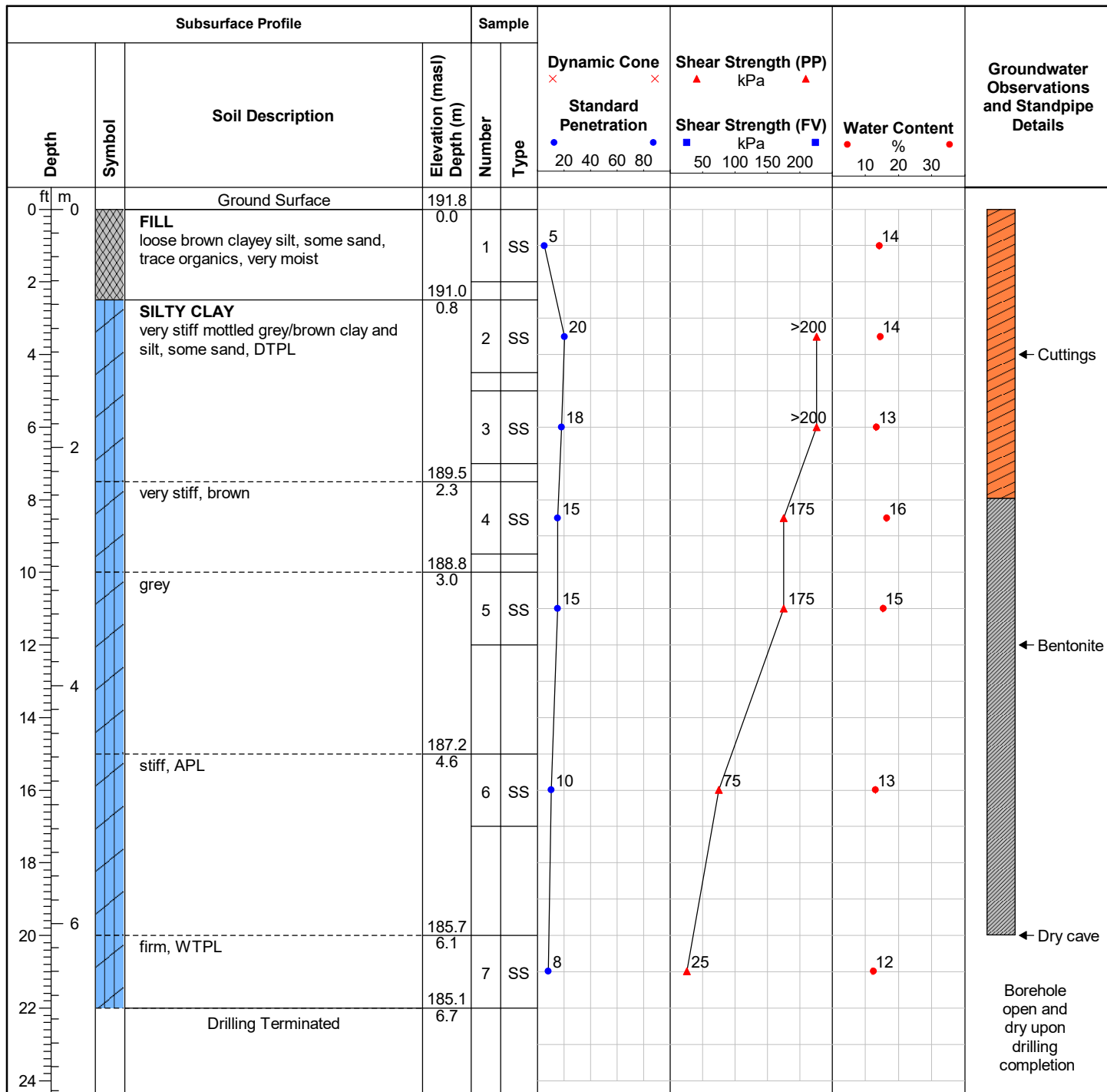
Sheet: 1 of 1

ID Number: BH110-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/24/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

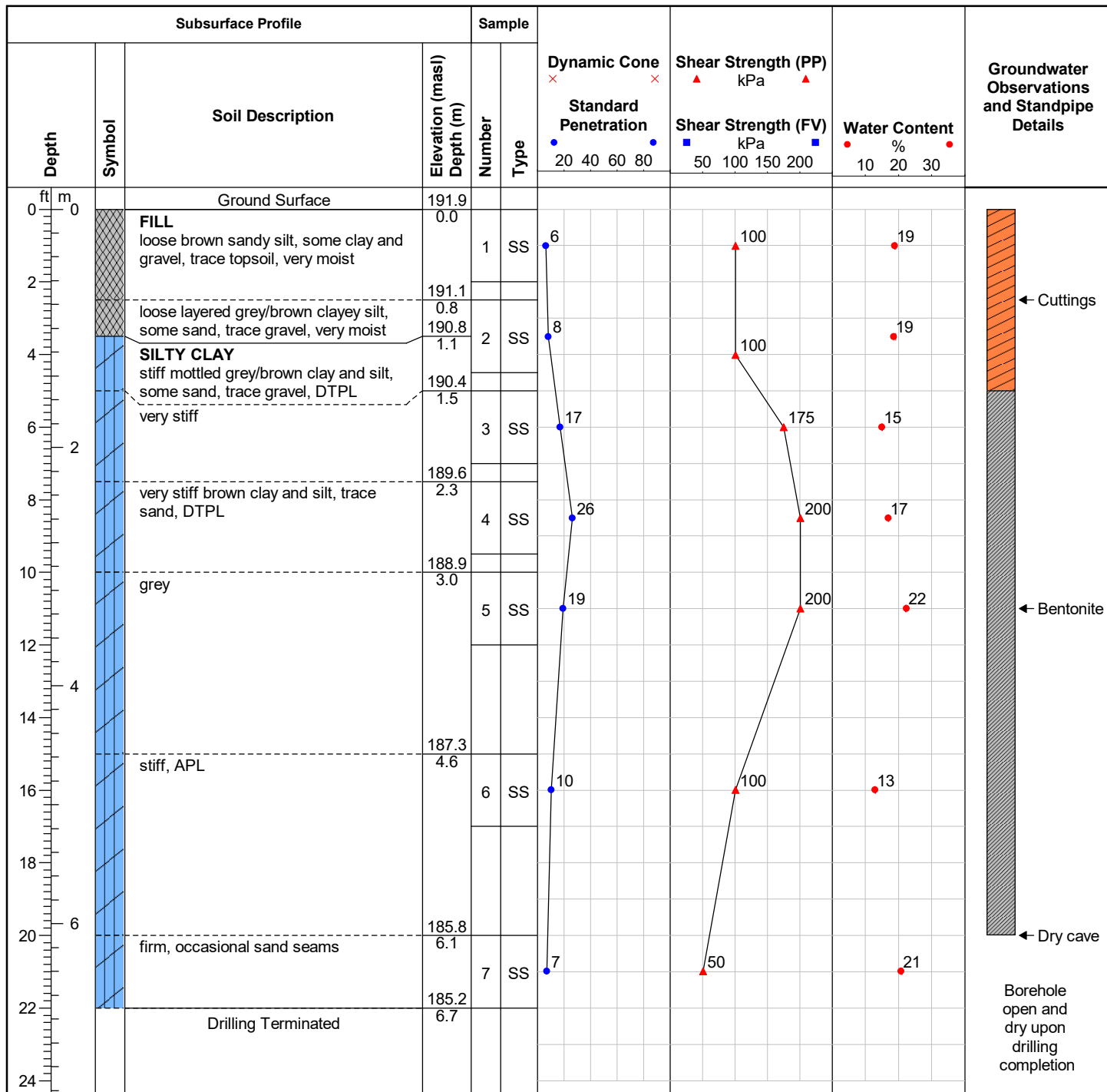
Field tile encountered at a depth of 1.37mbgs

ID Number: BH111-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

Sheet: 1 of 1

ID Number: BH112-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/24/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

Sheet: 1 of 1

ID Number: BH113-18**Project:** Port Dover LTC Facility**Project No:** 67157_001**Client:** Southbridge Health Care LP**Site Location:** Barrett Ct & Dover Coast Blvd, Port Dover, Ontario**Drill Date:** 8/23/2018**Drilling Contractor:** London Soil Test Ltd.**Drill Rig:** D50T Track**Drill Method:** Hollow Stem Augers**Protective Cover:** N/A**Field Technician:** M. Dalglish**Drafted by:** B. Heinbuch**Reviewed by:** B. Thorner

Sheet: 1 of 1

Appendix C

Laboratory Test Results

Table 101



Particle Size Distribution Analysis Test Results

Project Name: Port Dover LTC Facility

Client: Southbridge Health Care LP

Project Location: Dover Coast Boulevard & Barrett Court, Port Dover, ON

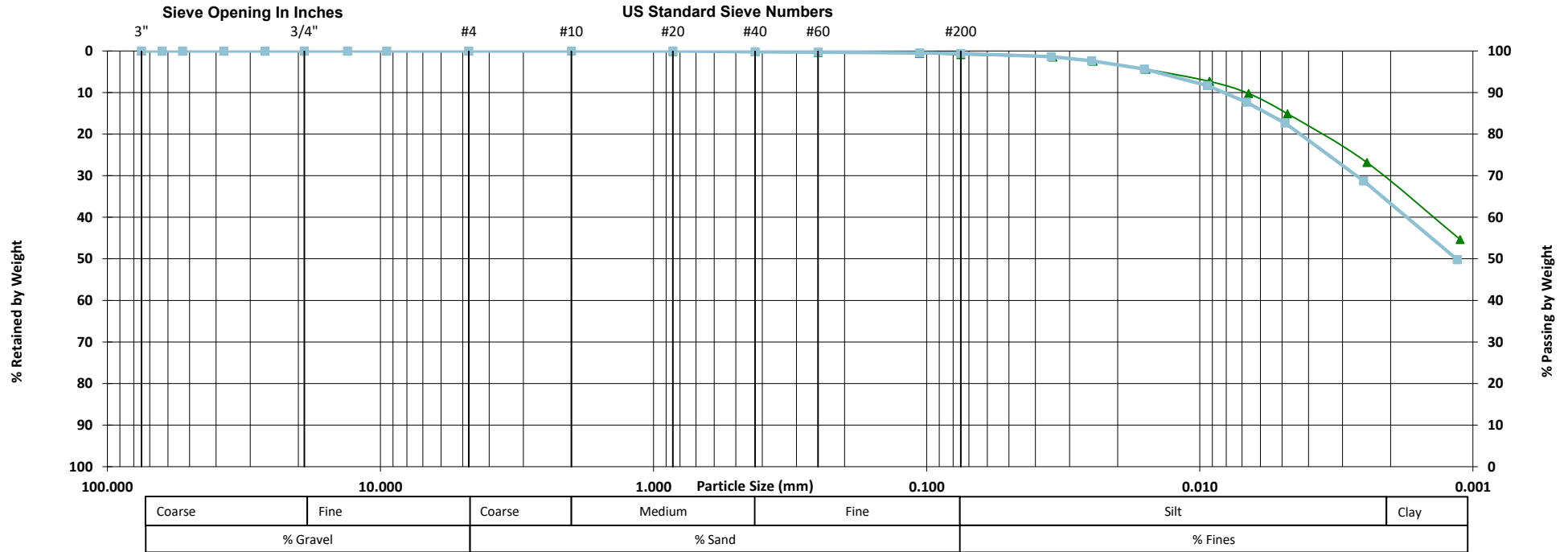
Date Sampled: Aug. 23, 2018

Date Tested: Aug. 31 - Sept. 5, 2018

MTE File No.: 67157_001

Table No: 101

Unified Soil Classification



Symbol	Borehole ID	Sample #	Sample Depth	Description
—▲—	BH104-18	SS-4	2.3-2.9 mbgs	Silty CLAY, trace Sand
—■—	BH111-18	SS-5	3.0-3.7 mbgs	Silty CLAY, trace Sand



NOTES:

Appendix D

Laboratory Certificate of Analysis



Your Project #: 44661-301
Site#: ENVIRONMENTAL CONSULTING SERVI
Site Location: 125 PORT DOVER BLVD
Your C.O.C. #: 945100-02-01

Attention: Monique Gyba

MTE Consultants Inc
520 Bingham Centre Dr
Kitchener, ON
CANADA N2B 3X9

Report Date: 2023/08/02

Report #: R7746004

Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3L8428

Received: 2023/07/21, 15:34

Sample Matrix: Soil
Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Chloride (20:1 extract)	2	2023/07/28	2023/07/28	CAM SOP-00463	MOE E3013 m
Conductivity	2	2023/07/28	2023/07/28	CAM SOP-00414	OMOE E3530 v1 m
Moisture (Subcontracted) (1, 2)	2	N/A	2023/08/01	AB SOP-00002	CCME PHC-CWS m
Sulphide in Soil (1)	2	N/A	2023/08/01	AB SOP-00080	EPA9030B/SM4500S2-DF
Moisture	2	N/A	2023/07/27	CAM SOP-00445	Carter 2nd ed 51.2 m
pH CaCl2 EXTRACT	2	2023/07/28	2023/07/28	CAM SOP-00413	EPA 9045 D m
Redox Potential (3)	2	2023/07/28	2023/07/28	CAM SOP-00421	SM 2580 B
Resistivity of Soil	2	2023/07/24	2023/07/28	CAM SOP-00414	SM 23 2510 m
Sulphate (20:1 Extract)	2	2023/07/28	2023/07/28	CAM SOP-00464	MOE E3013 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE, Calgary, AB, T2E 6P8

(2) Offsite analysis requires that subcontracted moisture be reported.



Your Project #: 44661-301
Site#: ENVIRONMENTAL CONSULTING SERVI
Site Location: 125 PORT DOVER BLVD
Your C.O.C. #: 945100-02-01

Attention: Monique Gyba

MTE Consultants Inc
520 Bingemans Centre Dr
Kitchener, ON
CANADA N2B 3X9

Report Date: 2023/08/02
Report #: R7746004
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3L8428

Received: 2023/07/21, 15:34

(3) Oxidation-Reduction Potential (ORP) values are determined using a Ag/AgCl reference electrode. The test is therefore, not SCC accredited for this matrix.

Encryption Key

Ankita Bhalla
Project Manager
02 Aug 2023 09:17:15

Please direct all questions regarding this Certificate of Analysis to:

Ankita Bhalla, Project Manager
Email: Ankita.Bhalla@bureauveritas.com
Phone# (905) 817-5700

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

Bureau Veritas Job #: C3L8428

Report Date: 2023/08/02

MTE Consultants Inc

Client Project #: 44661-301

Site Location: 125 PORT DOVER BLVD

Sampler Initials: SH

SOIL CORROSIVITY PACKAGE (SOIL)

Bureau Veritas ID		WLT263			WLT263			WLT264		
Sampling Date		2023/07/21			2023/07/21			2023/07/21		
COC Number		945100-02-01			945100-02-01			945100-02-01		
	UNITS	TP101-23	RDL	QC Batch	TP101-23 Lab-Dup	RDL	QC Batch	TP102-23	RDL	QC Batch
Calculated Parameters										
Resistivity	ohm-cm	1200		8808157				1100		8808157
CONVENTIONALS										
Redox Potential	mV	350	N/A	8818423				330	N/A	8818423
Inorganics										
Soluble (20:1) Chloride (Cl-)	ug/g	<20	20	8818449	<20	20	8818449	<20	20	8818449
Conductivity	umho/cm	811	2	8818508				874	2	8818508
Available (CaCl2) pH	pH	7.67		8818603				7.68		8818580
Soluble (20:1) Sulphate (SO4)	ug/g	760	20	8818452	800	20	8818452	860	20	8818452
Sulphide	mg/kg	0.6	0.5	8827072				1.8	0.5	8827072
RDL = Reportable Detection Limit										
QC Batch = Quality Control Batch										
Lab-Dup = Laboratory Initiated Duplicate										
N/A = Not Applicable										

Bureau Veritas ID		WLT264		
Sampling Date		2023/07/21		
COC Number		945100-02-01		
	UNITS	TP102-23 Lab-Dup	RDL	QC Batch
Inorganics				
Conductivity	umho/cm	876	2	8818508
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				
Lab-Dup = Laboratory Initiated Duplicate				



**BUREAU
VERITAS**

Bureau Veritas Job #: C3L8428

Report Date: 2023/08/02

MTE Consultants Inc

Client Project #: 44661-301

Site Location: 125 PORT DOVER BLVD

Sampler Initials: SH

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		WLT263		WLT264			WLT264		
Sampling Date		2023/07/21		2023/07/21			2023/07/21		
COC Number		945100-02-01		945100-02-01			945100-02-01		
	UNITS	TP101-23	QC Batch	TP102-23	RDL	QC Batch	TP102-23 Lab-Dup	RDL	QC Batch
Inorganics									
Moisture	%	19	8815542	16	1.0	8815543			
Physical Testing									
Moisture-Subcontracted	%	19	8827073	17	0.30	8827073	16	0.30	8827073
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									



BUREAU
VERITAS

Bureau Veritas Job #: C3L8428
Report Date: 2023/08/02

MTE Consultants Inc
Client Project #: 44661-301
Site Location: 125 PORT DOVER BLVD
Sampler Initials: SH

TEST SUMMARY

Bureau Veritas ID: WLT263
Sample ID: TP101-23
Matrix: Soil

Collected: 2023/07/21
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride (20:1 extract)	KONE/EC	8818449	2023/07/28	2023/07/28	Massarat Jan
Conductivity	AT	8818508	2023/07/28	2023/07/28	Leily Karimi
Moisture (Subcontracted)	BAL	8827073	N/A	2023/08/01	Ashley Henderson
Sulphide in Soil	SPEC	8827072	N/A	2023/08/01	Princess Nicole Hernaez
Moisture	BAL	8815542	N/A	2023/07/27	Joe Thomas
pH CaCl2 EXTRACT	AT	8818603	2023/07/28	2023/07/28	Gurpartee KAU
Redox Potential	COND	8818423	2023/07/28	2023/07/28	Gurpartee KAU
Resistivity of Soil		8808157	2023/07/28	2023/07/28	Automated Statchk
Sulphate (20:1 Extract)	KONE/EC	8818452	2023/07/28	2023/07/28	Massarat Jan

Bureau Veritas ID: WLT263 Dup
Sample ID: TP101-23
Matrix: Soil

Collected: 2023/07/21
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride (20:1 extract)	KONE/EC	8818449	2023/07/28	2023/07/28	Massarat Jan
Sulphate (20:1 Extract)	KONE/EC	8818452	2023/07/28	2023/07/28	Massarat Jan

Bureau Veritas ID: WLT264
Sample ID: TP102-23
Matrix: Soil

Collected: 2023/07/21
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride (20:1 extract)	KONE/EC	8818449	2023/07/28	2023/07/28	Massarat Jan
Conductivity	AT	8818508	2023/07/28	2023/07/28	Leily Karimi
Moisture (Subcontracted)	BAL	8827073	N/A	2023/08/01	Ashley Henderson
Sulphide in Soil	SPEC	8827072	N/A	2023/08/01	Princess Nicole Hernaez
Moisture	BAL	8815543	N/A	2023/07/27	Joe Thomas
pH CaCl2 EXTRACT	AT	8818580	2023/07/28	2023/07/28	Gurpartee KAU
Redox Potential	COND	8818423	2023/07/28	2023/07/28	Gurpartee KAU
Resistivity of Soil		8808157	2023/07/28	2023/07/28	Automated Statchk
Sulphate (20:1 Extract)	KONE/EC	8818452	2023/07/28	2023/07/28	Massarat Jan

Bureau Veritas ID: WLT264 Dup
Sample ID: TP102-23
Matrix: Soil

Collected: 2023/07/21
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	8818508	2023/07/28	2023/07/28	Leily Karimi
Moisture (Subcontracted)	BAL	8827073	N/A	2023/08/01	Ashley Henderson



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	15.3°C
-----------	--------

Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C3L8428

Report Date: 2023/08/02

QUALITY ASSURANCE REPORT

MTE Consultants Inc

Client Project #: 44661-301

Site Location: 125 PORT DOVER BLVD

Sampler Initials: SH

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8815542	Moisture	2023/07/27							1.1	20
8815543	Moisture	2023/07/27							0.60	20
8818423	Redox Potential	2023/07/28			101	95 - 105			1.8	35
8818449	Soluble (20:1) Chloride (Cl ⁻)	2023/07/28	101	70 - 130	99	70 - 130	<20	ug/g	NC	35
8818452	Soluble (20:1) Sulphate (SO ₄)	2023/07/28	NC	70 - 130	99	70 - 130	<20	ug/g	5.8	35
8818508	Conductivity	2023/07/28			102	90 - 110	<2	umho/cm	0.23	10
8818580	Available (CaCl ₂) pH	2023/07/28			101	97 - 103			0.26	N/A
8818603	Available (CaCl ₂) pH	2023/07/28			100	97 - 103			0.34	N/A
8827072	Sulphide	2023/08/01	16 (1)	75 - 125	112	75 - 125	<0.5	mg/kg	NC	30
8827073	Moisture-Subcontracted	2023/08/01					<0.30	%	1.2	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



BUREAU
VERITAS

Bureau Veritas Job #: C3L8428
Report Date: 2023/08/02

MTE Consultants Inc
Client Project #: 44661-301
Site Location: 125 PORT DOVER BLVD
Sampler Initials: SH

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere, Senior Scientific Specialist

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



Bureau Veritas
6740 Campbell Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

21-Jul-23 15:34

Ankita Bhalla

C3L8428

INVOICE TO:

Company Name: #6868 MTE Consultants Inc

Attention: Accounts Payable

Address: 520 Bingham Centre Dr
Kitchener ON N2B 3X9

Tel: (519) 743-6500 Fax: (519) 743-6513

Email: accounting@mte85.com

REPORT TO:

Company Name: MTE

Attention: Monique Gyba

Address: 1016A Sutton Dr. Burlington, ON

Tel: 905 639 2552 X2454 Fax:

Email: MGyba@mte85.com

PROJECT INFORMATION:

Quotation #: C25343

P.O. #: 44661-301

Project Name: 125 Port Dover Blvd
Environmental Consulting Services

Site #: SH

Sampled By:

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)		Other Regulations		Special Instructions
☐ Table 1	☐ Res/Park ☐ Medium/Fine	☐ CCME	☐ Sanitary Sewer Bylaw	
☐ Table 2	☐ Ind/Comm ☐ Coarse	☐ Reg 558	☐ Storm Sewer Bylaw	
☐ Table 3	☐ Agri/Other ☐ For RSC	☐ MISA	☐ Municipality	
☐ Table		☐ PWQO	☐ Reg 406 Table	
		☐ Other		

Include Criteria on Certificate of Analysis (Y/N)?

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	Analysis Requested (PLEASE BE SPECIFIC)
1	TP101-23	JUL21			1	
2	TP102-23	JUL21			1	
3						
4						
5						
6						
7						
8						
9						
10						

Turnaround Time (TAT) Required:

Please provide advance notice for rush projects.

Regular (Standard) TAT:

(will be applied if Rush TAT is not specified):

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: Time Required:

Rush Confirmation Number: (call lab for #)

of Bottles: Comments:

*** RELINQUISHED BY: (Signature/Print)**

Sydney Hum

Date: (YY/MM/DD)

23/07/21

Time

12:18

RECEIVED BY: (Signature/Print)

Monique Gyba

Date: (YY/MM/DD)

2023/07/21

Time

15:34

*** UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.**

*** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.**

**** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCs.**

Laboratory Use Only

Time Sensitive: ☐ Temperature (°C) on Reel: 18/18/10

Custody Seal Present: ☒ Intact

White: Bureau Veritas Yellow: Client

Signature: orie

Engineering

- Land/Site Development
- Municipal Infrastructure
- Environmental/Water Resources
- Traffic/Transportation
- Recreational

Planning

- Land/Site Development
- Planning Application Management
- Municipal Planning
- Urban Design
- Expert Witness (OLT)
- Wireless Industry

Landscape Architecture

- Streetscapes & Public Amenities
- Open Space, Parks & Recreation
- Community & Residential
- Commercial & Institutional
- Environmental Restoration

Southbridge Long Term Care Facility 125 Dover Coast Blvd, Port Dover, ON Traffic Brief

**Southbridge Long Term Care Facility
125 Dover Coast Boulevard, Port Dover, ON
Traffic Brief**

Prepared By:

NOVATECH
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario
K2M 1P6

May 2026

Novatech File: 126012
Ref: R-2026-044

May 19, 2026

Norfolk County
12 Gilbertson Drive
Simcoe, ON N3Y 4N5

Ministry of Transportation of Ontario
Corridor Management (Transportation)

**Attention: Mr. Stephen Gradish,
Development Technologist**

**Attention: Mr. Michael Kilgore,
Corridor Management Planner**

**Reference: 125 Dover Coast Boulevard
Traffic Brief
Novatech File No. 126012**

We are pleased to submit the following Traffic Brief, in support of a Site Plan Control application for 125 Dover Coast Boulevard, for your review and signoff. The structure and format of this report is in accordance with the Ministry of Transportation of Ontario's *General Guidelines for the Preparation of Traffic Impact Studies* (March 2023).

If you have any questions or comments regarding this report, please feel free to contact Jennifer Luong, or the undersigned.

Yours truly,

NOVATECH



Joshua Audia, P.Eng.
Project Engineer | Transportation

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Appendix B: Excerpts of 2013 Traffic Report	
Appendix C: Excerpts of 2022 Transportation Brief	

EXECUTIVE SUMMARY

This Traffic Brief (TB) has been prepared in support of a Site Plan Control application for the lands located at 125 Dover Coast Boulevard (referred to as the 'subject site'), which are currently vacant. The subject site is designated as 'Urban Residential' on Schedule B-16 of Norfolk County's *Official Plan*, and is zoned as 'Urban Residential Type 5' (R5) in the County's *Zoning By-Law (ZBL 1-Z-2014)*.

The proposed development consists of a single three-storey building with a building footprint of approximately 38,421 ft², which will include a total of 160 long-term care beds. Two full-movement accesses are proposed to Barrett Court. The two accesses will form a pick-up/drop-off loop adjacent to the main entrance.

A total of 91 surface parking spaces are proposed, with 22 spaces inside the pick-up/drop-off loop and 69 spaces north of the proposed building. A loading zone is proposed adjacent to the northeastern corner of the building.

The conclusions and recommendations of this TB can be summarized as follows:

- The proposed development is projected to generate 27 vehicle trips during the AM peak hour, 35 vehicle trips during the PM peak hour, and 64 vehicle trips during the Sunday peak hour.
- Compared to the previous studies, the trip generation projections have marginally increased for the AM and PM peak hours, with a slightly larger increase for the Sunday peak hour. The proposed site traffic represents an increase of 4% to 6% in the overall traffic at the Highway 6/Lakeview Avenue/Ocean Way intersection. No significant impact is expected as a result of the proposed development.
- The proposed development includes two approximately 7.3m-wide two-way accesses to Barrett Court, approximately 22m apart from each other (measuring nearest edge to nearest edge). The southerly access is approximately 44.5m from the Dover Coast Boulevard right-of-way.
- The two accesses form a pick-up/drop-off loop and access to some perpendicular parking spaces within the loop. An additional drive aisle connects the pick-up/drop-off loop to the additional parking and loading areas north of the proposed building. This drive aisle also has a width of 7.3m and centreline radius of 12m. The 7.3m drive aisle widths and centreline radii of 12m can accommodate the required passenger vehicles, loading vehicles, and fire trucks, and meet the minimum fire route requirements of the *Ontario Building Code*.
- The proposed accesses are more than 15m from the nearest edge of Dover Coast Boulevard, meeting the minimum corner clearance requirement. As Barrett Court is a generally straight and level roadway, it is anticipated that adequate sightlines will be provided at both proposed accesses.
- The proposed development is recommended from a transportation perspective. The development is not anticipated to adversely affect capacity, safety, or operations on Highway 6.

1.0 INTRODUCTION

This Traffic Brief (TB) has been prepared in support of a Site Plan Control application for the lands located at 125 Dover Coast Boulevard (referred to as the 'subject site'), which are currently vacant. The subject site is designated as 'Urban Residential' on Schedule B-16 of Norfolk County's *Official Plan*, and is zoned as 'Urban Residential Type 5' (R5) in the County's *Zoning By-Law (ZBL 1-Z-2014)*.

The subject site is approximately 5.5 acres in area, located within the Dover Coast subdivision, and is surrounded by the following:

- Highway 6 to the north;
- Dover Coast Boulevard and future residential to the south;
- Barrett Court and future development blocks to the east; and
- Schooner Drive and existing residential to the west.

An aerial of the study area and Dover Coast subdivision is provided in **Figure 1**.

1.1 Previous Studies

2013 Traffic Report

An initial Traffic Report in support of the entire Dover Coast subdivision was prepared by IBI Group in October 2013. The subdivision lands are located north of New Lakeshore Drive, south of Concession 2 Woodhouse, and east of Newport Lane and Lakeview Avenue. The lands are bisected by Highway 6.

The 2013 report considered a total of 1,444 residential dwellings, a 130-bed assisted living facility, 1,496 m² of office/medical space, 7,795 m² of retail floor space, 18-hole golf course, and a 60-room hotel. The subdivision was anticipated to be completed in nine phases, with an ultimate buildout year of 2025, and was approved by Norfolk County and the Ministry of Transportation of Ontario (MTO). A majority of the subdivision, including all lands north of Highway 6, remain undeveloped. At the time of the 2013 report, the assisted living facility location extended east of what is now Barrett Court, but still located on Dover Coast Boulevard.

The 2013 report identified the following intersection improvements would be required as the Dover Coast subdivision develops:

- Auxiliary eastbound and westbound left turn lanes at Highway 6/Lakeview Avenue/Ocean Way (which have been implemented since the 2013 report);
- Signalized intersection and auxiliary turn lanes at Highway 6/Dover Coast Boulevard;
- Open southbound approach at Highway 6/Dover Coast Boulevard as the final four phases (i.e. Dover Coast North) develop.

2022 Transportation Brief

A subsequent Transportation Brief in support of a 128-bed assisted living facility was prepared by WSP in December 2022. The 2022 brief and this report consider the same location for the proposed development. Updated intersection analysis was included in the 2022 brief, confirming the conclusions of the 2013 brief, and confirming that the future intersection at Highway 6/Dover Coast Boulevard is not required to accommodate the assisted living facility.

Figure 1: Aerial of Subject Site



1.2 Scope of Work

The scope of this TB includes the following:

- Description of the proposed development and proposed accesses;
- Summary of previous traffic studies completed for the subject lands;
- Review of existing road network, closest intersections, and on-street parking locations within the vicinity of the subject site;
- Estimates of trip generation for the proposed development, including an outline of the estimated number of vehicles entering and exiting via Highway 6;
- Review of the proposed site access design and location;
- Statement that the development does not adversely affect capacity, safety, or operations on Highway 6.

1.3 Proposed Development

The proposed development consists of a single three-storey building with a building footprint of approximately 38,421 ft², which will include a total of 160 long-term care beds. Two full-movement accesses are proposed to Barrett Court. The two accesses will form a pick-up/drop-off loop adjacent to the main entrance.

A total of 91 surface parking spaces are proposed, with 22 spaces inside the pick-up/drop-off loop and 69 spaces north of the proposed building. A loading zone is proposed adjacent to the northeastern corner of the building.

A copy of the preliminary site plan is included in **Appendix A**.

2.0 STUDY AREA

2.1 Roadways

Highway 6 is a provincial highway that generally runs on an east-west alignment between Norfolk County Road 24 and Highway 403. Within the study area, Highway 6 has a two-lane undivided rural cross-section. The posted speed limit is 80 km/h east of Lakeview Avenue, 70 km/h from Lakeview Avenue to Somerset Drive, and 50 km/h west of Somerset Drive. Highway 6 has paved shoulders on both sides of the roadway.

Lakeview Avenue is a local roadway that generally runs on a north-south alignment between Highway 6 and the terminus approximately 120m south of New Lakeshore Road. Lakeview Avenue has a two-lane uncurbed cross-section and a posted speed limit of 50 km/h.

Ocean Way is a local roadway that generally runs on a north-south alignment between Highway 6 and Newport Lane. Ocean Way has a two-lane undivided urban cross-section and a regulatory unposted speed limit of 50 km/h. Ocean Way has a concrete sidewalk on the west side of the roadway.

Dover Coast Boulevard is a local roadway that runs on a curvilinear alignment between New Lakeshore Road and the terminus immediately south of Highway 6. Dover Coast Boulevard has a two-lane undivided urban cross-section and a regulatory unposted speed limit of 50 km/h. Dover Coast Boulevard has a concrete sidewalk on the west side of the roadway from New Lakeshore Road and Schooner Drive.

Barrett Court is a local roadway that generally runs on a north-south alignment for a distance of approximately 130m north of Dover Coast Boulevard. Barrett Court has a two-lane undivided urban cross-section and a regulatory unposted speed limit of 50 km/h.

2.2 Intersections

Highway 6 @ Lakeview Avenue/Ocean Way

- Unsignalized four-legged intersection
- Stop-controlled on north and south approaches
- North Approach (Ocean Way):
one shared left turn/through/right turn lane
- South Approach (Lakeview Avenue):
one shared left turn/through/right turn lane
- East Approach (Highway 6):
one left turn lane and one shared through/right turn lane
- West Approach (Highway 6):
one left turn lane and one shared through/right turn lane



2.3 Active Transportation Facilities

Within the study area, concrete sidewalks are provided on one side of Dover Coast Boulevard and paved shoulders are provided on both sides of Highway 6.

Per Schedule I-3 of the *Official Plan*, Highway 6 is designated as an Active Transportation Route due to the existing paved shoulders. Both the existing and planned alignments of Dover Coast Boulevard (i.e. between New Lakeshore Road and Concession 2 Woodhouse) are designated as a Candidate Route, for consideration to be added to the Active Transportation Network.

2.4 On-Street Parking

The roadway width of Dover Coast Boulevard is 10.5m, which is a width that accommodates a travel lane and a curbside parking lane in both directions.

The roadway width of Barrett Court is 8m, which is a width that accommodates a travel lane in each direction and a curbside parking lane in one direction.

2.5 Traffic Volumes

As part of the 2013 Traffic Report, weekday and Sunday traffic counts were conducted by Pyramid Traffic Inc. at Highway 6/Lakeview Avenue/Ocean Way. These counts were completed on Tuesday, November 23, 2010 and Sunday, June 26, 2011. The traffic data collected as part of the 2013 Traffic Report was also used in the approved 2022 Transportation Brief. Excerpts are included in **Appendix B**.

Port Dover is a recreational destination during the summer months. To account for summer traffic volumes, seasonal factors were applied to the observed volumes. These factors were applied to volumes on Highway 6 and Lakeview Avenue, as these volumes were expected to increase due to an increase in summer activities (such as beachfront and boating activities). MTO staff have confirmed that the seasonal variation type to be considered Commuter Tourist Recreation (CTR).

3.0 BACKGROUND TRAFFIC CONDITIONS

3.1 Future Background Traffic

The previous traffic studies completed for the subject site considered a linear annual background traffic growth rate of 2% for the through volumes on Highway 6.

3.2 Planned Roadway Improvements

Dover Coast Boulevard is envisioned to intersect with Highway 6 and continue north to Concession 2 Woodhouse as part of a future phase of the Dover Coast subdivision. This intersection has not been considered, as it is not required to accommodate the proposed development and is anticipated to be constructed beyond the timeframe of this study. Projected 2027 background and total traffic volumes were considered in the approved 2022 Transportation Brief, and are included in **Appendix C**.

4.0 SITE-GENERATED TRAFFIC

4.1 Trip Generation

The estimated number of trips generated by the proposed development has been based on the Nursing Home land use rates outlined in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition*. A summary of the estimated trip generation, as well as the trip generation estimates from the previous studies in 2013 and 2022, are shown in **Table 1**.

Table 1: Site-Generated Trip Generation

Study	Beds	AM Peak Hour (vph) ¹			PM Peak Hour (vph) ¹			SUN Peak Hour (vph) ¹		
		IN	OUT	TOT	IN	OUT	TOT	IN	OUT	TOT
2026 Brief (Nova)	160	20	7	27	12	23	35	36	28	64
2022 Brief (WSP)	128	14	9	23	12	19	31	16	21	37
Difference to 2022 Brief		+6	-2	+4	-	+4	+4	+20	+7	+27
2013 Report (IBI)	130	13	6	19	13	16	29	22	28	50
Difference to 2013 Report		+7	+1	+8	-1	+7	+6	+14	-	+14

1. vph: vehicle trips per hour

From the previous table, the proposed development is projected to generate 27 vehicle trips during the AM peak hour, 35 vehicle trips during the PM peak hour, and 64 vehicle trips during the Sunday peak hour.

Compared to the previous studies, the trip generation projections have marginally increased for the AM and PM peak hours, with a slightly larger increase for the Sunday peak hour.

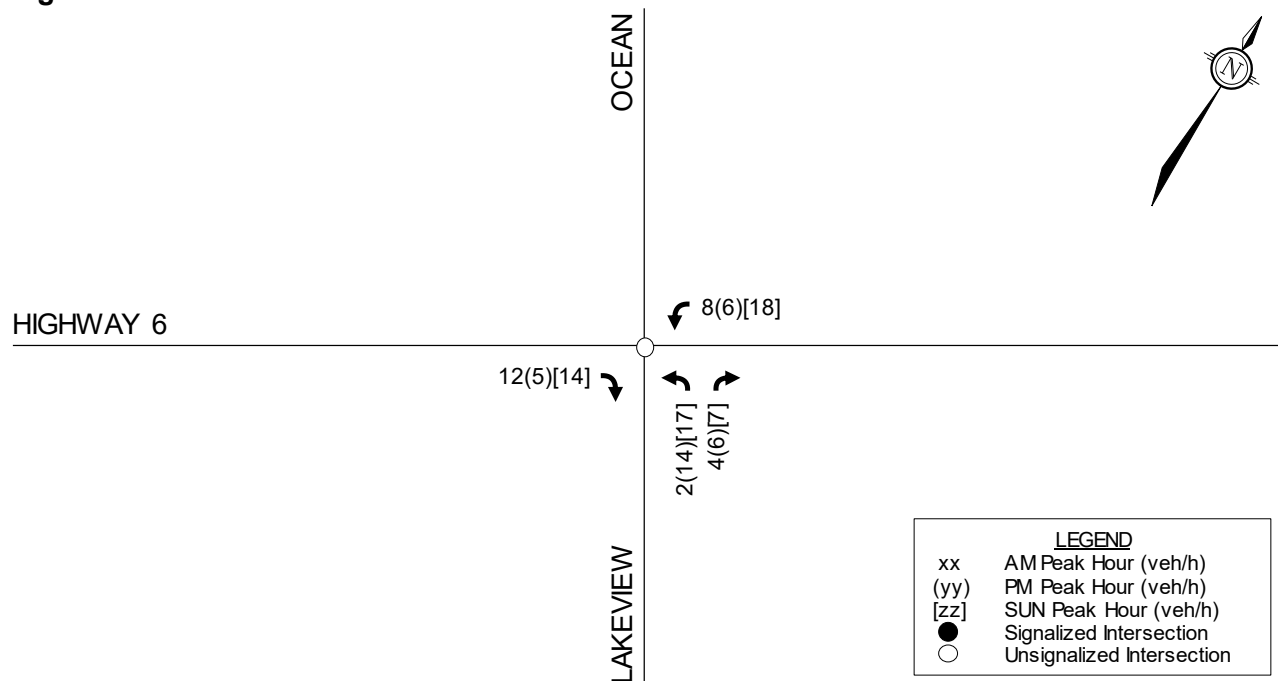
4.2 Trip Distribution

Consistent with the previous studies, the assumed trip distribution can be described as follows:

- Inbound from the east on New Lakeshore Road
 - 0% in AM peak, 10% in PM peak, 10% in SUN peak
- Inbound from the east on Highway 6
 - 40% in AM peak, 50% in PM peak, 50% in SUN peak
- Inbound from the west on Highway 6
 - 60% in AM peak, 40% in PM peak, 40% in SUN peak
- Outbound to the east on New Lakeshore Road
 - 15% in AM peak, 15% in PM peak, 15% in SUN peak
- Outbound to the east on Highway 6
 - 60% in AM peak, 25% in PM peak, 25% in SUN peak
- Outbound to the west on Highway 6
 - 25% in AM peak, 60% in PM peak, 60% in SUN peak

Site-generated traffic volumes at Highway 6/Lakeview Avenue/Ocean Way are shown in **Figure 2**.

Figure 2: Site-Generated Traffic Volumes



Compared to the previously projected 2027 background traffic in the approved 2022 Transportation Brief, the proposed site traffic represents an increase of 4% to 6% in the overall traffic at the Highway 6/Lakeview Avenue/Ocean Way intersection. No significant impact is expected as a result of the proposed development.

5.0 DEVELOPMENT AND ACCESS DESIGN

The proposed development includes two approximately 7.3m-wide two-way accesses to Barrett Court, approximately 22m apart from each other (measuring nearest edge to nearest edge). The southerly access is approximately 44.5m from the Dover Coast Boulevard right-of-way.

The two accesses form a pick-up/drop-off loop and access to some perpendicular parking spaces within the loop. The pick-up/drop-off loop also forms the on-site fire route. The 7.3m drive aisle widths and centreline radii of 12m meet the minimum fire route requirements outlined in the *Ontario Building Code*, which requires a minimum drive aisle width of 6m and centreline radius of 12m.

An additional drive aisle connects the pick-up/drop-off loop to the additional parking and loading areas north of the proposed building. This drive aisle also has a width of 7.3m and centreline radius of 12m. These dimensions can accommodate the required passenger vehicles, loading vehicles, and fire trucks.

The Transportation Association of Canada (TAC)'s *Geometric Design Guide for Canadian Roads* identifies minimum corner clearance requirements, based on the class of roadway being accessed and whether the nearest intersection is signalized or unsignalized. For local accesses, the minimum required corner clearance to the nearest intersection is 15m when that intersection is unsignalized. The proposed accesses are more than 15m from the nearest edge of Dover Coast Boulevard, meeting this requirement.

As Barrett Court is a generally straight and level roadway, it is anticipated that adequate sightlines will be provided at both proposed accesses.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations of this TB can be summarized as follows:

- The proposed development is projected to generate 27 vehicle trips during the AM peak hour, 35 vehicle trips during the PM peak hour, and 64 vehicle trips during the Sunday peak hour.
- Compared to the previous studies, the trip generation projections have marginally increased for the AM and PM peak hours, with a slightly larger increase for the Sunday peak hour. The proposed site traffic represents an increase of 4% to 6% in the overall traffic at the Highway 6/Lakeview Avenue/Ocean Way intersection. No significant impact is expected as a result of the proposed development.
- The proposed development includes two approximately 7.3m-wide two-way accesses to Barrett Court, approximately 22m apart from each other (measuring nearest edge to nearest edge). The southerly access is approximately 44.5m from the Dover Coast Boulevard right-of-way.

- The two accesses form a pick-up/drop-off loop and access to some perpendicular parking spaces within the loop. An additional drive aisle connects the pick-up/drop-off loop to the additional parking and loading areas north of the proposed building. This drive aisle also has a width of 7.3m and centreline radius of 12m. The 7.3m drive aisle widths and centreline radii of 12m can accommodate the required passenger vehicles, loading vehicles, and fire trucks, and meet the minimum fire route requirements of the *Ontario Building Code*.
- The proposed accesses are more than 15m from the nearest edge of Dover Coast Boulevard, meeting the minimum corner clearance requirement. As Barrett Court is a generally straight and level roadway, it is anticipated that adequate sightlines will be provided at both proposed accesses.

Based on the foregoing, the proposed development is recommended from a transportation perspective. The development is not anticipated to adversely affect capacity, safety, or operations on Highway 6.

NOVATECH

Prepared by:



Joshua Audia, P.Eng.
Project Engineer | Transportation

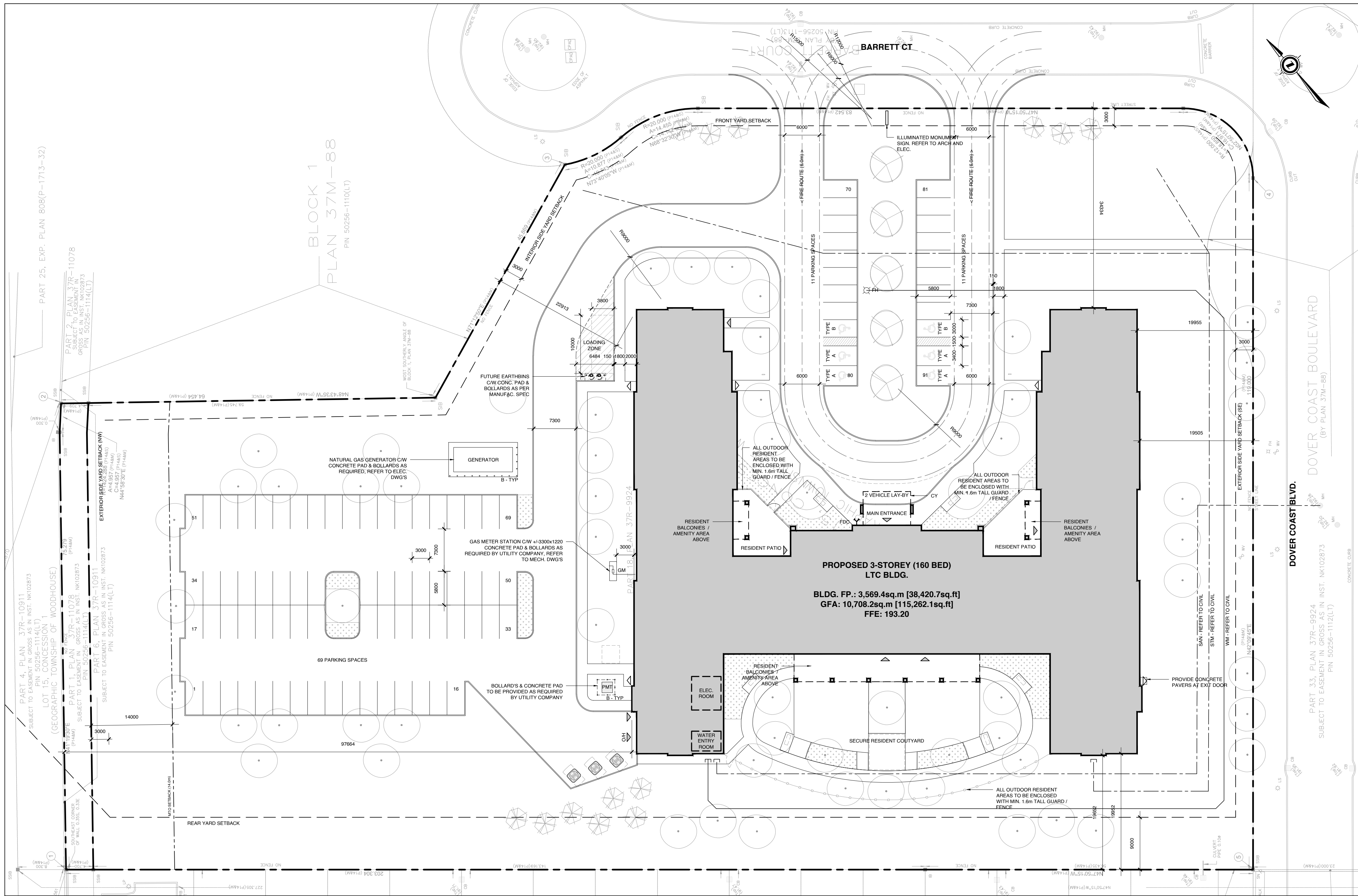
Reviewed by:



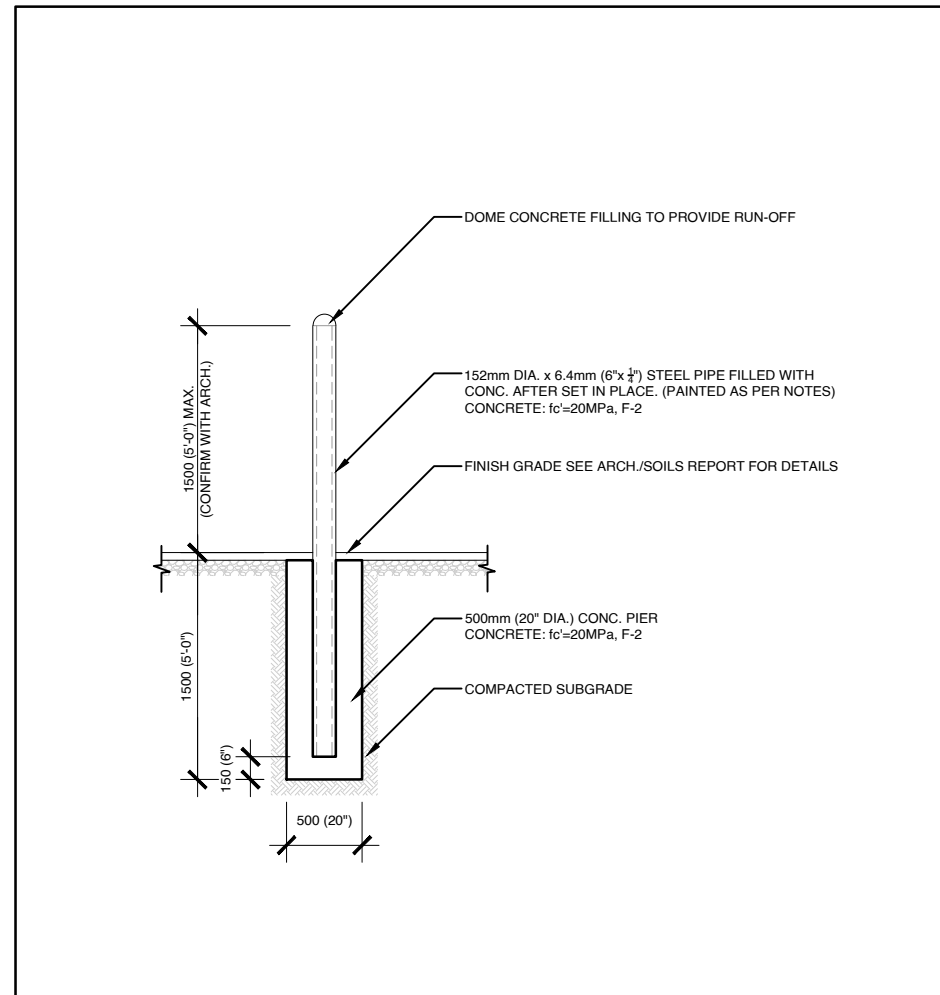
Jennifer Luong, P.Eng.
Senior Project Manager | Transportation

APPENDIX A

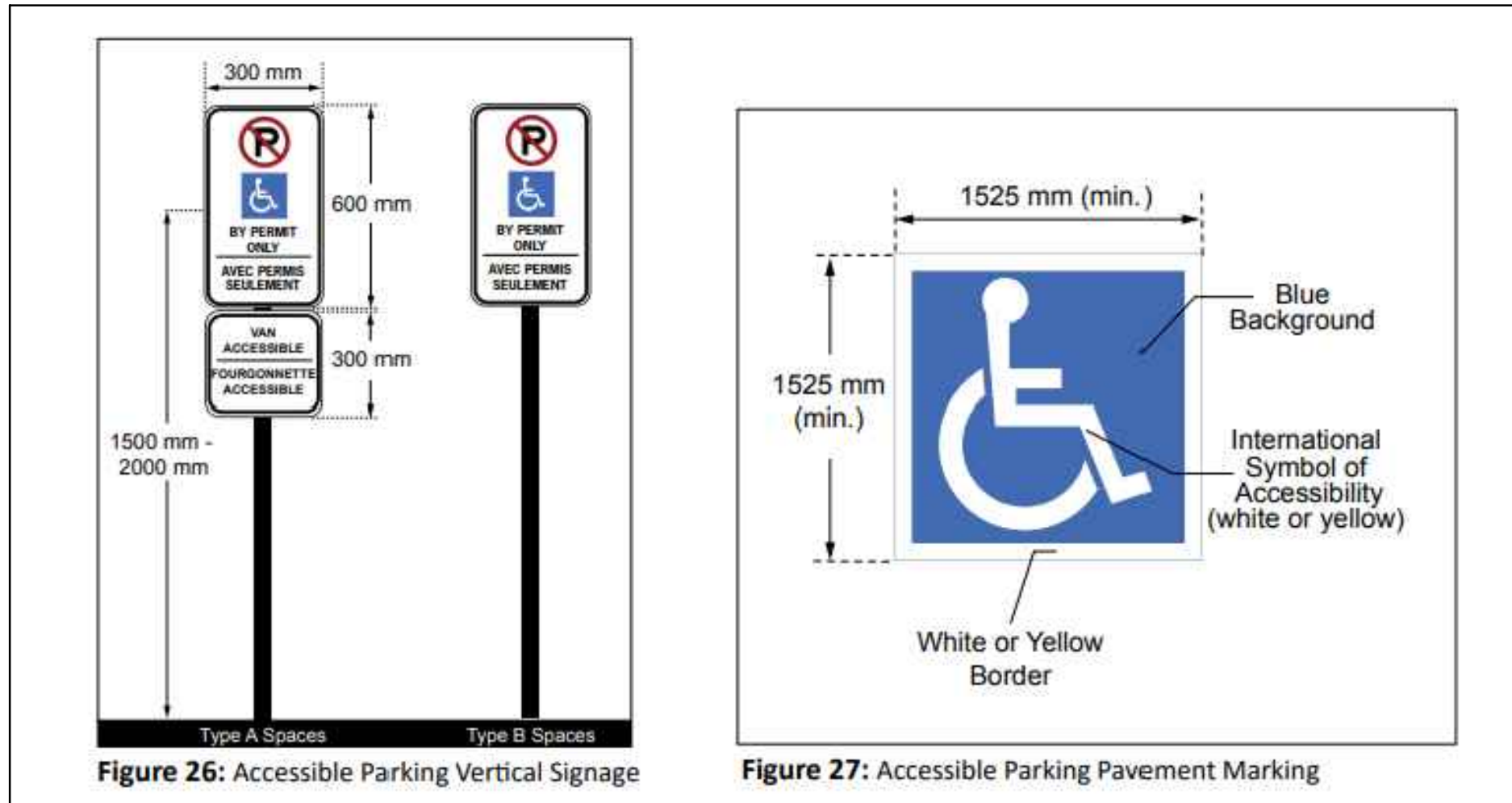
Preliminary Site Plan



01 PROPOSED SITE PLAN
A1.0 SCALE: 1:400



02 TYPICAL BOLLARD @ GRADE DETAIL
A1.0 SCALE: 1:50



03 ACCESSIBLE PARKING SIGNAGE DETAIL
A1.0 SCALE: NTS



04 KEY PLAN
A1.0 SCALE: N.T.S.

PROPERTY LEGAL DESCRIPTION		
PLAN OF SURVEY OF		
PART OF LOT 15,		
CONCESSION 1		
GEOGRAPHIC TOWNSHIP OF WOODHOUSE		
NORFOLK COUNTY		
Prepared by KRCMAR Surveyors Ltd. Dated August 29, 2022		
BUILDING AREAS	SQ.M.	SQ.FT.
GROSS FOOTPRINT	3,569.4m ²	38,420.7ft ²
GROSS FLOOR AREA:		
GROUND FLOOR	3,569.4m ²	38,420.7ft ²
SECOND FLOOR	3,569.4m ²	38,420.7ft ²
THIRD FLOOR	3,569.4m ²	38,420.7ft ²
TOTAL	10,708.2m ²	115,262.1ft ²
PROJECT ZONING REVIEW/STATISTICS		
MUNICIPALITY:	NORFOLK COUNTY	
MUNICIPAL ADDRESS:	125 DOVER COAST BLVD., PORT DOVER, ON	
REGISTERED OWNER:	SOUTHBRIDGE CARE HOMES	
LOT AREA:	22,382.1m ² (5.5 ACRES)	
ZONING ANALYSIS	R5 - URBAN RESIDENTIAL TYPE 5 ZONE (14.88)	
NORFOLK COUNTY	3-STORY LTC HOME (160 BEDS)	
PROPOSED USE:		

ZONING MECHANISM (IL9)	REQUIRED	PROVIDED
MINIMUM LOT AREA	N/A	22,382.1m ²
MINIMUM LOT FRONTAGE	30.0m	83.7m
MAXIMUM BUILDING HEIGHT	3-STORIES	3-STORIES (13.0m)
MINIMUM FRONT YARD SETBACK	3.0m	34.3m
MINIMUM REAR YARD SETBACK	9.0m	19.6m
MINIMUM INTERIOR SIDE YARD SETBACK	3.0m	22.9m
MINIMUM EXTERIOR SIDE YARD SETBACK (NW)	3.0m	97.6m
MINIMUM EXTERIOR SIDE YARD SETBACK (SE)	3.0m	19.5m
% OF SOFT LANDSCAPING	-	58%
PARKING & LOADING SPACE PROVISIONS		
MINIMUM REQUIRED VEHICLE PARKING SPACES	LONG-TERM CARE FACILITY (160 BEDS) = 40 SPACES 1 PER 4 BEDS	40 SPACES
PROVIDED PARKING	REGULAR SPACES (NEW) = 40 SPACES ACCESSIBLE SPACE (TYPE A) = 1 SPACE ACCESSIBLE SPACE (TYPE B) = 1 SPACE MINIMUM VISITOR PARKING = 0 SPACES TOTAL = 42 SPACES	85 SPACES 4 SPACE 2 SPACE 0 SPACES 91 SPACES
MINIMUM AISLE WIDTH	PARKING LOT: 7.3m	7.3m
MINIMUM PARKING SPACE DIMENSIONS	LENGTH: 5.8m WIDTH: 3.0m	LENGTH: 5.8m WIDTH: 3.0m
MINIMUM WIDTH OF DRIVEWAY ACCESSING LOADING SPACE	SINGLE TRAFFIC LANE: 7.3m	7.3m
MINIMUM WIDTH OF LOADING SPACE	3.0m	3.8m
MINIMUM LENGTH OF LOADING SPACE	10.0m	10.0m

SITE PLAN NOTES	NOTE
(E)AS	EXISTING ASPHALT SURFACE - REFER TO SURVEY
(E)BU	EXISTING BUSHES - REFER TO SURVEY
(E)CSW	EXISTING CONCRETE CURB - REFER TO SURVEY
(E)GSW	EXISTING CONCRETE SIDEWALK - REFER TO SURVEY
(E)OHW	EXISTING OVERHEAD UTILITY WIRES - REFER TO SURVEY
(E)RW	EXISTING RETAINING WALL - REFER TO SURVEY
(E)T	EXISTING TREE - REFER TO SURVEY
(E)TR	EXISTING TREE TO BE REMOVED - REFER TO SURVEY
B	BOLLARD, 6MM X 125MM DIA. X 1050MM PAINTED GALVANIZED STEEL BOLLARD C/W WELDED CAP AND (6MM X 150MM BASE PLATE WITH 4 BOLT HOLES, SECURE TO PAVEMENT OR SIDEWALK AT LOCATIONS INDICATED WITH 16MM DIA. GALVANIZED CONCRETE OR ASPHALT ANCHORS DEPENDANT ON LOCATION.
BFPS	PROVIDE VERTICALLY-MOUNTED SIGN, MINIMUM 300MM WIDE X 600MM HIGH, MARKED WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY. MOUNT NOT LESS THAN 150MM ABOVE GRADE AND NOT MORE THAN 200MM ABOVE GRADE. ENSURE TONAL CONTRAST BETWEEN BP PARKING SIGN AND BACKGROUND ENVIRONMENT. PROVIDE INFORMATION TEXT COMPLIANT WITH CITY OF OTTAWA BY LAW REQUIREMENTS. PROVIDE ADDITIONAL BILINGUAL SIGNAGE THAT IDENTIFIES TYPE "A" SPACES AS "VAN ACCESSIBLE/ FOURGONNETTE ACCESSIBLE".
BR	BIKE RACK - REFER TO LANDSCAPE
CC	CONCRETE CURB - REFER TO CIVIL
CP	CONCRETE PAD - REFER TO CIVIL
CSW	CONCRETE SIDEWALK - REFER TO CIVIL
CY	CANOPY C/W RECESSED POT LIGHTS - REFER TO ELECTRICAL
DC	DEPRESSED CONCRETE CURB - REFER TO CIVIL
FDC	FIRE DEPARTMENT CONNECTION / SIAMESE CONNECTION - REFER TO CIVIL & MECH.
FH	FIRE HYDRANT - REFER TO CIVIL
GM	GAS METER - REFER TO SITE SERVICING
PMT	PAD MOUNT TRANSFORMER - REFER TO ELEC.
PP	PAINTED PARKING LINES, TYP. - REFER TO CIVIL
RSL	ROOF STORM LINE - REFER TO CIVIL
RW	RETAINING WALL - REFER TO CIVIL
SL	SANITARY LINE - REFER TO CIVIL
STL	STORM LINE - REFER TO CIVIL
SW	SWALE - REFER TO CIVIL
TWSI	TACTILE WALKING SURFACE INDICATOR (TWSI), FULL WIDTH OF CURB RAMP, RECESSED TO BE FLUSH WITH CONCRETE WALKING SURFACE - REFER TO CIVIL
WTS	WATER SERVICE - REFER TO CIVIL
WTL	WEAVING TILE STORM LINE - REFER TO CIVIL

SITE PLAN SYMBOLS	
DN	NEW OVERHEAD DOOR
DN	NEW DOOR / ENTRANCE
DN	NEW EXIT
DN	BICYCLE PARKING SPACE (1.8Mx0.6M)
DN	NO PARKING LINES
DN	PARKING STALL COUNT PER ROW
DN	NEW SIGN, REFER TO SIGN LEGEND
DN	FIRE ROUTE SIGN
DN	STREET LIGHT
DN	DESIGNATED ACCESSIBLE PARKING SPACE AS PER AQDA STANDARDS
DN	VISITOR PARKING
DN	TWO WAY TRAFFIC
DN	DEPRESSED CURB (DC)
DN	TACTILE WALKING SURFACE INDICATORS (TWSI)
DN	PROPERTY LINE
DN	MINIMUM SETBACKS (ZONING)
DN	NEW CONSTRUCTION
DN	EXISTING BUILDINGS
DN	SOFT LANDSCAPING
DN	CONCRETE SIDEWALK
DN	BUILDING MOUNTED LIGHTS REFER TO ELECTRICAL DWGS
DN	INDICATION OF COMPACT PARKING SPACES

- NOTES:
- ALL WORK TO BE IN COMPLIANCE WITH LOCAL BUILDING CODES, REGULATIONS AND BY-LAWS.
 - ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH PLANS IN CONTRACT DOCUMENTS.
 - DO NOT SCALE DRAWINGS.
 - ALL SUB-CONTRACTORS TO TAKE THEIR OWN ON-SITE MEASUREMENTS AND BE RESPONSIBLE FOR THEIR ACCURACY.
 - NOTIFY LAWRENCE ARCHITECTS INC. FOR ANY ERRORS AND/OR OMISSIONS PRIOR TO START OF WORK.

04	2026.05.13	ISSUED FOR SPC
03	2026.03.06	ISSUED FOR LTC PRELIMINARY PLAN SUBMISSION
02	2026.02.13	ISSUED PRE-CONSULTATION
01	2026.02.10	ISSUED FOR REVIEW
No.	DATE	REVISION

APPENDIX B

Excerpts of 2013 Traffic Report

3.3 Traffic Volumes

This section outlines the methodology used to obtain the base weekday and weekend traffic volumes for the study area. Traffic analysis for this report was based on November 2011 counts, adjusted to account for summertime conditions. Several sets of 24 hour and turning movement counts were obtained to aid in this process and are listed below in Exhibit 3.2.

Exhibit 3-2: Traffic Count Summary

Description	Date	Source
24 hr – Highway 6 2.4km north of Concession 2 Woodhouse Road	August 11, 2009 – August 17, 2009	MTO
TMC – Highway 6 at Lakeview Avenue (Weekday)	November 23, 2010	Pyramid
TMC – New Lakeshore Road at Lakeview Avenue (Weekday)	November 23, 2010	Pyramid
24 hr – Highway 6 1.2 km east of Lakeview Avenue	November 24, 2010	Pyramid
24 hr – New Lakeshore Road	November 24, 2010	Pyramid
24 hr – Concession 2 Woodhouse Road	November 24, 2010	Pyramid
24 hr – Highway 6 1.2 km east of Lakeview Avenue	June 25, 2011 – July 1, 2011	OTI
TMC – Highway 6 and Lakeview Avenue (Weekend)	June 26, 2011	Pyramid
Legend: TMC – Turning movement count 24 hr – 24 hour ATR (automatic traffic recorder) count OTI – Ontario Traffic Inc. Pyramid – Pyramid Traffic Inc.		

3.3.1 WEEKDAY TRAFFIC VOLUMES

Weekday turning movement volumes were taken from November 23, 2011 counts conducted by Pyramid Traffic Inc. The peak-hour summaries for these counts are shown in Exhibit 3.4 and Exhibit 3.3. A plot of the 24hr count information (vs. time) collected on Highway 6 is displayed in Exhibit 3.7 and shows the directional flows along the roadway with a peak northbound flow, away from Port Dover, in the AM peak period and a southbound peak in the PM peak period. In total, 3,182 vehicles were recorded along this section of Highway 6 over the 24hr count period, 1,614 northbound and 1,568 southbound.

Plots of the Lakeview Avenue and Concession 2 Woodlawn Road counts (Exhibit 3.6 and Exhibit 3.5) illustrate similar travel patterns with eastbound AM peak and westbound PM peak flows. The total recorded volume along Lakeview Avenue was 915 vehicles (438 eastbound, 477 westbound) during the 24hr count period. Woodlawn Road carried a total volume of 145 vehicles during the 24hr count period, 83 eastbound and 62 westbound.

Exhibit 3-3: Dover Coast: Existing PM Peak-Hour Traffic

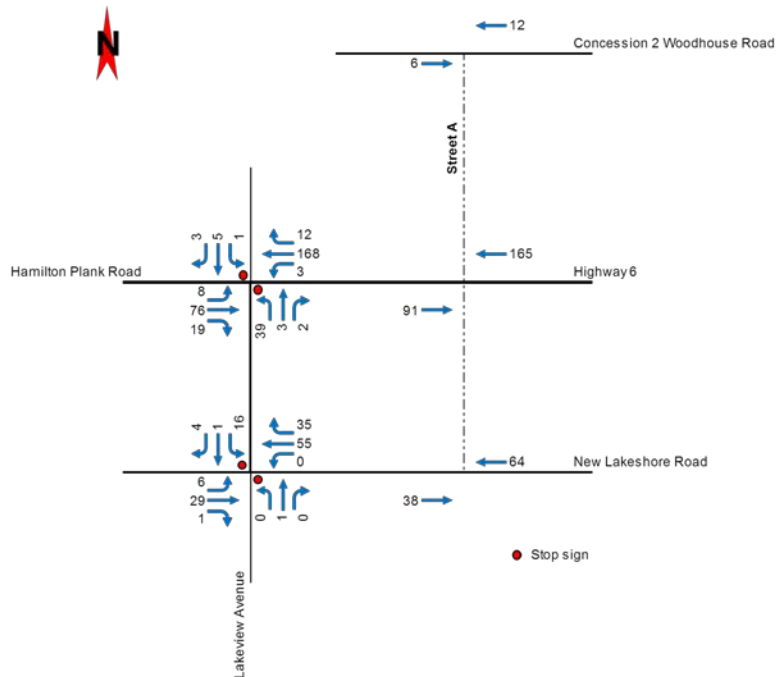


Exhibit 3-4: Dover Coast: Existing AM Peak-Hour Traffic

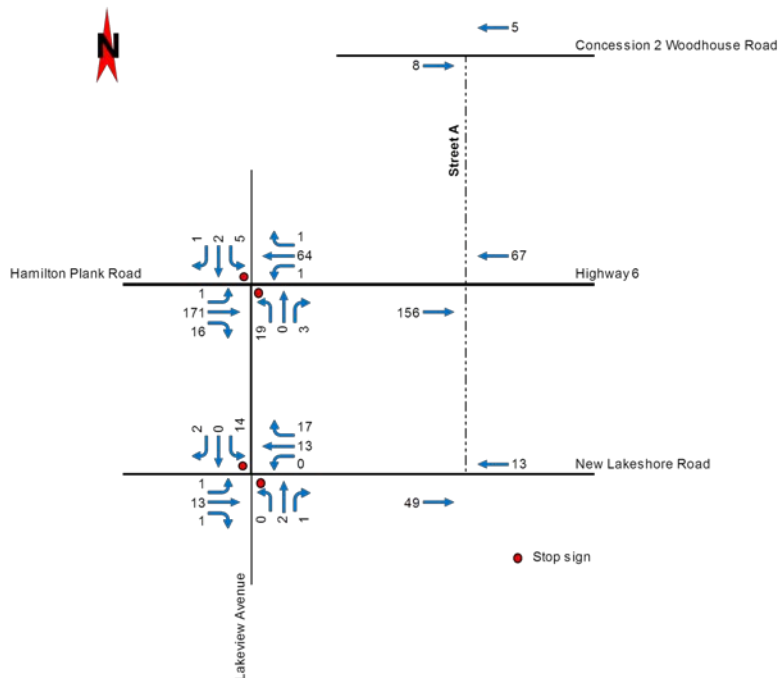


Exhibit 3-5: Existing Concession 2 Woodlawn Road Volume Profile

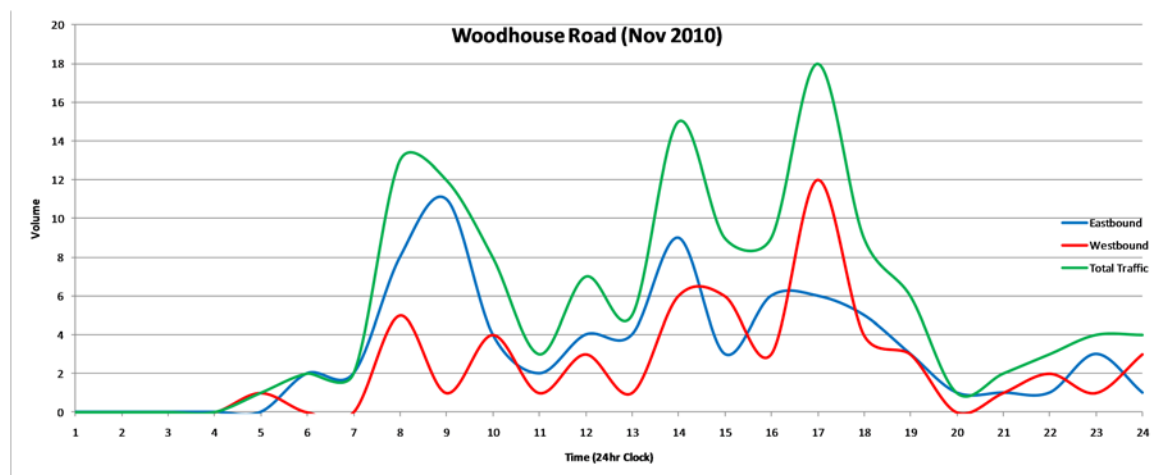


Exhibit 3-6: Existing Lakeview Avenue Volume Profile

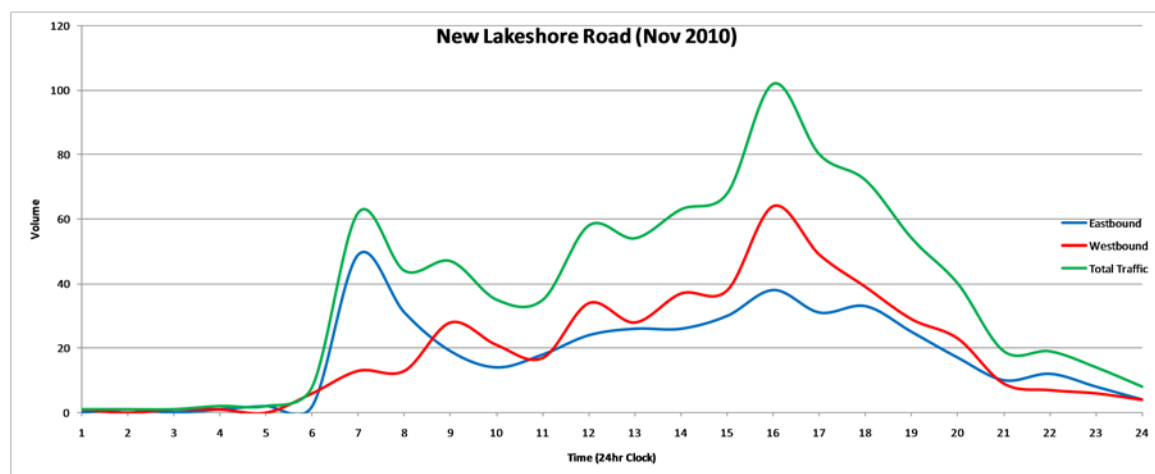
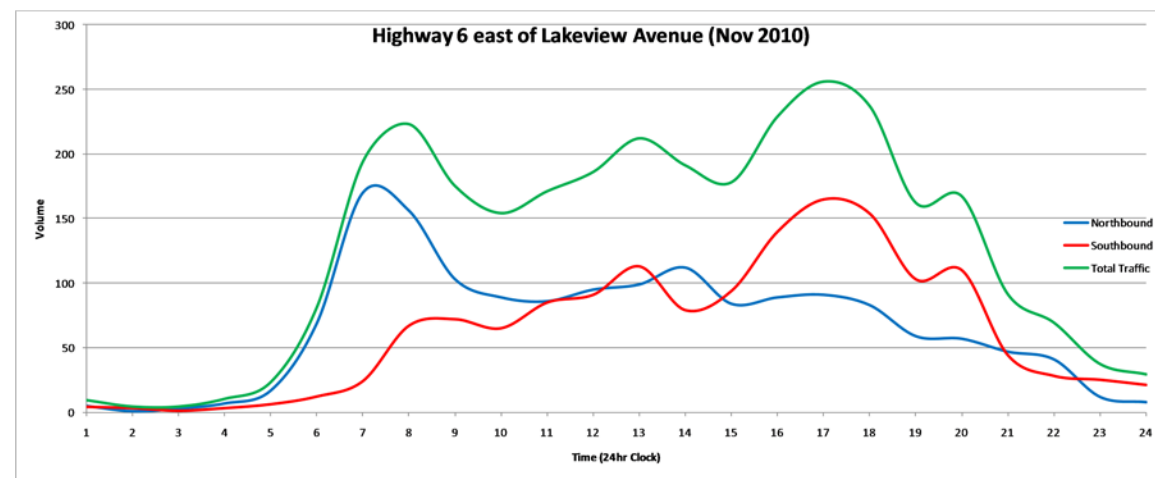


Exhibit 3-7: Existing Highway 6 Volume Profile

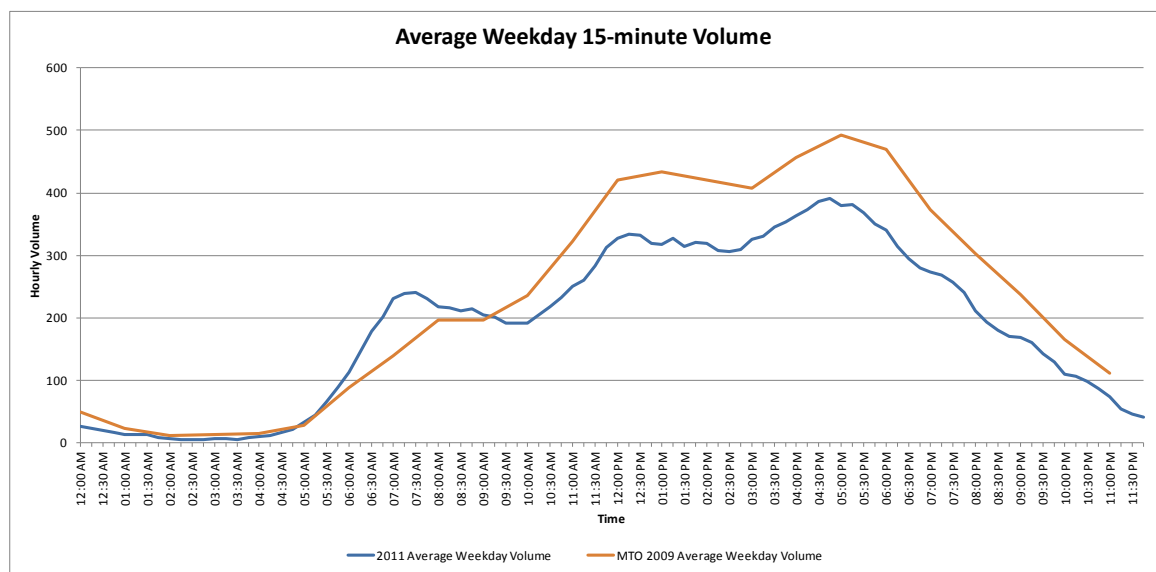


3.3.2 SUMMER TRAFFIC VOLUMES

Summertime traffic volumes were used to adjust turning movement counts to determine analysis volumes. Since two sets of summer counts were obtained (August 2009 and June 2011), a comparison was done between the two to determine which should be used for the seasonal variation analysis completed below. Exhibit 3.8 shows the average weekday traffic volumes from both the July 2011 traffic counts and the volumes collected by the MTO in Aug 2009 (2.4 km North of Nanticoke Con 2).

As illustrated in Exhibit 3.8, both plots appear to display similar volume profiles but the 2009 MTO data indicates that volumes at this location were higher in 2009. As agreed upon with MTO staff, the 2009 counts were used for the seasonal analysis as they were deemed to be conservative.

Exhibit 3-8: Comparison of 2009 and 2011 Summer Weekday Traffic Volumes



The Ministry of Transportation classifies the traffic flows along this section of Highway 6 as “intermediate recreation”. This section of Highway 6 is used by both regular commuter traffic and seasonal recreation-related traffic. The Port Dover area is a ‘summer season’ recreation destination and as such, traffic volumes along this section of roadway would be expected to be higher in the summer months than in the ‘off-season’ periods.

Exhibit 3.9 shows the volume profile of the August 2009 MTO count conducted along this section of Highway 6 during the summertime period. The southbound traffic profile for this count still shows a PM peak period (as shown in Exhibit 3.7), but, the previously discussed ‘commuter’ profile is now dominated by the flow of traffic towards the Port Dover area beaches and tourist attractions. Southbound traffic shows a steadily growing volume through the AM peak period which ultimately peaks at approximately noon. Northbound traffic now builds towards a PM peak rather than declining from the AM ‘commuter’ profile shown previously.

Exhibit 3.10 highlights the differences between the summertime and ‘off-season’ total volume flow profiles (August vs. November). While the AM peak-period (approximately 8 am) is relatively constant in both scenarios, the PM peak-period (approximately 5 pm) volume during the summertime is approximately double (93% increase) the ‘off-season’ volume.

Based on this analysis, the November PM peak traffic count data was adjusted to reflect the higher through volumes along this section of Highway 6 during the summer traffic period. The adjustments were made along the Highway 6 approaches, with the eastbound approach volumes being increased by 154% and the westbound approach volumes being increased by 36%, following the differences observed in the directional volumes in Exhibit 3.9. The adjusted PM peak period volumes are illustrated in Exhibit 3.11.

Exhibit 3-9: Highway 6 Summer Volume Profile

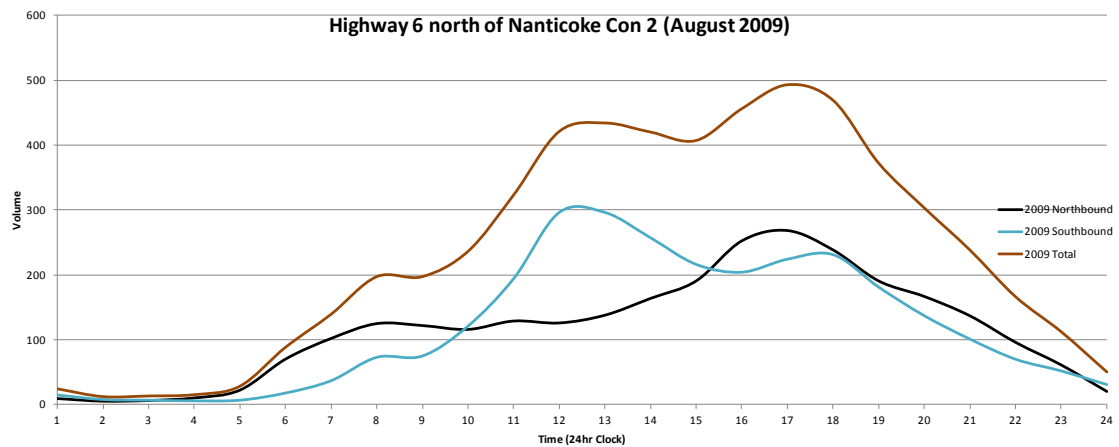


Exhibit 3-10: Highway 6 Summer vs. Off-Season Volume Profiles

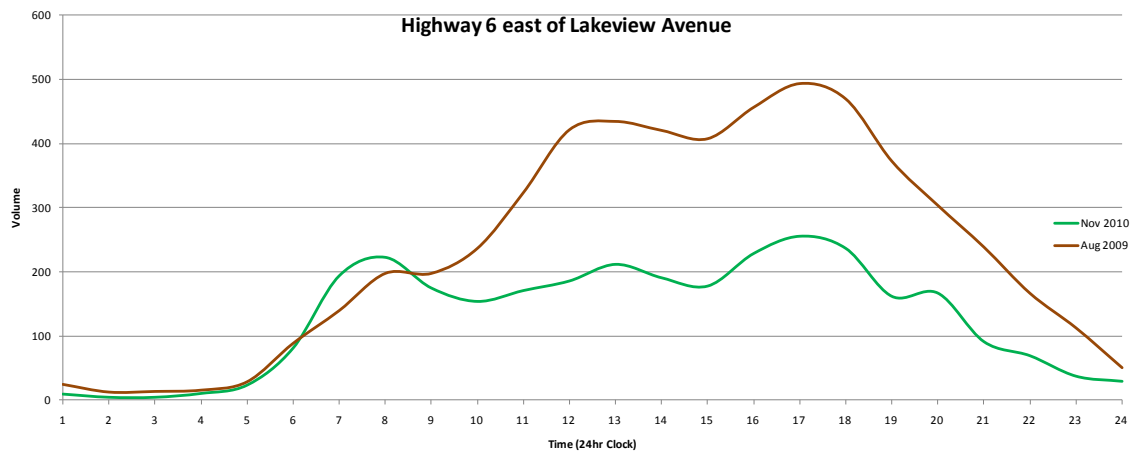
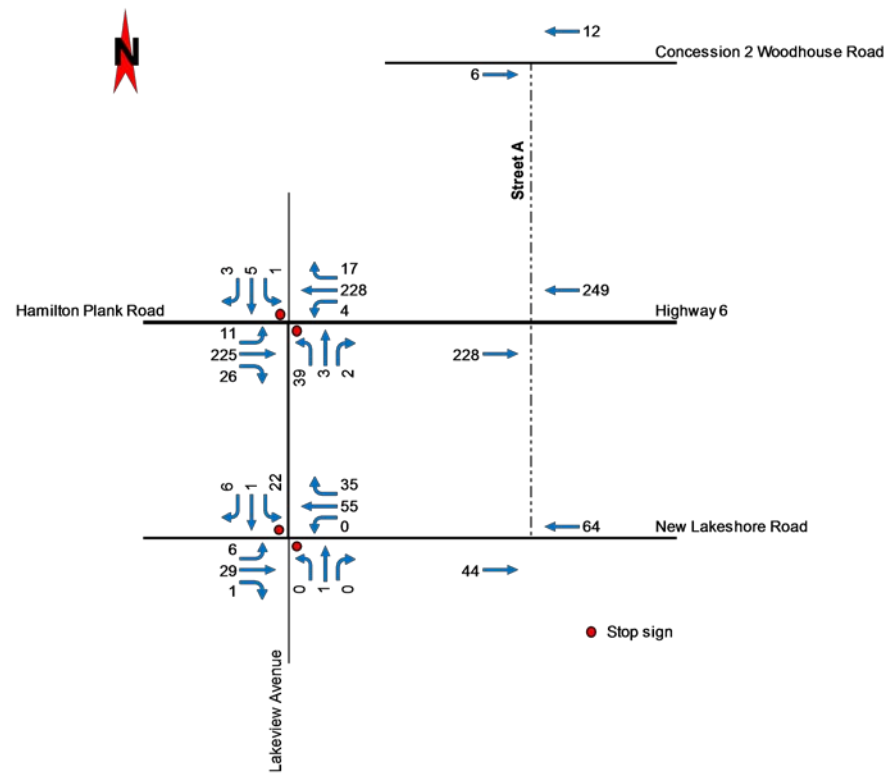


Exhibit 3-11: Dover Coast: Adjusted 2010 PM Peak-Hour Traffic



3.3.3 WEEKEND TRAFFIC VOLUMES

The counts obtained in June 2011 were used to determine the critical periods for weekend analysis. As illustrated in Exhibit 3.12, the weekend (Saturday and Sunday) traffic volume profiles differ from the typical weekday profile. For the weekend period, the Sunday PM-peak period appears to represent the 'worst case' scenario with respect to Highway 6 traffic volumes. While count information was collected for both Saturday and Sunday peak periods (see Appendix B), in discussion with MTO staff, a decision was made to restrict the evaluation of weekend conditions to the critical Sunday PM peak period only. A summary of the turning movement data collected for this period is illustrated in Exhibit 3.13. Sunday data was only collected for the critical intersection of Highway 6 and Lakeview Avenue; as such the other intersection volumes were left blank in the Sunday volume exhibits.

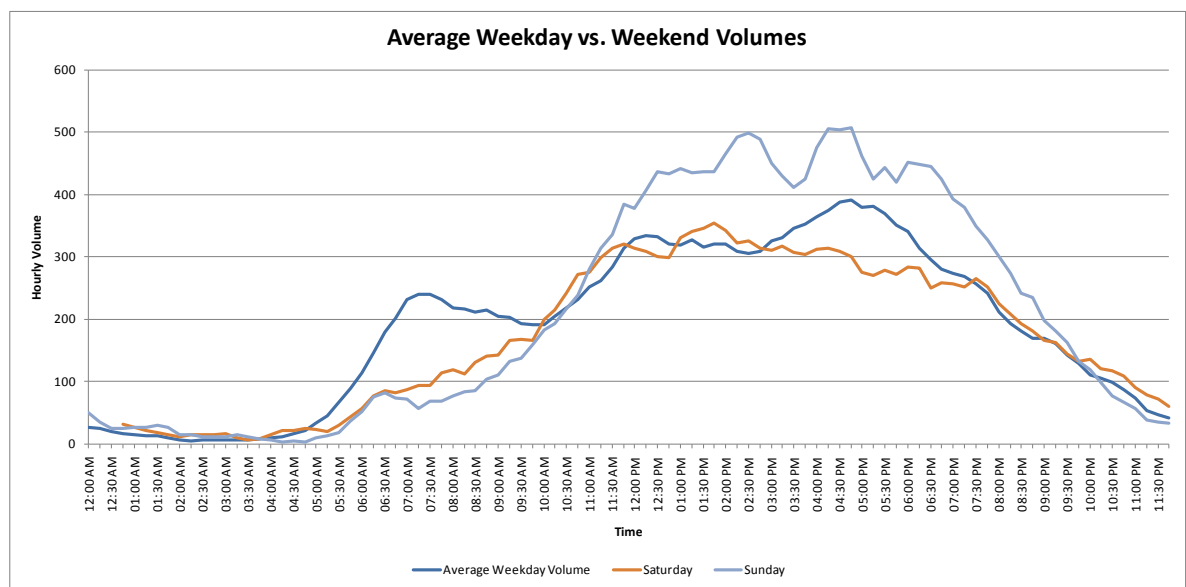
Exhibit 3-12: Comparison of Average Weekday and Weekend Traffic Volumes

Exhibit 3-13: 2011 Sunday PM Peak Traffic Volumes at Hwy 6 and Lakeview Avenue

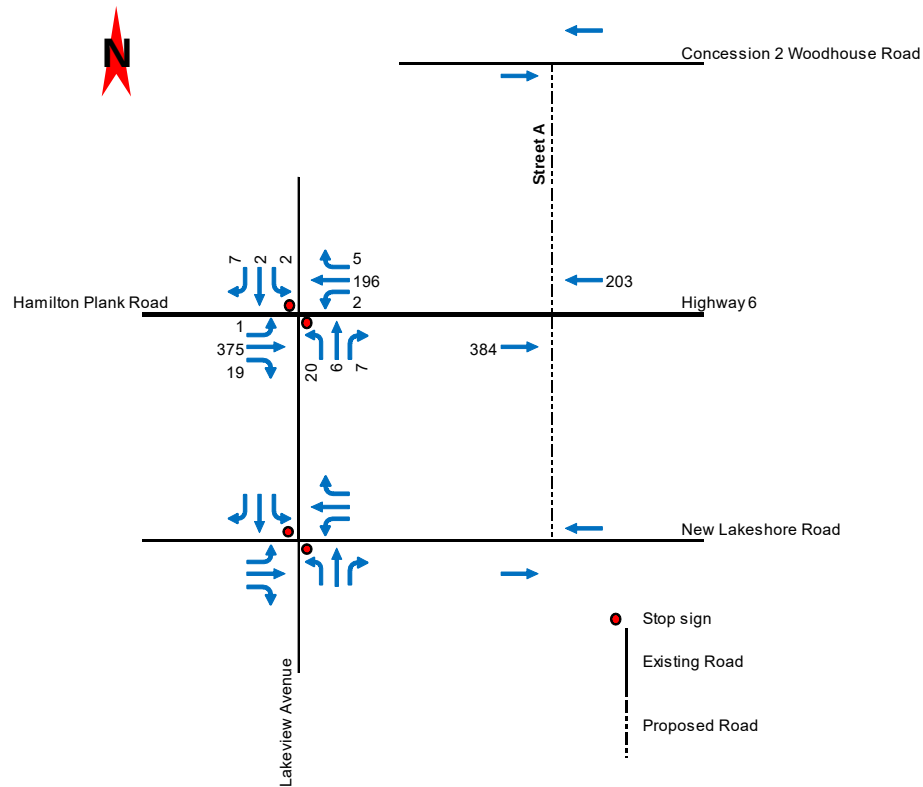


Exhibit 4-2: Ocean Way Subdivision Traffic

Year	Components	Independent Variable	Size	AM Total	IN	OUT	PM Total	IN	OUT	Sunday Peak*	IN	OUT
2011	Single-Family Detached Housing (LUC# 210)	Dwelling Unit	95	72	18	54	96	61	35	82	44	38
	Assume 20% use alternate accesses			15	4	11	20	13	7	17	10	7
	Trips using Ocean Way			57	14	43	76	48	28	65	34	31

*Peak Hour of Generator

4.3 Future Roadway Improvements

Norfolk County plans to improve Concession 2 Woodhouse Road in the vicinity of the Dover Coast development, but these improvements are intended to address existing geometric and surface conditions rather than to change the functional character of this roadway link.

MTO has issued a request for expressions of interest to undertake the EA clearance and detailed design for the portion of Highway 6 adjacent to the site. While this project is tentatively scheduled for construction in 2012, it is primarily intended to address pavement and structural rehabilitation of the existing roadway as opposed to providing either facility or capacity improvements. It is our understanding that a left-turn lane is to be introduced at the intersection of Highway 6 and Lakeview Avenue/Ocean Way for northbound (eastbound) traffic as a result of the subdivision development discussed in Section 6.2.

No other substantial roadway improvements are currently planned in the immediate development area.

Exhibit 5-2: Dover Coast Phase Detail and Trip Generation

Phase	Year	Blocks	Components	Independent Variable	Size	AM Total	IN	OUT	PM Total	IN	OUT	Sunday Peak*	IN	OUT
1	2011	A	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	101	48	17	31	46	29	17	22	12	10
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	18	3	2	1	3	2	1	10	5	5
			Medical-Dental Office (LUC# 720)	1000 ft ² Floor Area	16.1	51	19	32	49	31	18	32	17	15
2	2012 - 2013	B, C, D, E	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	134	53	19	34	56	35	21	29	15	14
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	195	26	10	16	32	20	12	108	54	54
			Golf Course (LUC# 430)	Holes	9	79	29	50	88	55	33	137	69	68
3	2014 - 2015	F	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	100	47	17	30	45	28	17	21	11	10
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	43	6	3	3	7	5	2	24	12	12
			Shopping Center (LUC# 820)	1000 ft ² Leaseable	83.9	53	20	33	52	33	19	45	23	22
			Golf Course (LUC# 430)	Holes	9	139	85	54	566	278	288	262	129	133
			Hotel (LUC#310)	Rooms	60	21	17	4	26	12	14	40	20	20
4	2016	G	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	63	41	15	26	32	20	12	14	8	6
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	25	4	2	2	4	3	1	14	7	7
						45	17	28	36	23	13	28	15	13
5	2017	H, I	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	49	39	14	25	27	17	10	11	6	5
			Assisted Living (LUC# 254)	Beds	130	19	13	6	29	13	16	50	22	28
						58	27	31	56	30	26	61	28	33
6	2018 - 2019	J	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	95	47	17	30	44	27	17	20	11	9
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	62	9	4	5	10	6	4	35	18	17
						56	21	35	54	33	21	55	29	26
7	2020 - 2022	K	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	168	59	21	38	67	41	26	36	19	17
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	106	14	6	8	17	11	6	59	30	29
						73	27	46	84	52	32	95	49	46
8	2023 - 2024	L, M	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	133	53	19	34	56	35	21	28	15	13
			Senior Adult Housing - Attached (LUC# 252)	Dwelling Unit	73	10	4	6	12	8	4	41	21	20
						63	23	40	68	43	25	69	36	33
9	2025	N	Senior Adult Housing - Detached (LUC# 251)	Dwelling Unit	79	44	16	28	38	24	14	17	9	8

*Peak Hour of Generator

5.2 Trip Distribution / Assignment

5.2.1 RESIDENTIAL TRIPS

The existing traffic movements at the intersection of Highway 6 and Lakeview Avenue (Exhibit 3.4 and Exhibit 3.3) are assumed to be representative of the residential trip distribution that would result from the new residential development in this area. Based on an assessment of these movements, the trip routing/distribution patterns illustrated in Exhibit 5.3, Exhibit 5.4 and Exhibit 5.5 were developed. These patterns were then used to assign trips generated by the Dover Coast project.

Exhibit 5-3: Weekday AM Peak Residential Trip Distribution



Exhibit 5-4: Weekday PM Peak Residential Trip distribution



Exhibit 5-5: Sunday PM Peak Residential Trip Distribution



5.2.2 COMMERCIAL TRIPS

There are four commercial uses proposed as part of the Dover Coast development (Exhibit 5.6). The primary market for all of the uses, other than the hotel site, is the immediate Port Dover urban area. As a result, 90% of trips associated with these uses will be assigned to/from the west versus the more general assignment of trips associated with the hotel/conference centre use.

Exhibit 5-6: Commercial Trip Distribution

Commercial Use	Trip Distribution To/From (%)		Pass-by %	% Internal Trips
	West	East		
Office	90	10	0	20
Golf Course	90	10	0	60
Hotel	50	50	0	0
Shopping Centre	90	10	45	30

*Note: Office not included in the Sunday distribution due to weekend closures.

Most of the commercial uses are assumed to be 'primary destinations' or destinations where the specific trip purpose is to visit the trip generator. The shopping centre use is the exception where 45% of the trips associated with this use are assumed to be pass-by trips (Source: Trip Generation Handbook, Second Edition, published by the ITE). Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without route diversion. For example, a trip to a grocery store on the route home from work would be considered as a pass-by trip.

A final factor used in the assignment and distribution of commercial related trips is assumed to be 'internal' trips, or trips that have both their origin and destination within the Dover Coast development. All of the commercial uses, except the hotel use, are intended to be amenities for the Dover Coast residents. The golf course, for example, is intended for resident's use, although it will have some availability for the general public. Trips generated from within the Dover Coast community and destined to a facility within the community will, generally have no impact on the adjacent street network (other than those crossing Highway 6). These internal trips are therefore removed from the total trip generation figures to arrive at a 'net' number of 'external' trips which would use the adjacent roadways.

APPENDIX C

Excerpts of 2022 Transportation Brief

CHANGES IN SITE TRIP GENERATION

Vehicular trips generated by the proposed development have been established based on the latest site statistics in accordance with the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition* for the land use of “Assisted Living”.

The site-generated trips during the weekday a.m., p.m. and Sunday peak hours are detailed in **Table 1**. The trip generation methodology is very conservative as it does not consider modal split reduction or the synergy between the site and other land uses nearby (i.e., multi-use reductions). Compared to the 2013 study, the same peak hours and land use were selected and a newer version of ITE trip generation manual was used.

Table 1: Proposed Site Trip Generation

Land Use (Statistics)	Basis/Parameter	Weekday A.M. Peak			Weekday P.M. Peak			Sunday Peak ²		
		In	Out	Total	In	Out	Total	In	Out	Total
Current Long-Term Care Facility (128 beds)	Trip Generation Rate (trips per bed) ¹	0.11	0.07	0.18	0.09	0.15	0.24	0.12	0.17	0.29
	Directional Split	60%	40%	100%	39%	61%	100%	43%	57%	100%
	Vehicular Trips	14	9	23	12	19	31	16	21	37
2013 Study Site Stats (130 beds)	2013 Study Estimated Vehicular Trips	13	6	19	13	16	29	22	28	50

¹ Based on the average rates for general urban/suburban settings of LUC 254 – Single-Family Detached Housing from *ITE*.

² Peak hour of generator.

³ Included for comparison purposes.

As shown in **Table 1**, the proposed development is estimated to generate 23, 31, and 37 two-way trips respectively during the weekday a.m., p.m. and Sunday peak hours, showing a slight increase in weekday peak-hour trips and a decrease in Sunday peak-hour trips as compared to the 2013 study projections. The reason for the trip generation increases during the weekday peak hours while fewer beds are proposed is that the latest 11th Edition of *ITE Trip Generation Manual* has different rates from the 8th Edition, which was used in the 2013 study. If the same rates were used, the number of trips generated by the proposed development would decrease during all peak hours. Overall, the differences in trip generation are considered minor.

2027 INTERIM CONDITIONS

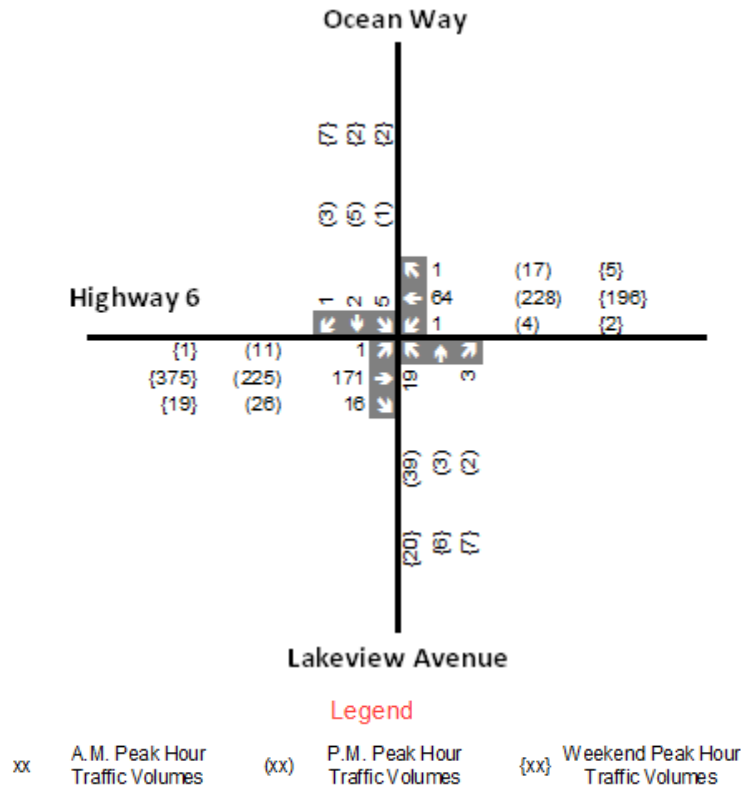
As previously mentioned in this report, the timing for extending Street ‘A’ to Highway 6 or implementing the planned roundabout at Highway 6 and Street ‘A’ is currently unknown. Therefore, it is possible that the development would be built prior to the planned network improvements and be accessible only via the access roads onto New Lake Shore Road when first constructed.

To demonstrate that the site-generated traffic can be supported without Street ‘A’ being extended to Highway 6 when it is built, WSP conducted traffic analysis at the intersection of Highway 6 and Lakeview Avenue/Ocean Way under the 2027 interim conditions. The interim conditions assume a five-year horizon for the proposed development (2027) and the Dover Coast south development road network would remain as is. This intersection was selected as the study intersection because it was analyzed in the 2013 study as the main gateway to the Dover Coast south development on Highway 6 besides Street ‘A’.

BASELINE TRAFFIC VOLUMES

The existing traffic volumes during the weekday a.m., p.m. and Sunday peak hours utilized in the 2013 study were adopted as the baseline traffic volumes in this study. The baseline traffic volumes were dated 2010 for the weekday peak hours and 2011 for the Sunday peak hour, which were adjusted accordingly to reflect summer seasonal peak in the 2013 study. The baseline traffic volumes are shown in **Figure 3**.

Figure3 – Baseline Traffic Volumes



GENERAL GROWTH

WSP applied a 2.0-percent annual growth rate to the through movements along Highway 6 from the respective baseline years (2010 or 2011) to 2027 to reflect the general traffic growth in the area.

Although a 3.0-percent annual growth rate was assumed in the 2013 study, it is our opinion that a 2.0-percent growth rate is sufficiently conservative for the purpose of the study because the satellite images from 2010 indicate that there has been limited development in the Port Dover area, particularly along Highway 6, except for the Ocean Way subdivision and Dover Coast south developments (included as background development traffic). It should be also noted that current commuter traffic volumes are generally lower than the pre-pandemic conditions since many companies are allowing employees to work remotely or on a hybrid schedule, where the traditional five-days-a-week attendance at a physical office is no longer required.

BACKGROUND DEVELOPMENT TRAFFIC

Same as the 2013 study, WSP included the trips generated by the Ocean Way subdivision as part of the background development traffic. The relevant excerpt is provided in **Attachment A** for reference.

Additionally, the western portion of the previously envisioned Phases 1 and 5 and part of Phases 2 and 3 have been constructed since the completion of the 2013 study, as per the recent satellite images, including detached and attached senior housing units as well as a golf course. WSP estimated the traffic volumes generated by these land uses based on the development phasing detail and trip generation table in the 2013 study (provided in **Attachment A**) and applied an adjustment factor to the residential trips to account for any unit increase from the envisioned plan. The estimated trip generation of the built Dover Coast developments is summarized in **Table 2**.

Table 2: Built Dover Coast Development Trip Generation

Land Use	Corresponding Phase and Statistics per 2013 Study	Peak Hour Trip Generation								
		Weekday A.M. Peak			Weekday P.M. Peak			Sunday Peak ²		
		In	Out	Total	In	Out	Total	In	Out	Total
Senior Adult Housing ¹	101 detached & 18 attached units from Phase 1 49 detached units from Phase 5	40	68	108	58	34	92	28	24	52
Golf Course	9 holes from Phase 2 9 holes from Phase 3	34	8	42	24	28	52	40	40	80

¹ A conservative adjustment factor of 1.2 was applied to the trip generation to account for any unit increase.

² Peak hour of generator.

Same as the trip distribution methodology discussed in Section 5.2 of the 2013 study (see **Attachment A**), WSP assumed most of the trips generated by the Dover Coast developments would travel on Highway 6, entering and exiting New Lake Shore Road via Lakeview Avenue, while the rest would stay on New Lake Shore Road. This is very conservative as it assigned over 90 percent of the background development trips to the study intersection, creating a worst-case scenario, while there are other roadways parallel to Lakeview Avenue that could alleviate some traffic.

The unbuilt Dover Coast developments were not included as background developments because it is our understanding that there are currently no other active SPA applications in the area and hence, the subject development is anticipated to be built before other potential developments.

SITE TRAFFIC AND 2027 TOTAL TRAFFIC VOLUMES

WSP assigned the site-generated trips shown in **Table 1** to the study intersection using the same logic as described above. The site traffic and the resulting total traffic volumes under the 2027 interim conditions during the weekday a.m., p.m. and Sunday peak hours are illustrated in **Figures 4** and **5**, respectively. The site-generated traffic only constitutes a small portion of the 2027 total traffic volumes

Figure 4 – Site Traffic Volumes

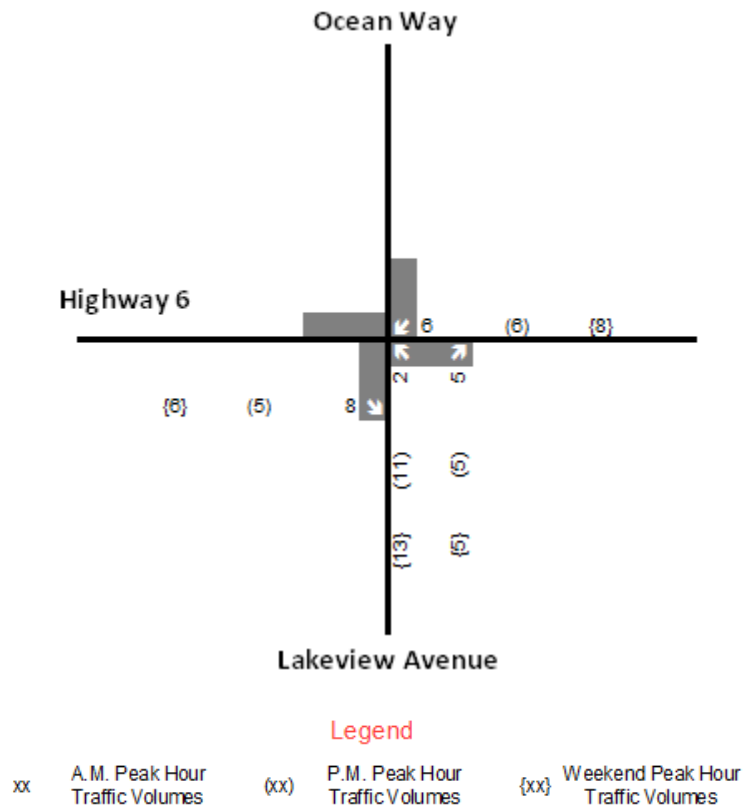
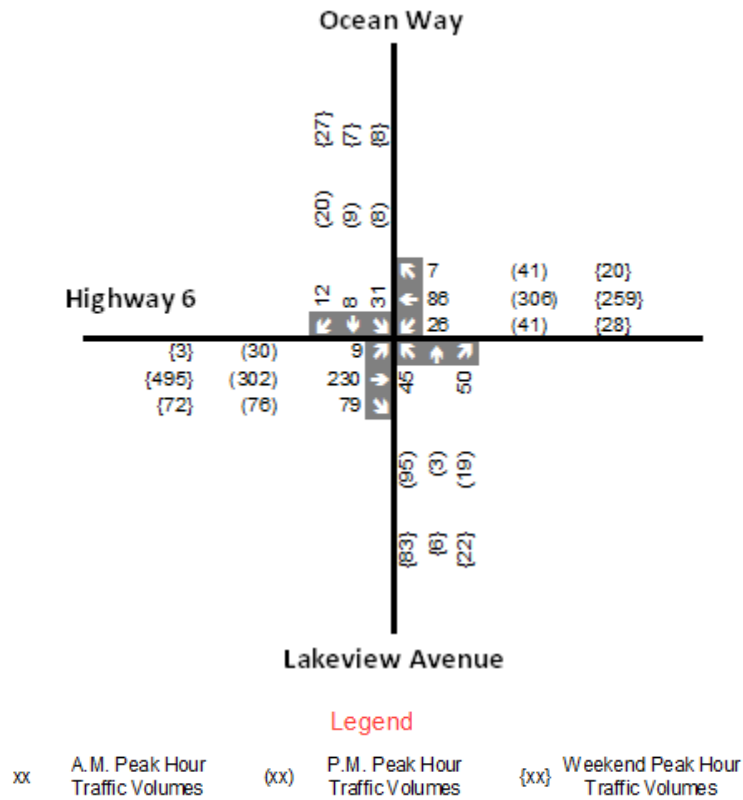


Figure 5 – 2027 Interim Condition Traffic Volumes



INTERSECTION CAPACITY ANALYSIS

WSP completed an intersection capacity analysis at Highway 6 and Lakeview Avenue/Ocean Way using Synchro 11 based on the forecast 2027 interim condition traffic volumes shown in **Figure 5**. Intersection capacity analysis provides an indication of traffic operations based on calculations of volume-to-capacity ratio (v/c) and delays for individual movements at an intersection. Level of Service (LOS) denoted by the letters ‘A’ through ‘D’ represent satisfactory traffic operations. LOS denoted by the letters ‘E’ and ‘F’ represents congested traffic conditions. The Level of Service definitions are included in **Attachment B**. The key Synchro input parameters are the same as the ones used for the 2013 study and the reported results are based on the *Highway Capacity Manual (HCM) 2000* methodology.

The results of the intersection capacity analysis under 2027 interim conditions are summarized in **Table 3**. The associated Synchro worksheets are provided in **Attachment C**.

Table 3: 2027 Interim Condition Intersection Capacity Analysis

Intersection	Weekday A.M. Peak		Weekday P.M. Peak		Sunday Peak	
	Overall LOS (Delay in Seconds)	Critical Movements (v/c)	Overall LOS (Delay in Seconds)	Critical Movements (v/c)	Overall LOS (Delay in Seconds)	Critical Movements (v/c)
Highway 6 at Lakeview Avenue / Ocean Way	B (13)	-	D (31)	-	D (33)	-

1 Overall level of service is based on the delay associated with the most critical movement. Critical v/c ratios are only listed for movements with LOS 'E' or 'F' or v/c ratios higher than 0.85.

As the results in **Table 3** indicate, the study intersection is projected to operate at an acceptable LOS 'D' or better during the weekday a.m., p.m. and Sunday peak hours under the 2027 interim conditions with no capacity issues. In addition, the side street traffic will have no direct impact on Highway 6 operations. Therefore, the forecast 2027 interim condition traffic volumes can be readily accommodated by the existing road network, even under very conservative assumptions. Furthermore, it indicates that the proposed development will still be supportable from a traffic operation perspective without Street 'A' in place.

ANTICIPATED IMPACT ON 2013 STUDY FINDINGS

The proposed development is estimated to generate 23, 31, and 37 two-way trips during the weekday a.m., p.m., and Sunday peak hours, respectively. Compared to the 2013 study trip generation for the envisioned site, it shows an increase of two to four trips during the weekday peak hours and a decrease of 13 trips during the Sunday peak hour. As previously explained, the reason for the trip generation increases during the weekday peak hours while fewer beds are proposed is that the latest 11th Edition of ITE Trip Generation Manual has different rates from the 8th Edition, which was used in the 2013 study. If the same rates were used, the trips generated by the proposed development would be reduced during all peak hours since there would be fewer beds (128 vs. 130).

These changes in trip generation are almost negligible when compared against the trips generated by the entire Coast Dover development envisioned in the 2013 study. **Table 4** summarizes the net changes in the subject site trip generation and their relative impact on the entire Coast Dover development trips estimated in the 2013 study.

Table 4: Changes in Site Trip Generation and Impact on Total Trip Generation

Category	Basis/Parameter	Weekday A.M. Peak			Weekday P.M. Peak			Sunday Peak ¹		
		In	Out	Total	In	Out	Total	In	Out	Total
Currently Proposed Site	Trip Generation	14	9	23	12	19	31	16	21	37
2013 Study Envisioned Site	Trip Generation from 2013 Study	13	6	19	13	16	29	22	28	50
Net Changes in Site Trip Generation		1	3	4	-1	3	2	-6	-7	-13
Entire Dover Coast Development	Trip Generation from 2013 Study	363	400	763	662	574	1236	460	455	915
Percentage Changes in Dover Coast Development Trip Generation		0.3%	0.8%	0.5%	-0.2%	0.5%	0.2%	-1.3%	-1.5%	-1.4%

1 Peak hour of generator.

As shown in **Table 4**, the variations in site trip generation only constitute downwards of 0.5 percent of the Dover Coast development two-way trips estimated in the 2013 study. In addition, the change of site location will not have any fundamental impact on traffic operations, and the two proposed site accesses are considered adequate to accommodate the moderate amount of peak-hour site traffic.

Based on the above assessment, it is our opinion that the changes in the development proposal would result in negligible overall changes to the trip generations and traffic forecasts estimated in the 2013 Dover Coast development traffic study and hence, the findings of the approved 2013 study would not be impacted fundamentally and should remain relevant.

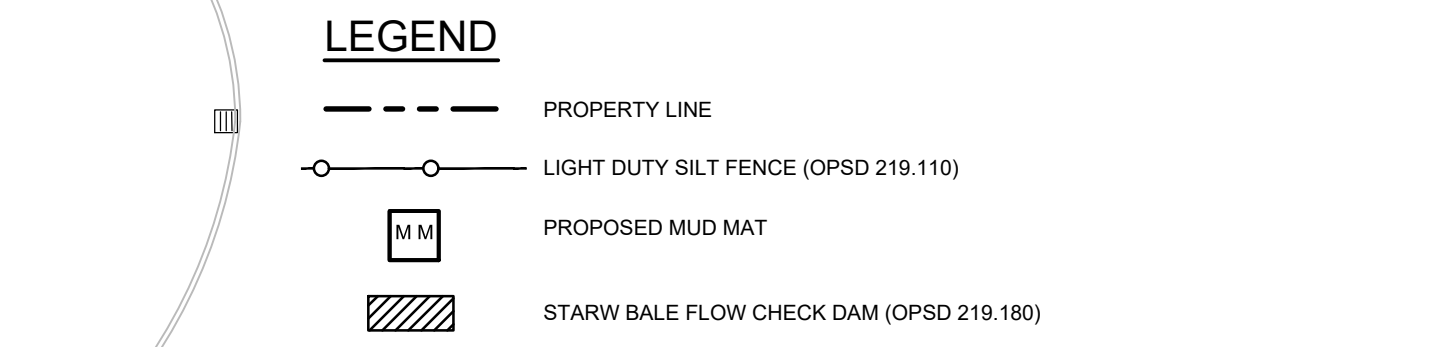
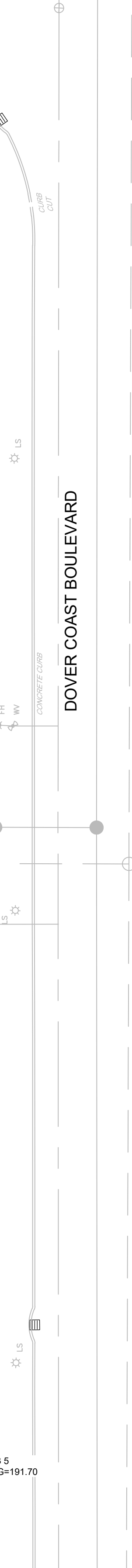
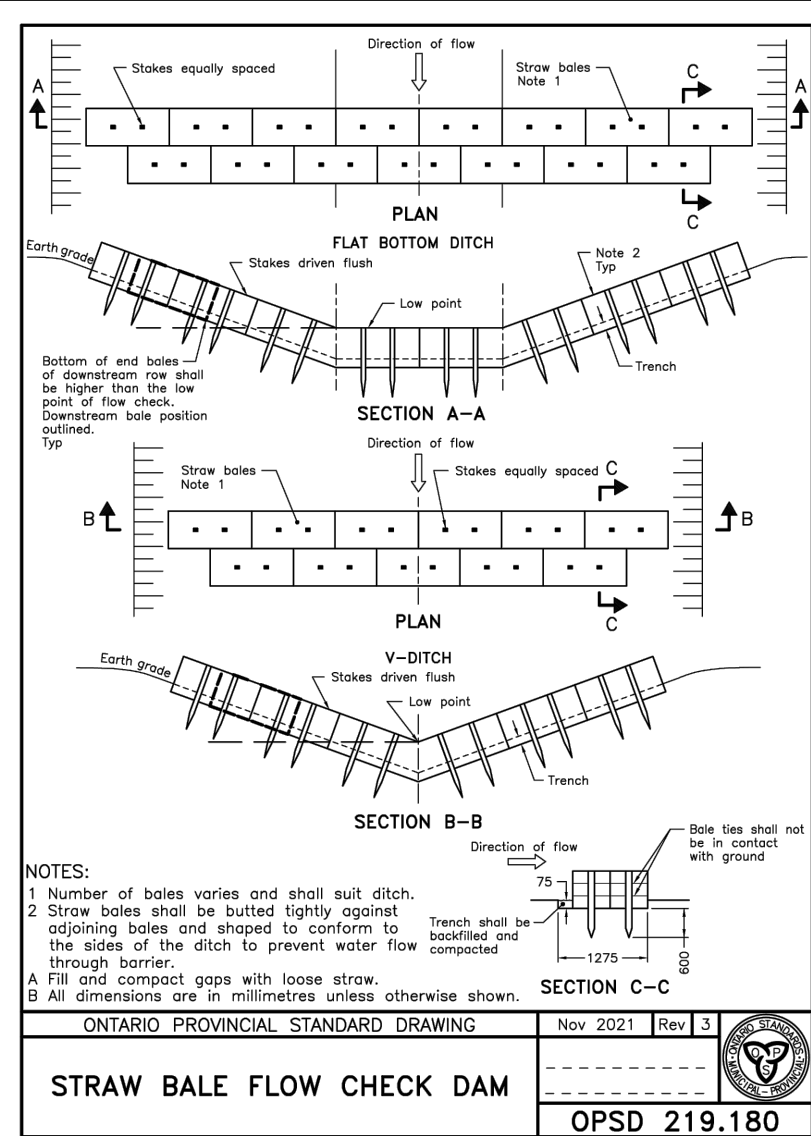
However, as pointed out previously, the 2013 study assumed a traffic signal at the intersection of Highway 6 and Street 'A', whereas the approved 2016 EA study recommends a roundabout as the traffic control at this intersection. It is therefore recognized that the 2013 study traffic analysis results at this intersection are no longer relevant. However, despite no detailed analysis results provided, the BTE 2016 EA study identifies the roundabout as the preferred alternative over a conventional signalized intersection in terms of traffic operations, where delays at this intersection are anticipated to be reduced by over 60 percent (relevant excerpt provided in **Attachment A**). Therefore, it is reasonable to expect that with such minor changes in site trip generation, the BTE 2016 EA study's conclusion would not be affected, and future traffic operations at the roundabout at Highway 6 and Street 'A' would remain acceptable.

SUMMARY

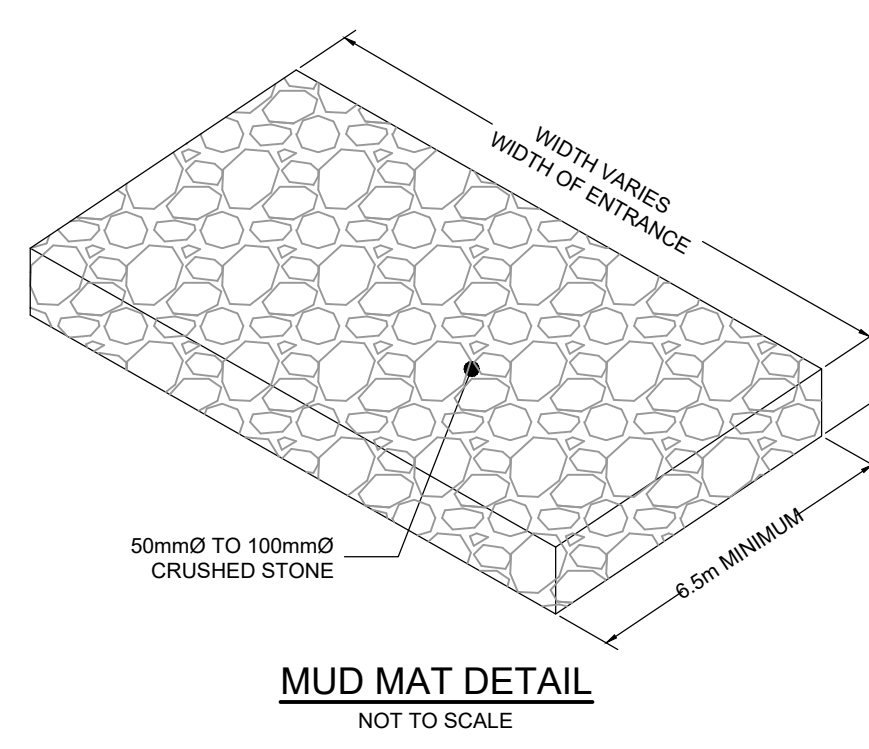
The proposed development is estimated to generate 23, 31, and 37 two-way trips respectively during the weekday a.m., p.m. and Sunday peak hours, showing a slight increase in weekday peak-hour trips and a decrease in Sunday peak-hour trips as compared to the approved 2013 study projections. The reason for the trip generation increases during the weekday peak hours while fewer beds are proposed is that the latest 11th Edition of ITE Trip Generation Manual has different rates from the 8th Edition, which was used in the 2013 study. If the same rates were used, the trips generated by the proposed development would be reduced during all peak hours since there would be fewer beds (128 vs. 130).

The variations in site trip generation correspond to an increase of merely 0.2 to 0.5 percent in two-way trips generated by the entire Dover Coast development during the weekday peak hours and a decrease of 1.4 percent during the Sunday peak hour. Therefore, the changes in the development proposal are anticipated to have a negligible overall impact on the trip generations and traffic forecasts estimated in the 2013 study, and the findings of the 2013 study as well as the 2016 EA would remain relevant.

Based on the findings of the 2027 interim condition analysis, the proposed development will be supportable from a traffic operation perspective without Street 'A' being extended to Highway 6 or the planned roundabout.



- ## EROSION AND SEDIMENT CONTROL NOTES:
1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERWAYS, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
 2. THE OWNER AGREES TO PREPARE AND IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN TO THE SATISFACTION OF THE COUNTY OF NORFOLK AND CONSERVATION AUTHORITY, APPLICABLE TO THE SITE. THE CONTRACTOR AGREES TO UNDERSTANDING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL NOT INSTALL AND MAINTAIN A LIGHT DUTY SILT FENCE BARRIER AS REQUIRED.
 3. SILT FENCING FOR ENTIRE PERIMETER OF SITE, SHALL BE UTILIZED TO CONTROL EROSION FROM THE SITE DURING CONSTRUCTION.
 4. THE CONTRACTOR SHALL PLACE FILTER BAGS UNDER THE CATCHBASIN AND MANHOLE GRATES FOR THE DURATION OF CONSTRUCTION AND WILL REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION.
 5. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
 6. PROVIDE MUD MATS AT ALL CONSTRUCTION ACCESS POINTS TO MINIMIZE SEDIMENT TRANSPORT OFFSITE.
 7. EROSION AND SEDIMENT CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE COUNTY OF NORFOLK SITE INSPECTOR OR CONSERVATION AUTHORITY.



NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

						SCALE	DESIGN MS/C CHECKED M DRAWN C CHECKED M APPROVED JL
						1:300	
						0 3 6 9 12 1:300	
1.	ISSUED FOR SITE PLAN APPLICATION			MAY 15/26	MS		
No.	REVISION			DATE	BY		

The image shows a circular professional seal for a Licensed Professional Engineer in the Province of Ontario. The seal contains the following text: "LICENSED PROFESSIONAL ENGINEER" around the top inner edge, "M. SAVIC" in the center, "100102651" below the name, "5/15/2026" below the license number, and "PROVINCE OF ONTARIO" around the bottom inner edge.

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6

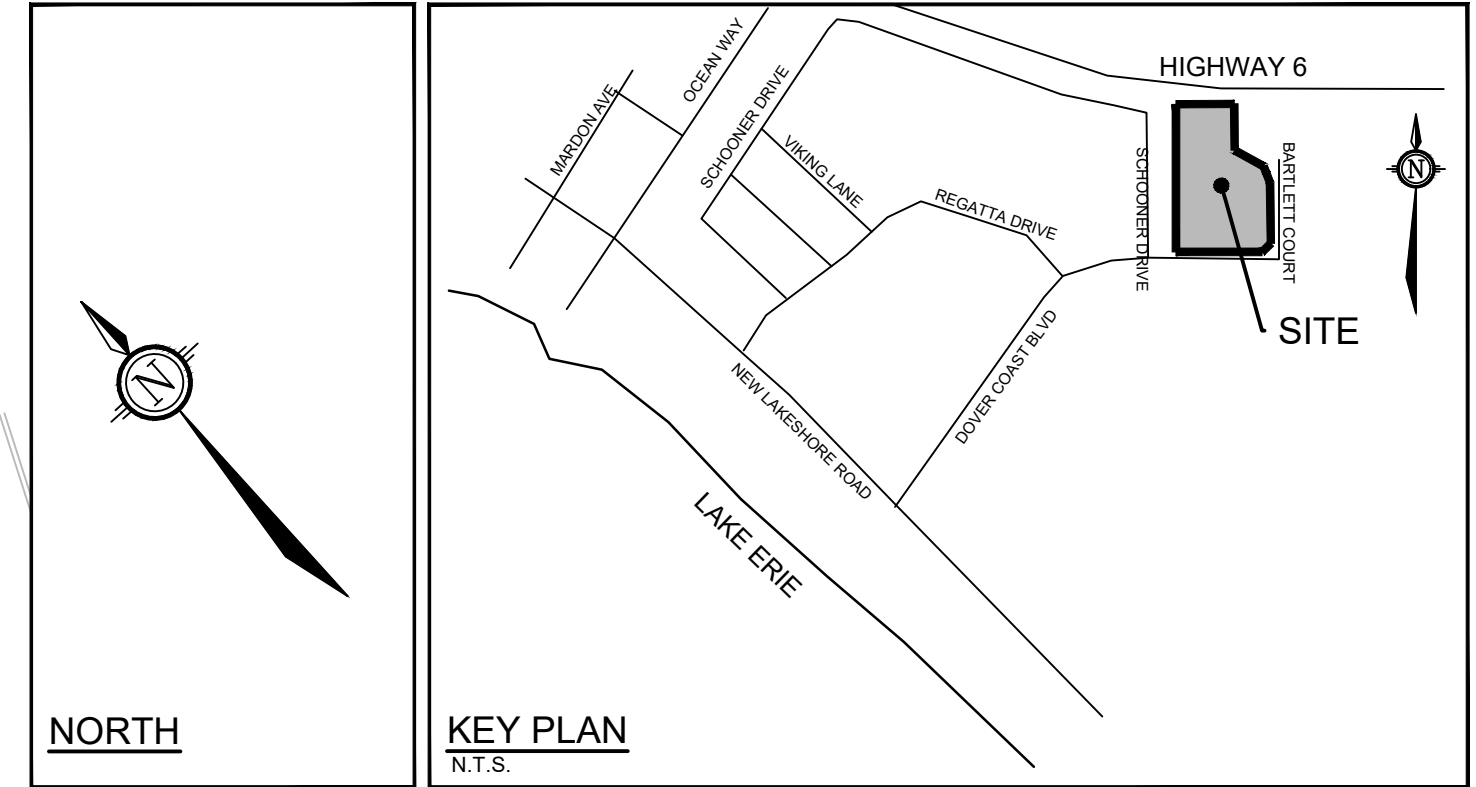
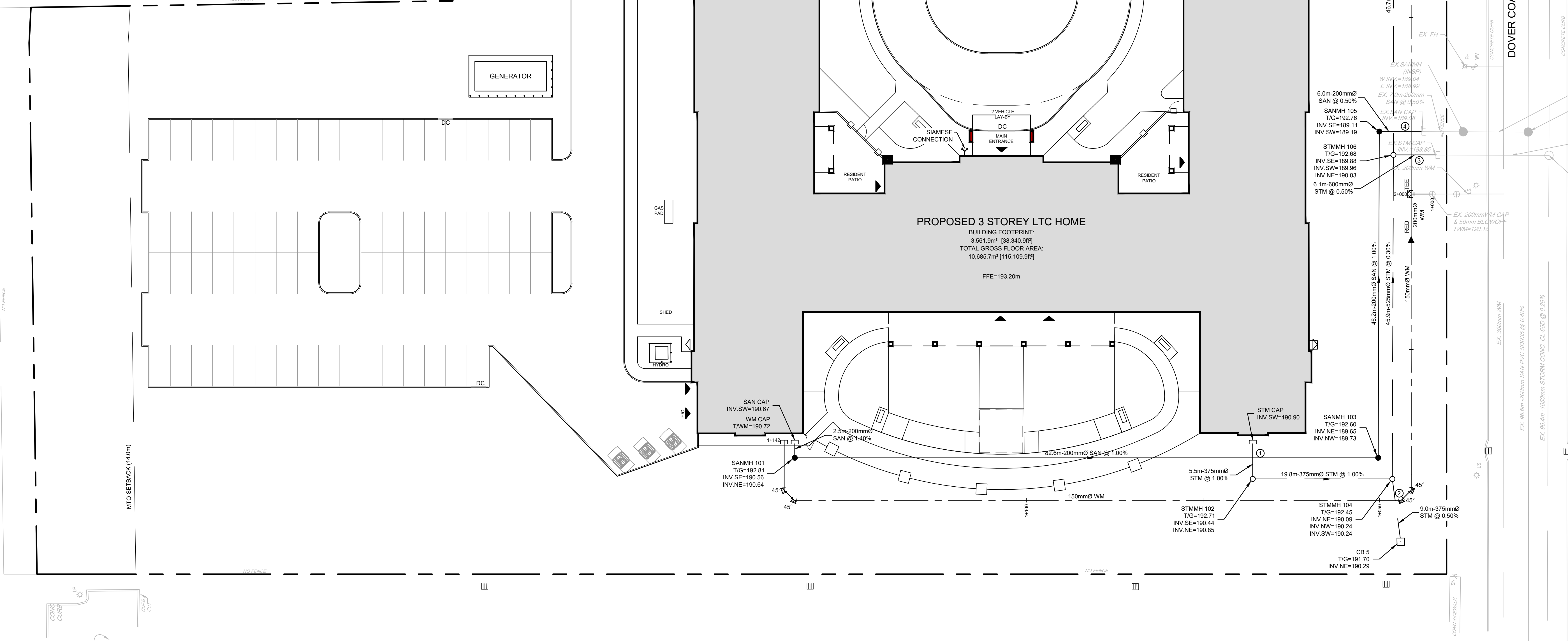
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION NORFOLK COUNTY 125 DOVER COAST BOULEVARD - PORT DOVER, ON	
DRAWING NAME SEDIMENT AND EROSION CONTROL PLAN	PROJECT No. 126012-ES
	REV REV
	DRAWING No. 126012-ES

PIPE CROSSINGS				
CROSSING NO.	SANITARY	STORM	WATERMAIN	CLEARANCE
①	190.10 (CBV)	190.88 (INV)	-	0.78m
②	-	190.26 (INV)	189.76 (TWM)	0.50m
③	-	189.87 (INV)	189.37 (TWM)	0.50m
④	189.29 (CBV)	-	190.35 (BWM)	1.06m
⑤	190.15 (INV)	-	186.65 (TWM)	0.50m

PROPOSED WATERMAIN TABLE			
Station	FIG ELEVATION	TOP OF WATERMAIN	DESCRIPTION
1+000.00	192.23	190.19	CONNECT TO EXISTING 200mm WATERMAIN
1+002.98	192.18	190.48	200mm x 200mm x 200mm TEE
1+008.98	192.13	190.43	200mm x 150mm REDUCER
1+025.00	192.01	190.31	
1+042.75	191.93	190.23	45° VERTICAL BEND
1+042.93	191.93	189.76	45° VERTICAL BEND
1+044.93	191.91	189.76	45° HORIZONTAL BEND
1+046.93	192.26	189.76	45° HORIZONTAL BEND
1+048.95	192.37	189.76	45° VERTICAL BEND
1+049.08	192.38	190.68	45° VERTICAL BEND
1+050.00	192.40	190.70	
1+075.00	192.52	190.82	
1+100.00	192.64	190.94	
1+125.00	192.63	190.93	
1+132.91	192.61	190.91	45° HORIZONTAL BEND
1+134.91	192.66	190.96	45° HORIZONTAL BEND
1+141.99	192.96	191.26	WM CAP (1.0m FROM BUILDING)

PROPOSED WATERMAIN TABLE			
Station	FIG ELEVATION	TOP OF WATERMAIN	DESCRIPTION
2+000.00	192.18	190.48	200mm x 200mm x 200mm TEE
2+003.42	192.20	190.50	45° VERTICAL BEND
2+003.95	192.21	189.37	45° VERTICAL BEND
2+007.15	192.23	189.37	45° VERTICAL BEND
2+007.68	192.23	190.53	45° VERTICAL BEND
2+025.00	192.34	190.64	
2+041.05	192.41	190.71	45° HORIZONTAL BEND
2+042.82	192.72	191.02	45° VERTICAL BEND
2+043.37	192.79	189.65	45° VERTICAL BEND
2+045.77	192.80	189.65	45° VERTICAL BEND
2+046.32	192.80	191.10	45° VERTICAL BEND
2+047.85	192.85	191.15	45° HORIZONTAL BEND
2+050.00	192.90	191.20	
2+075.00	192.94	191.24	
2+098.50	192.67	190.98	200mm x 150mm REDUCER
2+102.43	192.69	190.99	HYDRANT VALVE
2+104.50	192.65	190.96	FIRE HYDRANT



- LEGEND**
- PROPERTY LINE
 - PROPOSED CURB
 - PROPOSED DEPRESSED CURB
 - PROPOSED WATER SERVICE
 - PROPOSED VALVE AND SERVICE BOX
 - PROPOSED CAP
 - PROPOSED FIRE HYDRANT
 - PROPOSED SIAMESE CONNECTION
 - PROPOSED SANITARY SERVICE c/w MANHOLE
 - PROPOSED STORM SEWER AND MANHOLE
 - PROPOSED BUILDING ENTRANCE
 - PROPOSED BUILDING EXIT
 - DIRECTION OF FLOW
 - PROPOSED CATCHBASIN MANHOLE
 - PROPOSED CATCHBASIN
 - PROPOSED STORM SEWER WITH INSULATION
 - PROPOSED WATER METER
 - PROPOSED LINE PAINTING
 - EXISTING WATERMAIN c/w VALVE & VALVE CHAMBER
 - EXISTING HYDRANT c/w VALVE & LEAD
 - EXISTING SANITARY MANHOLE & SEWER
 - EXISTING STORM MANHOLE & SEWER
 - EXISTING CATCHBASIN
 - EXISTING SWALE

- WATERMAIN NOTES:**
- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	701	OPSS
THERMAL INSULATION IN SHALLOW TRENCHES	1109.030	OPSS
HYDRANT INSTALLATION	1105.010	OPSS
WATERMAIN	PVC DR 18	
 - SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE COUNTY OF NORFOLK AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL, RESTORATION, CONNECTIONS AND SHUT-OFFS AT THE MAIN AND ORIGINATOR OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR.
 - WATERMAIN SHALL BE MINIMUM 1.7m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. WHERE THE DEPTH OF COVER IS LESS THAN 1.7m, WATERMAIN SHALL BE INSULATED AS PER OPSS 1109.030.
 - PROVIDE MINIMUM 0.50m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
 - WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
- GENERAL NOTES:**
- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
 - DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
 - OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPALITY OF NORTH GRENVILLE BEFORE COMMENCING CONSTRUCTION. AN EXCAVATION PERMIT WILL BE REQUIRED FROM THE MUNICIPALITY PRIOR TO ANY WORKS ON PUBLIC PROPERTY.
 - BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED AND THE COUNTY OF NORFOLK AS THIRD PARTY.
 - RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD. ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE COUNTY OF NORFOLK.
 - REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ALL ORGANIC MATERIAL AND DEBRIS. ALL CONTAMINATED MATERIAL, IF ANY, SHALL BE DEPOSITED AT A LICENSED LANDFILL FACILITY.
 - REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
 - SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS.
 - CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES AND GRADING PLAN INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIE ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS, ANY ALIGNMENT CHANGES, AND ALL SURFACE ELEVATION AS BUILT GRADES.
 - ALL ELEVATIONS ARE GEODETIC.
 - REFER TO GEOTECHNICAL INFORMATION PROVIDED BY MTE CONSULTANTS INC. DATED MAY 8, 2026. FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
 - REFER TO THE SERVING STUDY AND STORMWATER MANAGEMENT REPORT NO. R-2026-041, PREPARED BY NOVATECH.

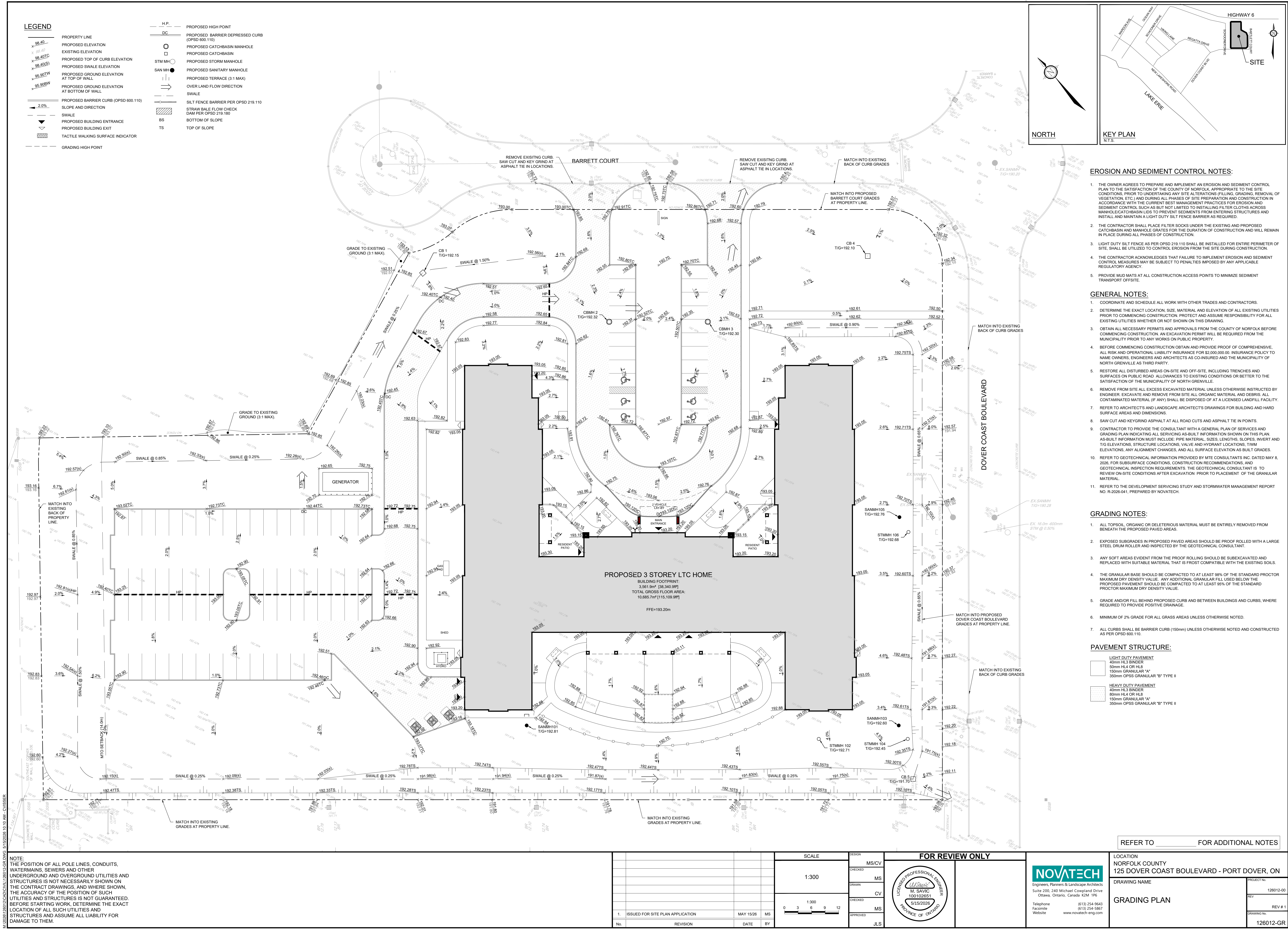
- SEWER NOTES:**
- SPECIFICATIONS:

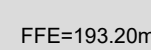
ITEM	SPEC. No.	REFERENCE
STORM / SANITARY MANHOLE (12000)	701.010	OPSD
STORM / SANITARY MANHOLE (15000)	701.011	OPSD
CATCHBASIN (800x500mm)	705.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
SANITARY COVER	401.020	OPSD
SEWER TRENCH	410	OPSS
SANITARY SEWER	PVC SDR 35	
STORM SEWER (<450mmØ)	PVC SDR 35	
STORM SEWER (450mmØ +)	CONC CLASS 650	
SEWER INSULATION SHALLOW TRENCH	1109.030	OPSD
 - SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
 - IF FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES FOR EXAMPLE KOR-A-SEAL, PSK POSITIVE SEAL AND DURASEAL, THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
 - DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN.
 - STORM MANHOLES AND CBMHs ARE TO HAVE 300mm SLUMPS UNLESS OTHERWISE INDICATED.
 - SUBDRAIN INVERTS SHOULD BE APPROXIMATELY 300mm BELOW SUBGRADE LEVEL. THE SUBGRADE SURFACE SHOULD BE SHAPED TO PROMOTE WATER FLOW TO THE DRAINAGE LINES.
 - CONTRACTOR TO TELEWISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
 - THE OWNER SHALL REQUIRE THAT THE SITE SERVING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

SCALE			DESIGN		FOR REVIEW ONLY			
1:300			MS/CV					
			CHECKED	MS				
			DRAWN	CV				
			CHECKED	MS				
			APPROVED	JLS				
1.	ISSUED FOR SITE PLAN APPLICATION	MAY 15/26	MS					
No.	REVISION	DATE	BY					

 Engineers, Planners & Landscape Architects Suite 200, 240 Michael Cowland Drive Ottawa, Ontario, Canada K2M 1P6 Telephone (613) 254-9643 Facsimile (613) 254-5867 Website www.novatech-eng.com		LOCATION NORFOLK COUNTY 125 DOVER COAST BOULEVARD - PORT DOVER, ON	
DRAWING NAME GENERAL PLAN OF SERVICES		PROJECT No. 126012-00	
		REV REV #1	
		DRAWING No. 126012-GP	





KEY

NOTE: PRELIMINARY PLANT LIST FOR SHRUBS, PERENNIALS, AND ORNAMENTAL GRASSES. QUANTITIES TO BE CONFIRMED

126012-L



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- Land/Site Development
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Planning

- Land/Site Development
- Planning Application Management
- Municipal Planning
- Urban Design
- Expert Witness (LPAT)
- Wireless Industry

Landscape Architecture

- Streetscapes & Public Amenities
- Open Space, Parks & Recreation
- Community & Residential
- Commercial & Institutional
- Environmental Restoration

Southbridge Port Dover LTC

125 Dover Coast Boulevard

Servicing and Stormwater Management Report

Engineering excellence.

Planning progress.

Liveable landscapes.

SOUTHBRIDGE PORT DOVER LTC

**125 DOVER COAST BOULEVARD
PORT DOVER, ONTARIO**

SERVICING AND STORMWATER MANAGEMENT REPORT

Prepared By:

NOVATECH

Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario
K2M 1P6

Issued: May 15, 2026

Novatech File: 126012
Report Ref: R-2026-041

May 15, 2026

Norfolk County
12 Gilbertson Drive, Ontario, N3Y 4N5
Simcoe, ON
N3Y 4N5

Attention: Stephen Gradish

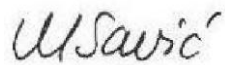
**Reference: Servicing and Stormwater Management Report
Southbridge Port Dover Long Term Care Home
125 Dover Coast Boulevard, Port Dover, Ontario
Novatech File No.: 126012**

Enclosed is a copy of the 'Servicing and Stormwater Management Report' for the proposed long term care home located at 125 Dover Coast Boulevard, in Port Dover, ON. This report addresses the approach to site servicing and stormwater management and is submitted in support of the Site Plan Control application.

Please contact the undersigned, should you have any questions or require additional information.

Yours truly,

NOVATECH



Miroslav Savic, P.Eng.
Senior Project Manager | Land Development Engineering

cc: Brandon Lawrence (S.J. Lawrence Architect Inc.)

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Figure 1 Aerial View of the Subject Site

LIST OF APPENDICIES

Appendix A Site Plan
Appendix B Water Demands, FUS Calculations, Watermain Model, Hydrant Test Data
Appendix C Sanitary Flow Calculations
 Dover Coast Development Master Sanitary Area Plan and Sanitary Sewer Design Sheet
Appendix D Storm Sewer Design Sheet and Storm Drainage Area Plan
 Dover Coast Development Master Storm Area Plan and Storm Sewer Design Sheet
Appendix E Drawings

LIST OF DRAWINGS

General Plan of Services	(126012-GP)
Grading Plan	(126012-GR)
Erosion & Sediment Control Plan	(126012-ESC)
Storm Drainage Area Plan	(126012-STM)

1.0 INTRODUCTION

Novatech has been retained to complete the site servicing and stormwater management design for the proposed Southbridge Long Term Care Home at 125 Dover Coast Boulevard, in Port Dover. This report addresses the approach to servicing and stormwater management and is being submitted in support of the Site Plan Control application.

1.1 Site Description and Location

The subject site is a parcel of land within the Dover Coast Development and is located on the west side of Dover Coast Boulevard. The site is currently undeveloped green field and is bordered by residential homes to the south, Barrett Court and an undeveloped parcel of land to the north, and Highway 6 to the west. **Figure 1** provides an aerial view of the site.



Figure 1 – Aerial View of the Subject Site

1.2 Proposed Development

The development proposal a three-storey, 10,685 m² (38,341 ft²) long-term care home. The development will include paved parking lot, access driveways, loading areas, and associated landscaped areas. The site will have two access driveways off Barrett Court.

Refer to **Appendix A.** for the proposed Site Plan.

1.3 Background Documents

The following documents were reviewed in preparation of the report:

- Port Dover LTC Facility Geotechnical Investigation Report, prepared by MTE Consultants Inc. (67157_001, May 8, 2026).
- Norfolk County Design Criteria (February 2019).
- Dover Coast Development – Phase 2, Port Dover, Ontario, Water Servicing Report
- Dover Coast Condominium Development – Phase 2, Port Dover, Ontario, Stormwater Management Report
- Sanitary Flows and Sewer Capacity Review Memo, prepared by Development Engineering (December 23, 2014).
- Port Dever LTC Facility, Functional Servicing and Stormwater Management Report, prepared by MTE Consultants (February 28, 2022)
- Dover Coast Development subdivision drawings

1.4 Site Servicing

The objective of the site servicing design is to provide proper sewage outlets, a suitable domestic water supply and to ensure that appropriate fire protection is provided for the proposed development. The servicing criteria, the expected sewage flows, and the water demands are to conform to the Norfolk County Design Criteria. Refer to the subsequent sections of the report for further details.

2.0 WATER SERVICING

2.1 Existing Water Servicing

Based on the Dover Court Development subdivision drawings, there is a 300mm diameter watermain in Dover Coast Boulevard in front of the site. A 200mm diameter water service stub has been provided to the property limit as part of the subdivision works.

2.2 Proposed Water Servicing

The proposed development will be serviced by a 200mm diameter watermain connected to the existing 200mm diameter service stub. A 150mm diameter water service line will extend to the building, and a new fire hydrant will be installed on site within a 45m unobstructed path of the building siamese connection.

2.2.1 Domestic Water Demands

The domestic water demands for the proposed long term care home were calculated based on the following criteria from Section 8 of the Ontario Building Code and the Norfolk County Design Criteria:

- Long Term Care Home Average Day Demand
 - 450L/bed/day
- Peaking Factor
 - Maximum Day = 2.25
 - Peak Hour = 4.0

The calculated water demands are summarized in **Table 2.1** below. Detailed calculations are included in **Appendix B**.

Table 2.1: Domestic Water Demand Summary

Proposed Development	Avg. Daily Demand (L/s)	Max. Daily Demand (L/s)	Peak Hour Demand (L/s)
Long Term Care Facility	0.83	1.88	3.33

2.2.2 Fire Protection System

The proposed building will be fully sprinklered. Water supply for fire protection will be provided from the proposed on-site hydrant located within 45m unobstructed path from the fire department siamese connection location.

The Fire Underwriters Survey (FUS) was used to estimate fire flow requirements for the proposed development. The fire flow calculations are based on the building information provided by the architect (Type I Fire-Resistive Construction with protected vertical openings between floors, and fully sprinklered building).

The fire flow demand is estimated to be 67 L/s (4,000 L/min). The detailed FUS fire flow calculations are included in **Appendix B**.

Based on the Dover Coast Development – Phase 2 Water Servicing Report, the water distribution system was modeled using 76 L/s fire flow from the subject site confirming adequate fire water supply to meet the FUS fire flow demand for the proposed long term care home. Refer to excerpt from the Dover Coast Subdivision Water Servicing Report enclosed in **Appendix B**.

Based on the hydrant test results (April 4, 2026, see **Appendix B**), the existing hydrant in Dover Coast Boulevard can provide approximately 187 L/s (2971 USGPM) at a residual pressure of 20psi. This hydrant flow exceeds the 150 L/s fire flow target for commercial developments as per the updated Norfolk County Design Criteria. Refer to email correspondence with the Norfolk County engineering and asset management enclosed in **Appendix B**.

2.2.3 Watermain Hydraulic Analysis

The following design criteria are provided in the Norfolk County Design Criteria, Section 10 - Watermains:

- During normal operating conditions, system pressures shall not be less than 280 kPa (40.6 psi).
- During the Maximum Day + Fire Flow demand, system pressures shall less than 140 kPa (20 psi).
- Maximum working pressure in the distribution system should not exceed 690 kPa (100 psi).

The hydraulic model EPANET was used for the purpose of analysing the performance of the proposed on-site watermain system. The model is based on hydrant test data. A pump/reservoir combination is included in the model, with the pump curve being representative of the hydrant test results.

A schematic representation of the hydraulic network is enclosed in **Appendix B**. The schematic depicts the junction and pipe numbers used in the model. The modelling highlights the system pressures during 1) Maximum Day + Fire Flow Demand, 2) Peak Hour Demand, and 3) Average Day Demand Conditions. The domestic water demands are applied at the building service (J3) and the fire flow demand is applied at the proposed fire hydrant location (J5).

Tables 2.2, 2.3, and 2.4 summarize the demands and hydraulic model results under the various operating conditions. Refer to **Appendix B** for detailed modelling results.

Table 2.2: Hydraulic Model Results – Maximum Day + Fire Flow Demand

Operating Condition	Minimum Pressure
Max Day + Fire Flow Demand (1.88L/s +122 L/s)	141.9 kPa (20.6 psi)

Table 2.3: Hydraulic Model Results – Peak Hour Demand

Operating Condition	Minimum Pressure
Peak Hour Demand (3.33 L/s)	350.3 kPa (50.8 psi)

Table 2.4: Hydraulic Model Results – Average Day Demand

Operating Condition	Maximum Pressure
Average Day Demand (0.83 L/s)	359.6 kPa (52.2 psi)

Based on the preceding analysis, the watermain system will provide adequate system pressures to the proposed long term care home.

The new on-site hydrant can provide approximately 122 L/s fire flow at a residual pressure of 20 psi, well exceeding the FUS fire flow requirements. Additional fire flow if required can be provided from the existing municipal hydrant in Dover Coast Boulevard in front of the site.

3.0 SANITARY SERVICING

3.1 Existing Sanitary Services

Based on the Dover Coast Development subdivision drawings, there is a 200mm diameter sanitary sewer in Dover Coast Boulevard in front of the site. A 200mm diameter service stub has been provided to the property limit as part of the subdivision works.

3.2 Proposed Sanitary Services

The proposed development will be serviced by a 200mm diameter sanitary sewer connected to the existing 200mm diameter service stub.

3.2.1 Peak Sanitary Flows

The theoretical peak sanitary flow for the existing and proposed long term care home was calculated based on the following criteria from Section 8 of the Ontario Building Code and the Norfolk County Design Criteria.

- Long Term Care Homes Sanitary Volume
 - per bed = 450L/bed/day
- Peaking Factor Harmon Formula
- Infiltration Rate = 0.28 L/s/ha

The peak sanitary flow calculations are summarized below in **Table 3.1**. Detailed calculations are included in **Appendix C**.

Table 3.1: Peak Sanitary Flow Summary

Development	Peak Flow (L/s)	Infiltration Flow (L/s)	Total Peak Flow (L/s)
Proposed Long Term Care Home	3.48	0.62	4.10

The proposed 200mm diameter sanitary service at 1.0% slope has a full flow capacity of 34.2 L/s.

The Dover Coast Development sanitary sewers were sized to accommodate flows from a 160 bed long term care home from this site. Therefore, there should be adequate capacity within the existing sanitary infrastructure to service the proposed development.

A copy of the Dover Coast Development sanitary drainage area plan and sanitary sewer design sheet for are provided in **Appendix C** for reference.

4.0 STORM SERVICING AND STORMWATER MANAGEMENT

4.1 Existing Conditions

The existing site is an undeveloped green field. The site generally drains from north to south towards Dover Coast Boulevard.

Based on the Dover Coast Development subdivision drawings, there is an existing 1050mm diameter storm sewer in Dover Coast Boulevard in front of the site. A 600mm diameter storm stub has been provided to the property limit as part of the subdivision works. The site generally drains from north to south towards Dover Coast Boulevard.

4.2 Proposed Conditions

The proposed development will be serviced by on-site storm sewer systems connected to the existing 600mm diameter storm stub. The on-site storm sewer systems will include drainage swales and storm sewers ranging in size from 300 mm to 600 mm in diameter.

The on-site storm sewer system has been designed for the 1:5 year storm design event as per the Norfolk County Design Criteria. Refer to Storm Sewer Design Sheet in **Appendix C** and Storm Drainage Area Plan in **Appendix E**.

4.3 Stormwater Management

The site is part of the overall Dover Coast Development which consist of the subject site, residential blocks, commercial block, roadways, and stormwater management (SWM) facilities.

Development Engineering (London) Limited has completed the engineering design for the proposed Dover Coast Development and have prepared a SWM report for Phase 2 of the Dover Coast Development where the subject site is located.

4.3.1 Stormwater Quantity Control

The subject site is part of the upstream catchment area of the SWM Facility B which forms part of the overall Dover Coast Development. Based on the Dover Coast Development – Phase 2 SWM report, the SWM Facility B and municipal storm sewer system have been designed with adequate capacity to service the site with a composite runoff coefficient of 0.73.

A copy of the storm drainage area plana and storm sewer design sheet for the Dover Coast Development are provided in **Appendix D** for reference. As shown on the Master Storm Area Plan, the subject site is labeled as catchment A32 (Future Retirement Home) with a total area of 2.208ha and a run-off coefficient “C” of 0.73.

Under post development conditions, the site will drain to the SWM facility at a composite run-off coefficient of 0.54. Since the proposed runoff coefficient is lower than what the downstream design contemplated, on-site stormwater quantity controls are not required.

4.3.2 Stormwater Quality Control

Stormwater quality control for the subject site is provided in the downstream receiving stormwater management pond (SWMF B). This pond has been designed to provide the MOECC’s Enhanced Level of water quality protection (80% TSS removal). Therefore, on-site stormwater quality measures are not required.

4.4 Site Grading and Emergency Overland Flow Route

The intent of the grading design was to propose the building finished floor elevation to best tie into the elevations along the existing adjacent roadways and surrounding property lines, and to provide major overland flow route towards Dover Coast Boulevard and Barrett Court. The proposed grading design provides positive drainage away from the building and towards the on-site stormwater drainage structures.

In the case of a major rainfall event exceeding the design storms provided for, the stormwater located within the subject site will overflow towards Dover Coast Boulevard and Barrett Court. The floor elevation of the proposed building will be a minimum of 0.55m above the major system overflow points. The emergency overland flow route is shown on the enclosed Grading Plan.

5.0 GEOTECHNICAL INVESTIGATIONS

A geotechnical Investigation report has been prepared by MTE Consultants Inc. for the proposed development. Refer to the Port Dover LTC Facility Geotechnical Investigation Report (67157_001, May 8, 2026).

6.0 EROSION AND SEDIMENT CONTROL

Temporary erosion and sediment control measures will be implemented on-site during construction in accordance with the Best Management Practices for Erosion and Sediment Control. This includes the following temporary measures:

- Filter socks (catch basin inserts) will be placed in existing and proposed catch basins and catch basin manholes, and will remain in place until vegetation has been established and construction is completed,
- Silt fencing will be placed along the surrounding construction limits,
- Mud mat will be installed at the site entrance,
- Strawbale check dams will be installed in swales,
- The contractor will be required to perform regular street sweeping and cleaning as required, to suppress dust and to provide safe and clean roadways adjacent to the construction site.

Erosion and sediment control measures should be inspected daily and after every rain event to determine maintenance, repair, or replacement requirements. These measures will be implemented prior to the commencement of construction and maintained in good order until vegetation has been established.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This report has been prepared in support of the Site Plan Control application for the proposed long term care home. The conclusions are as follows:

Watermain

- The proposed development will be serviced by 200mm diameter watermain connected to the existing 300mm diameter watermain in Dover Coast Boulevard. A 150mm diameter water service will be provided.
- The water supply for fire protection will be provided from the new private fire hydrant located within 45m from the building siamese connection.
- The existing municipal watermain will provide adequate water supply and system pressures to the proposed development.

Sanitary Servicing

- The proposed development will be serviced by 200mm diameter sanitary service connected to the existing 300mm diameter watermain in Dover Coast Boulevard.
- There is adequate capacity within the proposed sanitary service and existing sanitary infrastructure to service the proposed development.

Stormwater Management

- The proposed development will be serviced by on-site storm sewer systems outletting to the existing municipal storm sewer in Dover Coast Boulevard.
- Stormwater quantity control and an enhanced level of stormwater quality control are provided in the receiving stormwater pond (SWM Facility B)
- The site has been graded to prevent overland flow from leaving the property and entering neighbouring properties.

It is recommended that the proposed site servicing and stormwater management design be approved for implementation.

NOVATECH

Prepared by:



Miroslav Savic, P.Eng.
Senior Project Manager
Land Development Engineering

Reviewed by:

A handwritten signature in black ink, appearing to read "J. Lee Sheets".

J. Lee Sheets, C.E.T.
Director
Land Development & Public Sector Infrastructure

APPENDIX A

Site Plan

01 PROPOSED SITE PLAN
A1.0 SCALE: 1: 400

02 TYPICAL BOLLARD @ GRADE DETAIL
A1.0 SCALE: 1:50

03 ACCESSIBLE PARKING SIGNAGE DETAIL
A1.0 SCALE: NTS

Figure 27: Accessible Parking Pavement Marking



04 KEY PLAN
A1.0 SCALE: N.T.S.

PROPERTY LEGAL DESCRIPTION		
PLAN OF SURVEY OF		
PART OF LOT 15,		
CONCESSION 1		
GEOGRAPHIC TOWNSHIP OF WOODHOUSE		
NORFOLK COUNTY		
Prepared by KRCMAR Surveyors Ltd.		
Dated August 29, 2022		
BUILDING AREAS	SQ. M.	SQ. FT.
BUILDING FOOTPRINT	3,569.4m ²	38,420.7ft ²
GROSS FLOOR AREA:		
GROUND FLOOR	3,569.4m ²	38,420.7ft ²
SECOND FLOOR	3,569.4m ²	38,420.7ft ²
THIRD FLOOR	3,569.4m ²	38,420.7ft ²
TOTAL	10,708.2m ²	115,262.1ft ²

PROJECT ZONING REVIEW/STATISTICS	
MUNICIPALITY:	NORFOLK COUNTY
MUNICIPAL ADDRESS:	125 DOVER COAST BLDV., PORT DOVER, ON
REGISTERED OWNER:	SOUTHBRIIDGE CARE HOMES
LOT AREA:	22,382.1m ² (5.5 ACRES)
ZONING ANALYSIS	
NORFOLK COUNTY	
ZONE:	R5 - SINGLE RESIDENTIAL TYPE 5 ZONE (14.886)
PROPOSED USE:	3-STORY LTC HOME (160 BEDS)

ZONING MECHANISM (ILS)	REQUIRED	PROVIDED
MINIMUM LOT AREA	N/A	22,382.1m ²
MINIMUM LOT FRONTAGE	30.0m	83.7m
MAXIMUM BUILDING HEIGHT	3-STORY'S	3-STORY'S (13.0m)
MINIMUM FRONT YARD SETBACK	3.0m	34.3m
MINIMUM REAR YARD SETBACK	9.0m	19.6m
MINIMUM INTERIOR SIDE YARD SETBACK	3.0m	22.9m
MINIMUM EXTERIOR SIDE YARD SETBACK (NW)	3.0m	97.6m
MINIMUM EXTERIOR SIDE YARD SETBACK (SE)	3.0m	19.5m
% OF SOFT LANDSCAPING	-	58%
PARKING & LOADING SPACE PROVISIONS		
MINIMUM REQUIRED VEHICLE PARKING SPACES	LONG-TERM CARE FACILITY (160 BEDS) = 40 SPACES 1 PER 4 BEDS	40 SPACES
PROVIDED PARKING	REGULAR SPACES (NEW)	85 SPACES
	ACCESSIBLE SPACE (TYPE A)	4 SPACE
	ACCESSIBLE SPACE (TYPE B)	2 SPACE
	MINIMUM VISITOR PARKING	0 SPACES
	TOTAL	91 SPACES
MINIMUM AISLE WIDTH	PARKING LOT: 7.3m	7.3m
MINIMUM PARKING SPACE DIMENSIONS	LENGTH: 5.8m WIDTH: 3.0m	LENGTH: 5.8m WIDTH: 3.0m
MINIMUM WIDTH OF DRIVEWAY ACCESSING LOADING SPACE	SINGLE TRAFFIC LANE - 7.3m	7.3m
MINIMUM WIDTH OF LOADING SPACE	3.0m	3.8m
MINIMUM LENGTH OF LOADING SPACE	10.0m	10.0m

SITE PLAN NOTES	
NOTES	NOTE
(EAS)	EXISTING ASPHALT SURFACE - REFER TO SURVEY
(EUB)	EXISTING BUSHES - REFER TO SURVEY
(ECSW)	EXISTING CONCRETE CURB - REFER TO SURVEY
(EOWH)	EXISTING CONCRETE SIDEWALK - REFER TO SURVEY
(EOHW)	EXISTING OVERHEAD UTILITY WIRES - REFER TO SURVEY
(EIRW)	EXISTING RETAINING WALL - REFER TO SURVEY
(EIT)	EXISTING TREE - REFER TO SURVEY
(EIR)	EXISTING TREE TO BE REMOVED - REFER TO SURVEY
B	BOLLARD, 6MM X 125MM DIA. X 1050MM PAINTED GALVANIZED STEEL BOLLARD C/W WELDED CAP AND 6MM X 150MM BASE PLATE WITH 4 BOLT HOLES. SECURE TO PAVEMENT OR SIDEWALK AT LOCATIONS INDICATED WITH 16MM DIA. GALVANIZED CONCRETE OR ASPHALT ANCHORS DEPENDANT ON LOCATION.
BFPS	PROVIDE VERTICALLY-MOUNTED SIGN, MINIMUM 3000MM DEPTH X 600MM HIGH, MARKED WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY. MOUNT NOT LESS THAN 1500MM ABOVE GRADE AND MORE THAN 200MM ABOVE GRADE. ENSURE TONAL CONTRAST BETWEEN BF PARKING SIGN AND BACKGROUND. SIGNMENT. PROVIDE INFORMATION TEXT COMPLIANT WITH CITY OF OTTAWA BY LAW REQUIREMENTS. PROVIDE ADDITIONAL BILINGUAL SIGNAGE THAT IDENTIFIES TYPE "A" SPACES AS "VAN ACCESSIBLE FOUR-COORNER ACCESSIBLE".
BR	BIKE RACK - REFER TO LANDSCAPE
CC	CONCRETE CURB - REFER TO CIVIL
CP	CONCRETE PAD - REFER TO CIVIL
CSW	CONCRETE SIDEWALK - REFER TO CIVIL
CY	CANOPY C/W RECESSED POT LIGHTS - REFER TO ELECTRICAL
DC	DEPRESSED CURBED CURB LIGHTS - REFER TO CIVIL
FDC	FIRE DEPARTMENT CONNECTION / SIAMSESE CONNECTION - REFER TO FIRE & MISC.
FH	FIRE HYDRANT - REFER TO CIVIL
GM	GAS METER - REFER TO SITE SERVING
PMT	PAD MOUNT TRANSFORMER - REFER TO ELEC.
PP	PAINTED PARKING LINES, TYP. - REFER TO CIVIL
RSI	ROOF STORM LINE - REFER TO CIVIL
RW	RETAINING WALL - REFER TO CIVIL
SL	SANITARY LINE - REFER TO CIVIL
STL	STORM LINE - REFER TO CIVIL
SW	SWALE - REFER TO CIVIL
TWSI	TACTILE WALKING SURFACE INDICATOR (TWSI), FULL WIDTH OF CURB RAMP - RECESSED TO BE FLUSH WITH CONCRETE WALKING SURFACE - REFER TO CIVIL
WTS	WATER SERVICE - REFER TO CIVIL
WTSI	WEEPING TILE STORM LINE - REFER TO CIVIL

SITE PLAN SYMBOLS	
	NEW OVERHEAD DOOR
	NEW DOOR / ENTRANCE
	NEW EXIT
	BICYCLE PARKING SPACE (1.8Mx0.6M)
	NO PARKING LINES
#	PARKING STALL COUNT PER ROW
	NEW SIGN, REFER TO SIGN LEGEND
	FIRE ROUTE SIGN
	STREET LIGHT
	DESIGNATED ACCESSIBLE PARKING SPACE AS PER AODA STANDARDS
V	VISITOR PARKING
	TWO WAY TRAFFIC
	DEPRESSED CURB (DC)
	TACTILE WALKING SURFACE INDICATORS (TWSI)
---	PROPERTY LINE
- - -	MINIMUM SETBACKS (ZONING)
	NEW CONSTRUCTION
	EXISTING BUILDINGS
	SOFT LANDSCAPING
	CONCRETE SIDEWALK
	BUILDING MOUNTED LIGHTS REFER TO ELECTRICAL DWG's
*	INDICATION OF COMPACT PARKING SPACES

- NOTES:**
1. ALL WORK TO BE IN COMPLIANCE WITH LOCAL BUILDING CODES, REGULATIONS AND BY-LAWS.
 2. ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH PLANS IN CONTRACT DOCUMENTS.
 3. DO NOT SCALE DRAWINGS.
 4. ALL SUB-CONTRACTORS TO TAKE THEIR OWN ON-SITE MEASUREMENTS AND BE RESPONSIBLE FOR THEIR ACCURACY.
 5. NOTIFY LAWRENCE ARCHITECTS INC. FOR ANY ERRORS AND/OR OMISSIONS PRIOR TO START OF WORK.

[illegible]

205-18 DEAKIN STREET
OTTAWA, ONTARIO
K2E 8B7

T: 613.739.7770
E: INFO@LAWRENCEARC.COM

THIS DRAWING IS THE SOLE PROPERTY OF
LAWRENCE ARCHITECTS INCORPORATED
REPRODUCTION IS NOT PERMITTED

PROJECT:
**SOUTHBRIDGE PORT DOVER
LTC**

125 DOVER COAST BLVD., NORFOLK, ON

SHEET TITLE:

SITE PLAN

DRAWN BY: D.T. B.L.	CHECKED BY: B.L.
PLOT DATE: 2026.05.13	PROJECT DATE: 2026.02.13
JOB NUMBER: LA-1168-26	SCALE: AS SHOWN
SHEET NUMBER:	

APPENDIX B

Water Demands, FUS Calculations, Watermain Model, Hydrant Test Results

SOUTHBRIDGE PORT DOVER LTC WATER DEMAND

Number of Beds	160
Average Day Demand	450 L/bed/day
Maximum Day Peak Factor	2.25
Peak Hour Peak Factor	4.00
Average Day Demand	0.83 L/s
Maximum Day Demand	1.88 L/s
Peak Hour Demand	3.33 L/s

FUS - Fire Flow Calculations

Novatech Project #: 126012
Project Name: Southbridge Port Dover LTC
Date: 4/29/2026
Input By: MS
Reviewed By:
Drawing Reference:

Legend: Input by User

No Input Required

Reference: Fire Underwriter's Survey Guideline (2020)
Formula Method

Building Description: 3-Storey Long Term Care Home
Type I - Fire resistive construction (2 hrs)

Step		Choose		Value Used	Total Fire Flow (L/min)
Base Fire Flow					
1	Construction Material		Multiplier		0.6
	Coefficient related to type of construction C	Type V - Wood frame		1.5	
		Type IV - Mass Timber		Varies	
		Type III - Ordinary construction		1	
		Type II - Non-combustible construction		0.8	
		Type I - Fire resistive construction (2 hrs)	Yes	0.6	
2	Floor Area				10,000
	A	Building Footprint (m ²)	3562		
		Number of Floors/Storeys	3		
		Protected Openings (1 hr) if C<1.0	Yes		
		Area of structure considered (m ²)		5,343	
	F	Base fire flow without reductions F = 220 C (A)^{0.5}			
Reductions or Surcharges					
3	Occupancy hazard reduction or surcharge		FUS Table 3	Reduction/Surcharge	8,500
	(1)	Non-combustible		-25%	
		Limited combustible	Yes	-15%	
		Combustible		0%	
		Free burning		15%	
		Rapid burning		25%	
4	Sprinkler Reduction		FUS Table 4	Reduction	-4,250
	(2)	Adequately Designed System (NFPA 13)	Yes	-30%	
		Standard Water Supply	Yes	-10%	
		Fully Supervised System	Yes	-10%	
		Cumulative Sub-Total		-50%	
		Area of Sprinklered Coverage (m²)	10686	100%	
		Cumulative Total		-50%	
5	Exposure Surcharge		FUS Table 5	Surcharge	0
	(3)	North Side	>30m	0%	
		East Side	>30m	0%	
		South Side	>30m	0%	
		West Side	>30m	0%	
		Cumulative Total		0%	
Results					
6	(1) + (2) + (3)	Total Required Fire Flow, rounded to nearest 1000L/min		L/min	4,000
		(2,000 L/min < Fire Flow < 45,000 L/min)		or L/s	67
				or USGPM	1,057

SOUTHBRIDGE PORT DOVER LTC WATERMAIN MODELING RESULTS

Maximum Day + Fire Flow Demand

Network Table - Nodes

Node ID	Elevation m	Demand LPS	Head m	Pressure m	kPa	psi
Junc J1	192.18	0	219.78	27.6	270.8	39.3
Junc J2	192.08	0	218.55	26.47	259.7	37.7
Junc J3	192.95	1.88	218.52	25.57	250.8	36.4
Junc J4	192.67	0	209.76	17.09	167.7	24.3
Junc J5	192.65	122	207.11	14.46	141.9	20.6
Resvr R1	192.18	-123.88	192.18	0	0.0	0.0

Maximum Day + Fire Flow Demand

Network Table - Links

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km
Pipe P1	13.1	200	110	123.88	3.9	93.8
Pipe P2	142	150	100	1.88	0.1	0.2
Pipe P3	96.4	200	110	122	3.9	91.2
Pipe P4	6	150	100	122	6.9	441.8
Pump 1	#N/A	#N/A	#N/A	123.88	0.0	-27.6

Peak Hour Demand

Network Table - Nodes

Node ID	Elevation m	Demand LPS	Head m	Pressure m	kPa	psi
Junc J1	192.18	0	228.74	36.56	358.7	52.0
Junc J2	192.08	0	228.74	36.66	359.6	52.2
Junc J3	192.95	3.33	228.66	35.71	350.3	50.8
Junc J4	192.67	0	228.74	36.07	353.8	51.3
Junc J5	192.65	0	228.74	36.09	354.0	51.3
Resvr R1	192.18	-3.33	192.18	0	0.0	0.0

Peak Hour Demand

Network Table - Links

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km
Pipe P1	13.1	200	110	3.33	0.1	0.1
Pipe P2	139	150	100	3.33	0.2	0.6
Pipe P3	96.4	200	110	0	0.0	0.0
Pipe P4	6	150	100	0	0.0	0.0
Pump 1	#N/A	#N/A	#N/A	3.33	0.0	-36.6

SOUTHBRIDGE PORT DOVER LTC WATERMAIN MODELING RESULTS

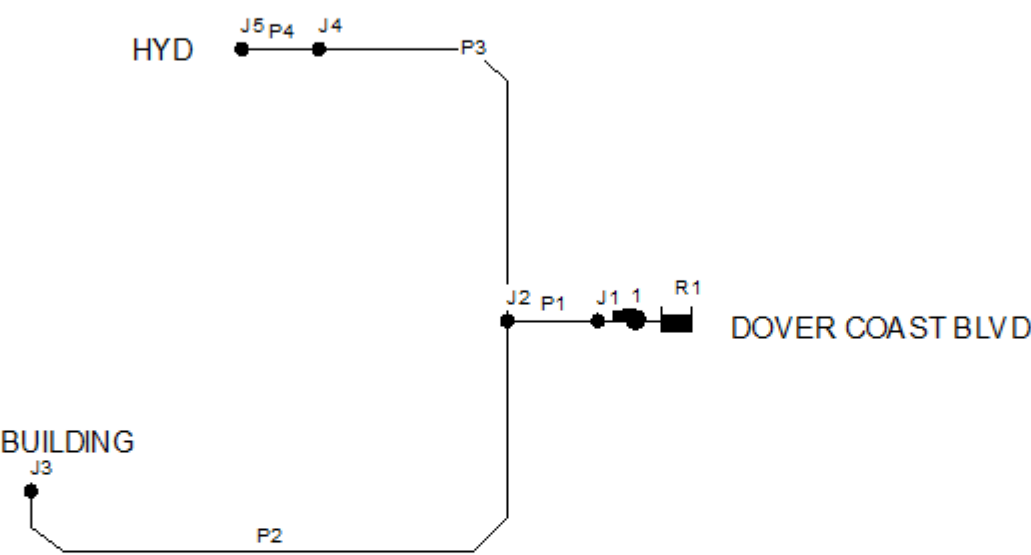
Average Day Demand Network Table - Nodes

Node ID	Elevation m	Demand LPS	Head m	Pressure m	kPa	psi
Junc J1	192.18	0	228.74	36.56	358.7	52.0
Junc J2	192.08	0	228.74	36.66	359.6	52.2
Junc J3	192.95	0.83	228.73	35.78	351.0	50.9
Junc J4	192.67	0	228.74	36.07	353.8	51.3
Junc J5	192.65	0	228.74	36.09	354.0	51.3
Resvr R1	192.18	-0.83	192.18	0	0.0	0.0

Average Day Demand Network Table - Links

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km
Pipe P1	13.1	200	110	0.83	0.0	0.0
Pipe P2	142	150	100	0.83	0.1	0.0
Pipe P3	96.4	200	110	0	0.0	0.0
Pipe P4	6	150	100	0	0.0	0.0
Pump 1	#N/A	#N/A	#N/A	0.83	0.0	-36.6

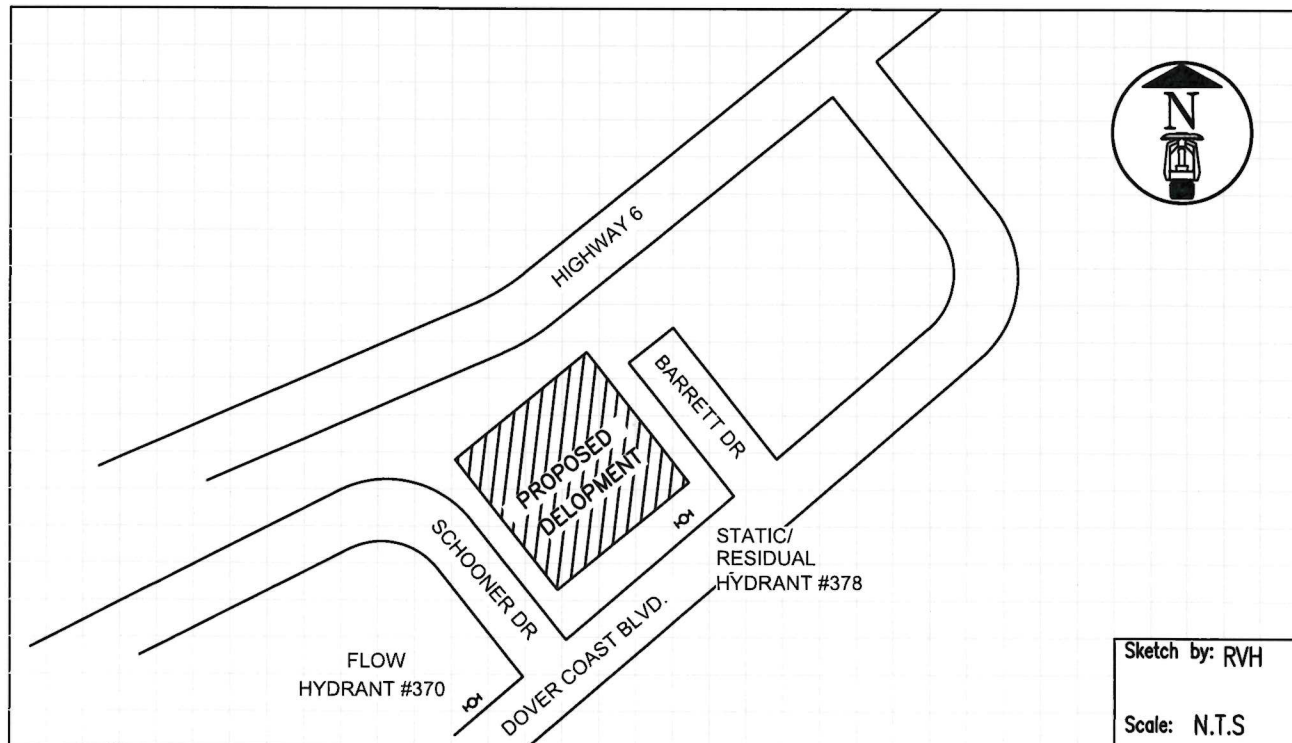
SOUTHBRIDGE PORT DOVER LTC



WATER SUPPLY TEST

Facility Name: Proposed Development				File/Project #: 60322			
Facility Address: 125 Dover Coast Boulevard, Port Dover, Ontario							
Tested by: Ron Van Hulst				Witnessed by: Norfolk County Waterworks			
Size of Main: $\phi 8"$		Comments:					
☐ Dead End							
☒ Two Ways							
☐ Loop							
Flow Hydrant Location: Hydrant Located On North Side Of Dover Coast Blvd West Of Schooner Dr							
Residual Hydrant Location: Hydrant Located On North Side Of Dover Coast Blvd West Of Barrett Dr							
Static Pressure: 52 psi				Date: Apr 24 2026		Time: 10:00 ☒ AM ☐ PM	
Test No.	No. of Outlets	Orifice Size (in.)	Pitot Reading (psi)	Equivalent Flow gpm (U.S.)	Total Flow gpm (U.S.)	Residual Pressure (psi)	Comments
1	1	2½"	30	1022	1022	49	
2	2	2½"	2(22)	2(875)	1750	40	
3							
4							

Site Map:



Name and Address of authority who should receive a copy.

Norfolk County Waterworks Att: Theo Karagias

SPIRA

FIRE PROTECTION LTD.

31 HAYES AVE., GUELPH, ONTARIO N1E 5V6 Phone: (519) 823-1150 Fax: (519) 822-7752

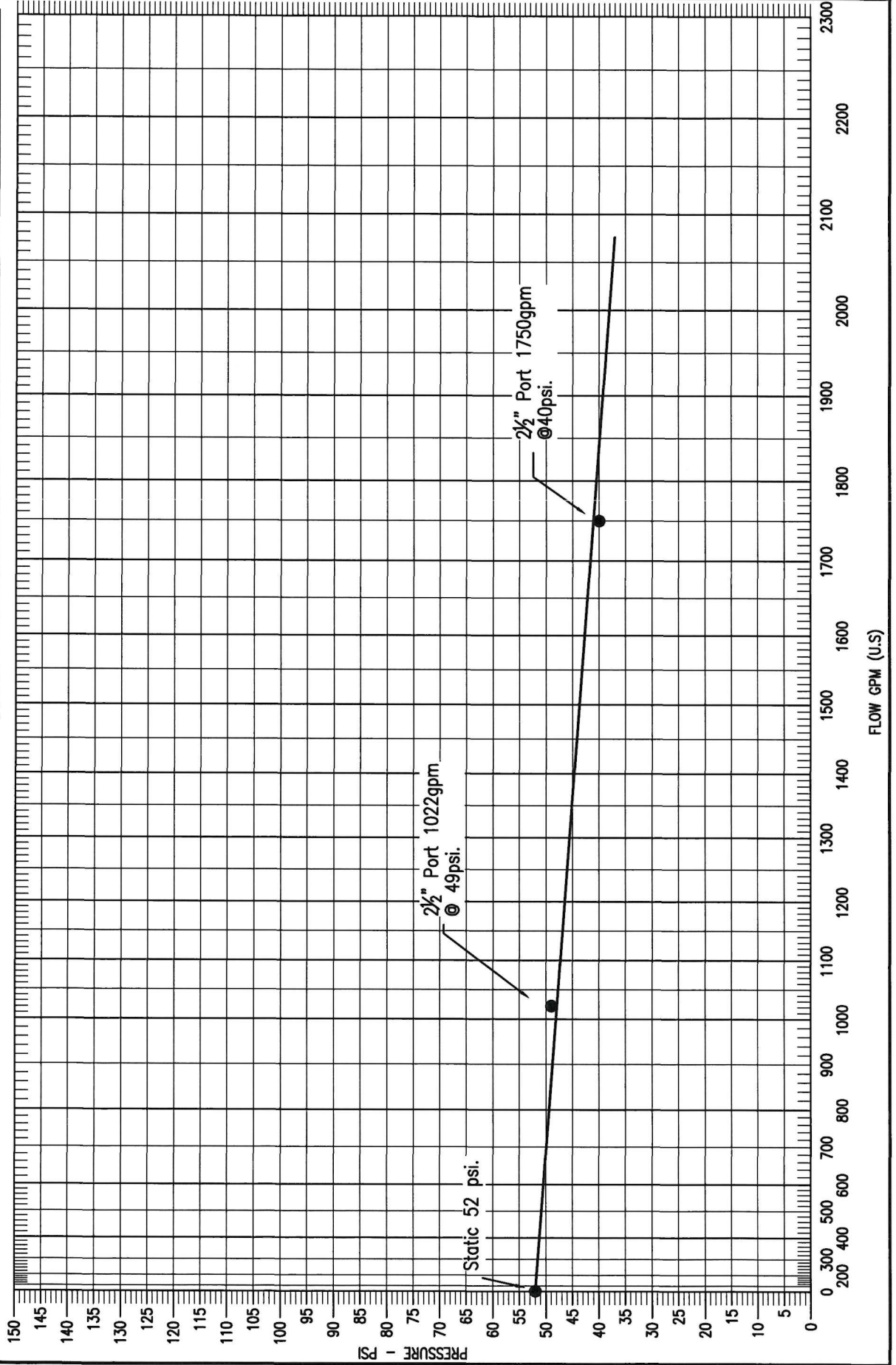
Facility Name: Proposed Development

File/Project # 60322

Facility Address: 125 Dover Coast Boulevard, Port Dover, Ontario

Tested by: Ron Van Hulst/Norfolk County

Date: Apr 24 2026



Hydrant Testing Summary

Hydrant Test Summary

Novatech Project #: 126012
Project Name: Southbridge Port Dover LTC
Date: 5/12/2026
Input By: MS

Legend: Input by User
Reference: NFPA 291 - 2022
Testing Contractor: Spira Fire Protection Ltd.
Testing Date / Time: 4/19/2023

Calculated Cells

Hydrant Test Data

Flow Hydrant	No. of Outlets	Orifice Size d (inch)	Coefficient of Discharge c (unitless)	Static Hydrant Pressure (psi)	Residual Hydrant Pressure (psi)	Pitot Hydrant Pressure p (psi)	Desired Flow at Residual Pressure		Configuration
							20	psi	
Flow Hydrant	No. of Outlets	Orifice Size d (inch)	Coefficient of Discharge c (unitless)	Static Hydrant Pressure (psi)	Residual Hydrant Pressure (psi)	Pitot Hydrant Pressure p (psi)	Flow Hydrant Test Flow at Residual Qf (Usgpm) ¹	Flow Hydrant Desired Flow QDesired (Usgpm) ²	Configuration
1	1	2.50	1.00	52	49	30	1022	3668	Looped
2	2	2.50	1.00	52	40	22	1750	2971	Looped

Testing Equations / Parameters

- $Q_f = 29.84 \times c \times d^2 \times (p^{0.5})$
- $Q_{Desired} = Q_f \times \frac{(Static - 20 \text{ psi})^{0.54}}{(Static - Residual)^{0.54}}$

Miro Savic

From: Cara Ruddle
Sent: Monday, May 11, 2026 3:23 PM
To: Miro Savic
Subject: FW: Southbridge Port Dover (126012) - existing info
Attachments: Norfolk Design Criteria February 2019.pdf

Cara Ruddle, P.Eng., Senior Project Manager | Land Development Engineering

NOVATECH

Engineers, Planners & Landscape Architects

240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6 | Tel: 613.254.9643 Ext: 220 | Cell: 613.261.7719

The information contained in this email message is confidential and is for exclusive use of the addressee.

From: Stephen Gradish <Stephen.Gradish@norfolkcounty.ca>
Sent: Monday, May 11, 2026 3:21 PM
To: Cara Ruddle <c.ruddle@novatech-eng.com>; DCS Developments <developmentengineering@norfolkcounty.ca>
Cc: 'Kathy Kakish' <kkakish@southbridgcare.com>; Lee Sheets <l.sheets@novatech-eng.com>
Subject: RE: Southbridge Port Dover (126012) - existing info

Hello Cara

Please find attached the Norfolk County Design Criteria.

You must also be aware that the design criteria is undergoing review and an updated version will be released at a future date. Please note the updated servicing requirements based on the new implemented criteria are below:

- **Fire Flow:** Design flow is now set at 150 L/s, with no reductions permitted based on construction material type.
- **Sanitary:** Design flow has been updated to 285 L/capita/day.
- **Water Service:** Standard water services is now 25mm PEX.
- **Sanitary Service:** Minimum sanitary service size has been revised to 100mm.

Table 5 – Recommended Land Use Fire Flow System Targets

Land Use	Applicable Community	Proposed Land Use Fire Flow Target
Industrial	All communities	150
Institutional	All communities	150
Commercial	All communities	150
Small ICI (<1,800m³)*	All communities	100
Residential (Single)**	Simcoe, Delhi, Port Dover	85
	Waterford, Port Rowan, Courtland	50
Residential – Multi > 3 units	Simcoe, Delhi, Port Dover	150
	Waterford, Port Rowan, Courtland	90
Residential – Multi <3 units (i.e. Semi-detach dwellings)	Simcoe, Delhi, Port Dover	125
	Waterford, Port Rowan, Courtland	70

*- This target level has been set for smaller forms of stand alone ICI structures.

**- For isolated cases of small scale Residential - Single development located where looping is not a realistic solution to achieving the target, a lower target may be reasonable at the discretion of Norfolk County

Table 3 - New Water and Wastewater Design Values

Parameter	Norfolk County Current Design Value
Water Consumption	285 L/p/d
Wastewater Output	285 L/p/d

Table 5: Recommended housing density and PPU Values for Norfolk County

Population Density	Norfolk County Current Density / PPU Values
On Development Zone Basis (Housing Density + PPU)	
Low Density Residential	25 units/ha @3.0 persons/unit
Medium Density Residential	75 units/ha @2.4 persons/unit
High Density Residential	150 units/ha @1.6 persons/unit
On Lot Basis (PPU)	
Single and Semi-Detached Residential	3.0
Townhouse/ Rowhomes	2.4
Apartments and ADU's (2+ bedroom)	2.0
Apartments and ADU's (1-2 bedroom)	1.6

I have also found the most recent version of the SWM report. The copy I have is quite large (24mb). Please let me know if your email system can accept something that large or if you have a secure file transfer system I can use.

I have not had much luck finding an original FSR however given the changes to our design criteria above and the requirement to model both Water and Wastewater flows through the County's modelling software I believe you can produce a separate FSR and that is specific to your proposal and will not need to reference the original subdivision reports.

If you have any questions, please do not hesitate to contact me.

Regards,
Stephen

Stephen Gradish

Development Technologist
Gilbertson Administration Building
Engineering and Asset Management
Public Works
12 Gilbertson Drive, Simcoe, Ontario, N3Y 4N5
519-426-5870 x8015 | 226-NORFOLK



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We are committed to providing high-quality customer service and a safe and respectful environment for all. Read our Respect and Responsibilities Policy at norfolkCounty.ca/RR.

From: Cara Ruddle <c.ruddle@novatech-eng.com>

Sent: Monday, May 4, 2026 1:33 PM

To: DCS Developments <developmentengineering@norfolkcounty.ca>

Cc: 'Kathy Kakish' <kkakish@southbridgecare.com>; Lee Sheets <l.sheets@novatech-eng.com>

Subject: RE: Southbridge Port Dover (126012) - existing info

You don't often get email from c.ruddle@novatech-eng.com. [Learn why this is important](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I don't believe I got a response to my email below. Can you please provide the requested information as soon as possible so that we can complete the detailed design for the above noted development?

Thanks.

Cara Ruddle, P.Eng., Senior Project Manager | Land Development Engineering

NOVATECH

Engineers, Planners & Landscape Architects

240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6 | Tel: 613.254.9643 Ext: 220 | Cell: 613.261.7719

The information contained in this email message is confidential and is for exclusive use of the addressee.

From: Cara Ruddle
Sent: Wednesday, April 8, 2026 9:33 AM
To: 'developmentengineering@norfolkcounty.ca' <developmentengineering@norfolkcounty.ca>
Cc: Kathy Kakish <kkakish@southbridgecare.com>; Lee Sheets <l.sheets@novatech-eng.com>
Subject: Southbridge Port Dover (126012) - existing info

Hello,

I am working on the detailed design of the Southbridge Long Term Care Facility in the Dover Coast Subdivision in Port Dover. I understand from the pre-consultation notes from Norfolk County that I can email for information such as the Norfolk County Design Criteria as well as an original report on the servicing of the Dover Coast Subdivision. I also understand that further information on the subdivision design should be obtained directly from the Developer. Please provide any information you can so that I can proceed with the detailed design of the proposed development in preparation of submitting the site plan application package.

Thanks.

Cara Ruddle, P.Eng., Senior Project Manager | Land Development Engineering

NOVATECH

Engineers, Planners & Landscape Architects

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4. DESIGN CRITERIA & SYSTEM DEMANDS

4.1 NORFOLK COUNTY DESIGN CRITERIA

Water distribution system performance criteria and required demand conditions are provided in the Norfolk County Design Criteria, Section 10 – Watermains (May 2009).

This report aims to demonstrate the water distribution network proposed for this development satisfies the County requirements as follows:

- Maximum working pressure should not be more than 690 kPa (100 psi or 70 m H₂O);
- During the Maximum Day + Fire demand, system pressures shall not be less than 140 kPa (20 psi or 14.28 m H₂O);
- During normal operating conditions, system pressures shall not be less than 280 kPa (40.6 PSI or 28.4 m H₂O);

4.2 AVERAGE DAY DEMANDS

Norfolk County Design Criteria specifies the average day water demand as 450 L/capita/day. The population was estimated by assuming 2.75 people per unit as specified in the Norfolk County Design Criteria, Section 9 – Sanitary Sewers. The number of units was counted based on the number of lots.

The commercial developments assumed 90 people/hectare as specified in the Norfolk County Design Criteria, Section 9 – Sanitary Sewers.

4.3 MAXIMUM DAY AND PEAK HOUR DEMANDS

The County Design Criteria specify the maximum daily demand factor as 2.25, and the maximum hourly demand factor as 4.00 for residential and 2.00 for commercial.

4.4 FIRE FLOW REQUIREMENTS

The County Design Criteria specifies fire flows should be considered in accordance with the requirements of the latest edition of “Water Supply for Public Fire Protection – A Guide to Recommended Practice” by Fire Underwriters Survey (FUS). Use of the FUS requires that certain information about the building be known including the gross floor area, the type of construction, and setback from other structures. Past experience with this method has demonstrated the calculated fire demand is usually overly conservative which can result in misleading conclusions that a system is not adequate for fire protection when in fact it is sufficient. Note ‘J’ of FUS

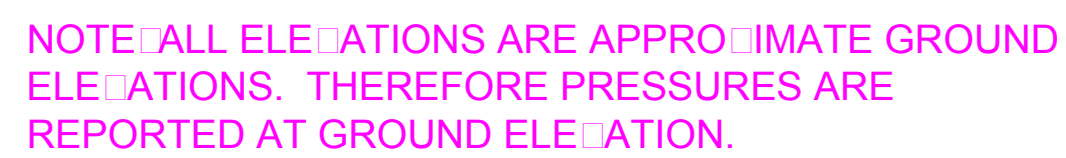
states “for groupings of detached one family and small two family dwellings not exceeding 2 stories in height, the following short method may be used:

Exposure Distance	Suggested required Fire Flow	
	Wood Frame	Masonry or Brick
Less than 3 m	Should be considered one area	6,000 L/min
3 to 10 m	4,000 L/min	4,000 L/min
10.1 to 30 m	3,000 L/min	3,000 L/min
Over 30 m	2,000 L/min	2,000 L/min

Assuming the units will generally be approximately 3-10 m apart, this method provides a reasonable fire demand of 4,000 L/min, equivalent to 66.7 L/s or 1057 usgpm. Based on previous experience, we have decided to use a more conservative fire demand of 76 L/s (1205 usgpm). This number is accepted in other municipalities and is considered conservative yet reasonable.

The same fire demand of 76 L/s will be used for commercial and high density residential developments. If the commercial or high density building is small enough not to require automatic sprinklers, then it is anticipated the fire demand would be similar to a house. Larger commercial or high density buildings that require a sprinkler system often use less water for fire protection due to the effectiveness of the sprinkler design. Therefore 76 L/s is considered conservative for sprinklered buildings as well.

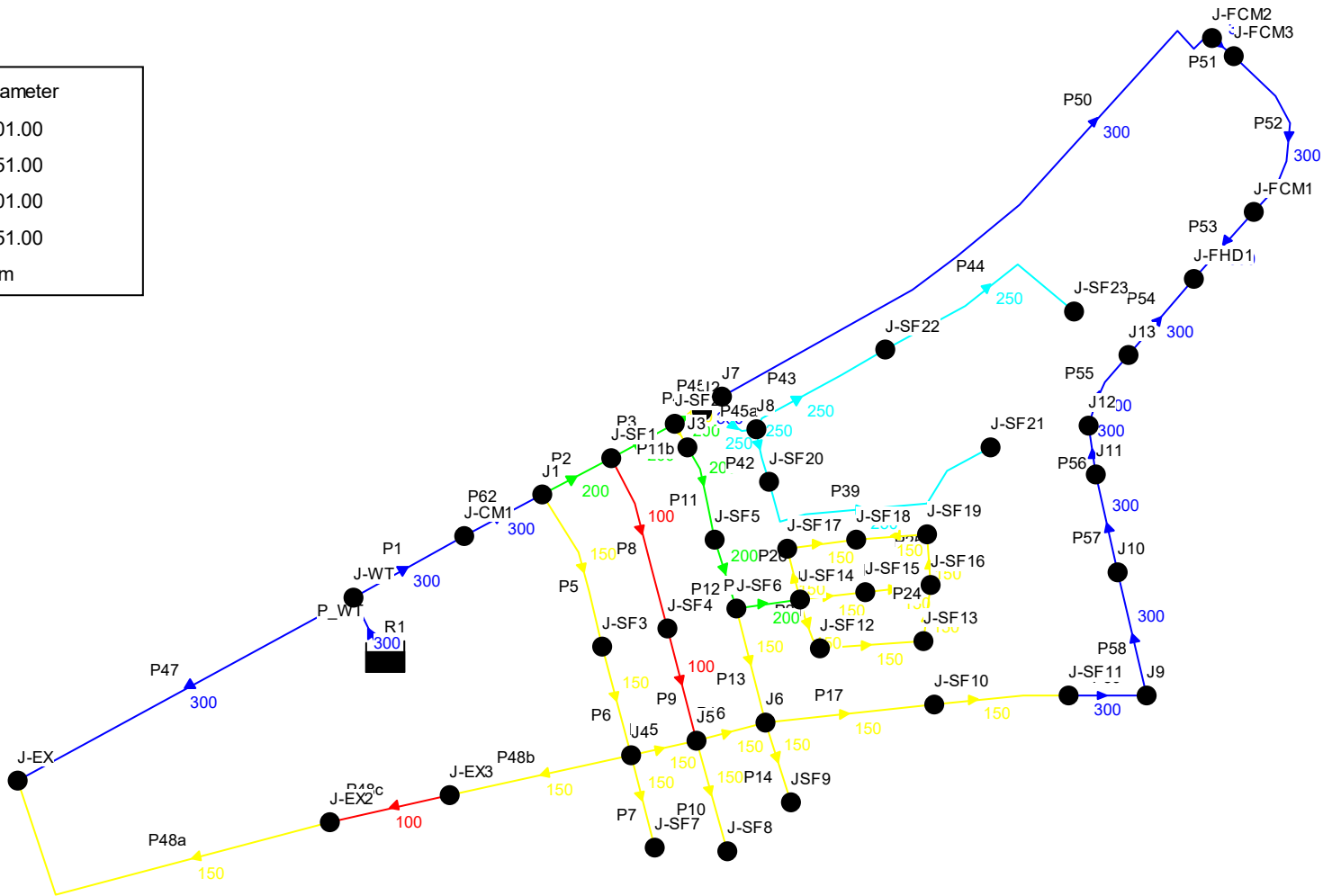
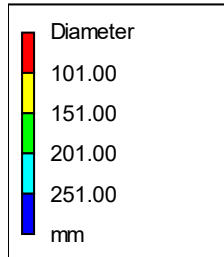
A summary of the domestic and fire protection demands is provided in the table below. The units/lots are grouped to simplify the model. Each group is identified as SF# in the table. Refer to the Figures in Appendix C, D, and E for the lot groupings.



ismith Mar.05/15-5:27pm DEL13-124 - WM Model.dwg

DEL13-124 - Dover Coast - Future

Day 1, 12:00



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*****
*                               E P A N E T                               *
*                               Hydraulic and Water Quality                 *
*                               Analysis for Pipe Networks                   *
*                               Version 2.0                                 *
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Input File: DEL13-124 - WM Model - FUT.NET

MAX DAY + FIRE AT FHD1 (Future Dover Coast)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm
P1	J-WT	J-CM1	182	300
P2	J1	J-SF1	113	200
P3	J-SF1	J-SF2	104	200
P4	J-SF2	J2	43	200
P5	J1	J-SF3	239	150
P6	J-SF3	J4	160	150
P7	J4	J-SF7	135	150
P8	J-SF1	J-SF4	260	100
P9	J-SF4	J5	165	100
P10	J5	J-SF8	167	150
P11	J3	J-SF5	139	200
P12	J-SF5	J-SF6	101	200
P13	J-SF6	J6	173	150
P14	J6	J-SF9	121	150
P15	J4	J5	96	150
P16	J5	J6	101	150
P17	J6	J-SF10	240	150
P18	J-SF10	J-SF11	198	150
P20	J-SF13	J-SF12	149	150
P21	J-SF12	J-SF14	81	150
P22	J-SF14	J-SF15	92	150
P23	J-SF15	J-SF16	92	150
P24	J-SF16	J-SF13	77	150
P25	J-SF16	J-SF19	76	150
P26	J-SF14	J-SF17	77	150
P27	J-SF17	J-SF18	101	150
P28	J-SF18	J-SF19	101	150
P47	J-WT	J-EX	549	300
P48a	J-EX2	J-EX	579	150
P_WT	R1	J-WT	106	300
P62	J-CM1	J1	127	300
P48c	J-EX2	J-EX3	177	100
P48b	J-EX3	J4	272	150
P19b	J-SF6	J-SF14	94	200
P11b	J-SF2	J3	37	150
P45	J2	J7	35	300
P45a	J7	J8	78	250

Link - Node Table: (continued)

Link ID	Start Node	End Node	Length m	Diameter mm
P42	J8	J-SF20	79	250
P39	J-SF20	J-SF21	397	250
P43	J8	J-SF22	217	250
P44	J-SF22	J-SF23	341	250
P50	J7	J-FCM2	912	300
P51	J-FCM2	J-FCM3	41	300
P52	J-FCM3	J-FCM1	269	300
P53	J-FCM1	J-FHD1	129	300
P54	J-FHD1	J13	144	300
P55	J13	J12	118	300
P56	J12	J11	68	300
P57	J11	J10	145	300
P58	J10	J9	180	300
P59	J9	J-SF11	106	300

Node Results:

Node ID	Demand LPS	Head m	Pressure m	Quality hours
J1	0.00	225.83	34.73	0.00
J2	0.00	218.77	27.47	0.00
J4	0.00	222.72	33.42	0.00
J5	0.00	221.46	31.56	0.00
J6	0.00	219.90	30.70	0.00
J-SF1	0.26	222.56	32.06	0.00
J-SF2	0.13	219.85	28.95	0.00
J-SF3	1.10	223.88	33.98	0.00
J-SF4	1.14	221.73	31.83	0.00
J-SF5	0.55	219.84	30.04	0.00
J-SF6	0.64	219.84	30.04	0.00
J-SF7	0.46	222.72	35.12	0.00
J-SF8	0.46	221.46	33.06	0.00
J-SF9	0.39	219.90	31.00	0.00
J-SF10	0.49	217.08	27.08	0.00
J-SF11	0.46	214.85	25.25	0.00
J-SF12	0.62	219.83	29.03	0.00
J-SF13	0.20	219.83	29.13	0.00
J-SF14	0.36	219.84	29.04	0.00
J-SF15	0.55	219.83	29.03	0.00
J-SF16	0.29	219.83	29.13	0.00
J-SF17	0.26	219.83	29.03	0.00
J-SF18	0.62	219.83	29.03	0.00
J-SF19	0.20	219.83	29.23	0.00
J-WT	0.00	227.71	36.71	0.00
J-EX	65.67	225.63	34.63	0.00
J-CM1	2.14	226.58	35.58	0.00

Node Results: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality hours
J-EX2	0.00	224.83	35.53	0.00
J-EX3	0.00	223.09	33.79	0.00
J3	0.00	219.85	29.85	0.00
J7	0.00	218.64	27.14	0.00
J8	0.00	218.64	26.94	0.00
J-SF20	0.64	218.64	27.44	0.00
J-SF21	1.07	218.64	27.54	0.00
J-SF22	0.90	218.64	26.54	0.00
J-SF23	0.77	218.64	26.14	0.00
J9	0.00	214.81	25.11	0.00
J10	0.00	214.74	24.34	0.00
J11	0.00	214.69	23.59	0.00
J12	0.00	214.66	22.86	0.00
J13	0.00	214.62	21.62	0.00
J-FHD1	79.05	214.57	21.57	0.00
J-FCM1	1.52	214.90	21.90	0.00
J-FCM2	2.43	215.74	22.74	0.00
J-FCM3	3.36	215.62	22.62	0.00
R1	-166.74	229.60	0.00	0.00 Reservoir

Link Results:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
P1	94.33	1.33	6.20	Open
P2	74.52	2.37	28.88	Open
P3	70.57	2.25	26.12	Open
P4	69.18	2.20	25.17	Open
P5	17.67	1.00	8.16	Open
P6	16.57	0.94	7.24	Open
P7	0.46	0.03	0.01	Open
P8	3.68	0.47	3.22	Open
P9	2.55	0.32	1.63	Open
P10	0.46	0.03	0.01	Open
P11	1.26	0.04	0.02	Open
P12	0.71	0.02	0.01	Open
P13	-3.04	0.17	0.31	Open
P14	0.39	0.02	0.01	Open
P15	22.85	1.29	13.13	Open
P16	24.94	1.41	15.45	Open
P17	21.51	1.22	11.75	Open
P18	21.02	1.19	11.26	Open
P20	-0.33	0.02	0.00	Open
P21	-0.95	0.05	0.04	Open
P22	0.92	0.05	0.03	Open
P23	0.37	0.02	0.01	Open

Link Results: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
P24	-0.13	0.01	0.00	Open
P25	0.21	0.01	0.00	Open
P26	0.86	0.05	0.03	Open
P27	0.61	0.03	0.02	Open
P28	-0.01	0.00	0.00	Open
P47	72.41	1.02	3.80	Open
P48a	-6.73	0.38	1.37	Open
P_WT	166.74	2.36	17.81	Open
P62	92.19	1.30	5.94	Open
P48c	6.73	0.86	9.85	Open
P48b	6.73	0.38	1.37	Open
P19b	3.11	0.10	0.08	Open
P11b	1.26	0.07	0.06	Open
P45	69.18	0.98	3.49	Open
P45a	3.39	0.07	0.03	Open
P42	1.71	0.03	0.01	Open
P39	1.07	0.02	0.00	Open
P43	1.68	0.03	0.01	Open
P44	0.77	0.02	0.00	Open
P50	65.79	0.93	3.18	Open
P51	63.37	0.90	2.97	Open
P52	60.01	0.85	2.68	Open
P53	58.48	0.83	2.56	Open
P54	-20.57	0.29	0.37	Open
P55	-20.57	0.29	0.37	Open
P56	-20.57	0.29	0.37	Open
P57	-20.57	0.29	0.37	Open
P58	-20.57	0.29	0.37	Open
P59	-20.57	0.29	0.37	Open

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*                               Hydraulic and Water Quality                 *
*                               Analysis for Pipe Networks                   *
*                               Version 2.0                                 *
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Input File: DEL13-124 - WM Model - FUT.NET

Peak Hour (Future Dover Coast)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm
P1	J-WT	J-CM1	182	300
P2	J1	J-SF1	113	200
P3	J-SF1	J-SF2	104	200
P4	J-SF2	J2	43	200
P5	J1	J-SF3	239	150
P6	J-SF3	J4	160	150
P7	J4	J-SF7	135	150
P8	J-SF1	J-SF4	260	100
P9	J-SF4	J5	165	100
P10	J5	J-SF8	167	150
P11	J3	J-SF5	139	200
P12	J-SF5	J-SF6	101	200
P13	J-SF6	J6	173	150
P14	J6	J-SF9	121	150
P15	J4	J5	96	150
P16	J5	J6	101	150
P17	J6	J-SF10	240	150
P18	J-SF10	J-SF11	198	150
P20	J-SF13	J-SF12	149	150
P21	J-SF12	J-SF14	81	150
P22	J-SF14	J-SF15	92	150
P23	J-SF15	J-SF16	92	150
P24	J-SF16	J-SF13	77	150
P25	J-SF16	J-SF19	76	150
P26	J-SF14	J-SF17	77	150
P27	J-SF17	J-SF18	101	150
P28	J-SF18	J-SF19	101	150
P47	J-WT	J-EX	549	300
P48a	J-EX2	J-EX	579	150
P_WT	R1	J-WT	106	300
P62	J-CM1	J1	127	300
P48c	J-EX2	J-EX3	177	100
P48b	J-EX3	J4	272	150
P19b	J-SF6	J-SF14	94	200
P11b	J-SF2	J3	37	150
P45	J2	J7	35	300
P45a	J7	J8	78	250

Link - Node Table: (continued)

Link ID	Start Node	End Node	Length m	Diameter mm
P42	J8	J-SF20	79	250
P39	J-SF20	J-SF21	397	250
P43	J8	J-SF22	217	250
P44	J-SF22	J-SF23	341	250
P50	J7	J-FCM2	912	300
P51	J-FCM2	J-FCM3	41	300
P52	J-FCM3	J-FCM1	269	300
P53	J-FCM1	J-FHD1	129	300
P54	J-FHD1	J13	144	300
P55	J13	J12	118	300
P56	J12	J11	68	300
P57	J11	J10	145	300
P58	J10	J9	180	300
P59	J9	J-SF11	106	300

Node Results:

Node ID	Demand LPS	Head m	Pressure m	Quality hours
J1	0.00	227.25	36.15	0.00
J2	0.00	225.74	34.44	0.00
J4	0.00	225.76	36.46	0.00
J5	0.00	225.72	35.82	0.00
J6	0.00	225.68	36.48	0.00
J-SF1	0.46	226.46	35.96	0.00
J-SF2	0.23	225.87	34.97	0.00
J-SF3	1.96	226.25	36.35	0.00
J-SF4	2.02	225.79	35.89	0.00
J-SF5	0.98	225.72	35.92	0.00
J-SF6	1.15	225.68	35.88	0.00
J-SF7	0.81	225.76	38.16	0.00
J-SF8	0.81	225.72	37.32	0.00
J-SF9	0.69	225.67	36.77	0.00
J-SF10	0.88	225.56	35.56	0.00
J-SF11	0.81	225.50	35.90	0.00
J-SF12	1.10	225.65	34.85	0.00
J-SF13	0.35	225.65	34.95	0.00
J-SF14	0.65	225.66	34.86	0.00
J-SF15	0.98	225.65	34.85	0.00
J-SF16	0.52	225.65	34.95	0.00
J-SF17	0.46	225.65	34.85	0.00
J-SF18	1.10	225.65	34.85	0.00
J-SF19	0.35	225.65	35.05	0.00
J-WT	0.00	227.82	36.82	0.00
J-EX	116.75	223.26	32.26	0.00
J-CM1	3.81	227.47	36.47	0.00

Node Results: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality hours
J-EX2	0.00	223.94	34.64	0.00
J-EX3	0.00	225.44	36.14	0.00
J3	0.00	225.79	35.79	0.00
J7	0.00	225.72	34.22	0.00
J8	0.00	225.72	34.02	0.00
J-SF20	1.15	225.71	34.51	0.00
J-SF21	1.90	225.71	34.61	0.00
J-SF22	1.60	225.71	33.61	0.00
J-SF23	1.38	225.71	33.21	0.00
J9	0.00	225.49	35.79	0.00
J10	0.00	225.49	35.09	0.00
J11	0.00	225.49	34.39	0.00
J12	0.00	225.49	33.69	0.00
J13	0.00	225.49	32.49	0.00
J-FHD1	5.42	225.49	32.49	0.00
J-FCM1	2.71	225.49	32.49	0.00
J-FCM2	4.31	225.51	32.51	0.00
J-FCM3	5.98	225.50	32.50	0.00
R1	-161.31	229.60	0.00	0.00 Reservoir

Link Results:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
P1	50.77	0.72	1.97	Open
P2	34.63	1.10	6.99	Open
P3	30.91	0.98	5.66	Open
P4	22.22	0.71	3.07	Open
P5	12.34	0.70	4.19	Open
P6	10.38	0.59	3.05	Open
P7	0.81	0.05	0.03	Open
P8	3.25	0.41	2.56	Open
P9	1.23	0.16	0.43	Open
P10	0.81	0.05	0.03	Open
P11	8.46	0.27	0.51	Open
P12	7.48	0.24	0.41	Open
P13	0.82	0.05	0.03	Open
P14	0.69	0.04	0.02	Open
P15	3.35	0.19	0.38	Open
P16	3.78	0.21	0.47	Open
P17	3.90	0.22	0.50	Open
P18	3.03	0.17	0.31	Open
P20	-0.59	0.03	0.01	Open
P21	-1.69	0.10	0.11	Open
P22	1.65	0.09	0.10	Open
P23	0.67	0.04	0.02	Open

Link Results: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
P24	-0.23	0.01	0.00	Open
P25	0.38	0.02	0.01	Open
P26	1.54	0.09	0.09	Open
P27	1.08	0.06	0.05	Open
P28	-0.02	0.00	0.00	Open
P47	110.54	1.56	8.32	Open
P48a	6.21	0.35	1.18	Open
P_WT	161.31	2.28	16.75	Open
P62	46.96	0.66	1.70	Open
P48c	-6.21	0.79	8.48	Open
P48b	-6.21	0.35	1.18	Open
P19b	5.52	0.18	0.23	Open
P11b	8.46	0.48	2.09	Open
P45	22.22	0.31	0.43	Open
P45a	6.02	0.12	0.09	Open
P42	3.04	0.06	0.03	Open
P39	1.90	0.04	0.01	Open
P43	2.98	0.06	0.03	Open
P44	1.38	0.03	0.01	Open
P50	16.20	0.23	0.24	Open
P51	11.89	0.17	0.13	Open
P52	5.91	0.08	0.04	Open
P53	3.20	0.05	0.01	Open
P54	-2.22	0.03	0.01	Open
P55	-2.22	0.03	0.01	Open
P56	-2.22	0.03	0.01	Open
P57	-2.22	0.03	0.01	Open
P58	-2.22	0.03	0.01	Open
P59	-2.22	0.03	0.01	Open

APPENDIX C

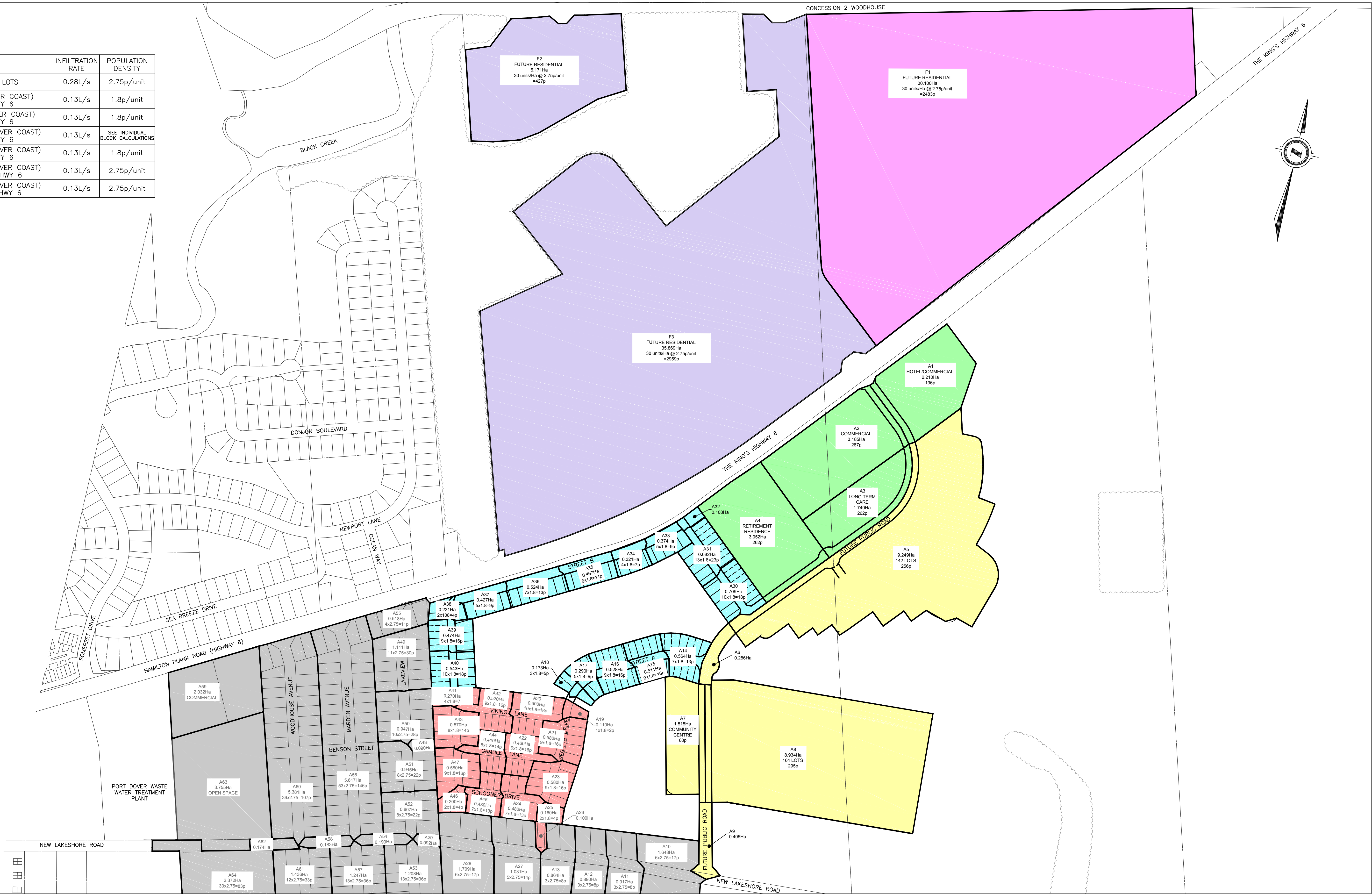
Sanitary Flow Calculations

Dover Coast Development Master Sanitary Area Plan and Sanitary Sewer Design Sheet

SOUTHBRIDGE PORT DOVER LTC SANITARY FLOW

Number of Beds	160
Average Daily Flow	450 L/bed/day
Peak Factor (Harmon Formula)	4.18
Peak Sanitary Flow	3.48 L/s
Site Area	2.2 ha
Infiltration Allowance	0.28 L/s/ha
Peak Extraneous Flow	0.62 L/s
Total Peak Sanitary Flow	4.10 L/s

	AREA	INFILTRATION RATE	POPULATION DENSITY
	EXISTING RESIDENTIAL LOTS	0.28L/s	2.75p/unit
	STAGE 1 (EX. DOVER COAST) SOUTH OF HWY 6	0.13L/s	1.8p/unit
	STAGE 2 (PH2 DOVER COAST) SOUTH OF HWY 6	0.13L/s	1.8p/unit
	STAGE 3 (FUTURE DOVER COAST) SOUTH OF HWY 6	0.13L/s	SEE INDIVIDUAL BLOCK CALCULATIONS
	STAGE 4 (FUTURE DOVER COAST) SOUTH OF HWY 6	0.13L/s	1.8p/unit
	STAGE 5 (FUTURE DOVER COAST) NORTHWEST OF HWY 6	0.13L/s	2.75p/unit
	STAGE 6 (FUTURE DOVER COAST) NORTHEAST OF HWY 6	0.13L/s	2.75p/unit



Final Dec.23/14-11:03am DEL13-124 Sanitary area plan figure.dwg

CONSULTANT OR DIVISION Consulting Civil Engineers 41 Adelaide St. N., Unit 71 London, Ontario N6B 3P4 Phone (519) 672-8310 Fax (519) 672-4182 e-mail: deveng@deveng.net	 CONSULTING CIVIL ENGINEERS	SCALE SCALE -- 1:4000 	TITLE DOVER COAST DEVELOPMENT PORT DOVER, ONTARIO MASTER SANITARY AREA PLAN	PROJECT No. DEL13-124 SHEET No. SAN 1 PLAN FILE No.

THE FOLLOWING POPULATION ALLOWANCES HAVE BEEN USED TO DESIGN THE SANITARY SEWERS:													SANITARY SEWER DESIGN SHEET NORFOLK COUNTY													DESIGN CRITERIA SEWAGE = $\frac{300 \times M \times POP.}{86.400}$ INFILTRATION (DOVER COAST) = 0.13 L/s/ha INFILTRATION (EXISTING) = 0.28 L/s/ha PEAKING FACTOR (M) = $1 + \frac{14}{4 + \sqrt{P}}$													DATE: DEC.20/2014 DESIGNED BY: JR/LM CHECKED BY: LM/JF PROJECT FILE NO. DEL13-124				
RESIDENTIAL (EXISTING TOWN) =2.75 PEOPLE / UNIT RESIDENTIAL (UNCERTAIN DEVELOPMENT) = 30 UNITS / HECTARE @ 2.75 PEOPLE / UNIT RESIDENTIAL (DOVER COAST) = 1.8 PEOPLE / UNIT (SOUTH OF HWY. 6) RESIDENTIAL (DOVER COAST) = 2.75 PEOPLE / UNIT (NORTH OF HWY. 6) COMMERCIAL = 90 PEOPLE / HECTARE PER CAPITA DESIGN SEWAGE (L / PERSON / DAY) = 300													PROJECT NAME: <u>DOVER COAST DEVELOPMENT</u> ULTIMATE BUILD OUT																														
LOCATION				AREA			POPULATION						SEWAGE FLOWS			SEWER DESIGN						PROFILE																					
AREA No.	STREET	FROM MANHOLE	TO MANHOLE	NET OR GROSS	DELTA HECTARES	TOTAL HECTARES	PER HECTARE	PER LOT	NO. OF LOTS	DELTA POP.	TOTAL POP.	PEAKING FACTOR	INFILT L / s	SEWAGE L / s	Q TOTAL L / s	n	PIPE SIZE mm	SLOPE %	CAP L / s	VELOCITY m / s	LENGTH m	FALL IN SEWER	HEADLOSS IN U.S. MH	DROP IN MANHOLE	INVERT ELEVATION																		
																									U.S.	D.S.																	
DOVER COAST - NORTH																																											
F1	FUTURE				30.100	30.100	30	2.75		2483	2483	3.51	3.91	30.27	34.18	0.013	300	0.3	52.96	0.81																							
F2	FUTURE				5.171	5.171	30	2.75		427	427	4.01	0.67	5.94	6.61	0.013	300	0.3	52.96	0.52																							
F3	FUTURE				35.869	71.140	30	2.75		2959	5869	3.18	9.25	64.80	74.05	0.013	375	0.3	96.03	0.96																							
awings\2013\DEL13-124 - Dover Coast Subdivision\Distribution\141224 NC-SAN PS & Trunk Sewer Memo																																											
DOVER COAST - SOUTH																																											
A1 (HOTEL/COMM.)	PUBLIC ROAD			N	2.210	2.210	120	(Rooms)		200	200	3.32	0.29	2.30	2.59	0.013	200	0.50	23.19	0.49																							
A2 (COMMERCIAL)	PUBLIC ROAD			N	3.185	5.395	100,000	(Sq.Ft)		287	487	3.18	0.70	5.38	6.08	0.013	200	0.50	23.19	0.61																							
A3 (LTC FACILITY)	PUBLIC ROAD			N	1.740	7.135	160	(Beds)		240	727	3.89	0.93	9.80	10.73	0.013	200	0.50	23.19	0.72																							
A4 (RETIREMENT RESIDENCE)	PUBLIC ROAD			N	3.052	10.187	160	(Beds)		240	967	3.81	1.32	12.79	14.11	0.013	200	0.50	23.19	0.79																							
A31	STREET B			N	0.682	0.682		1.80	13	23	23	4.37	0.09	0.36	0.44	0.013	200	1.00	32.80	0.25	92.5																						
A30	STREET B			N	0.709	1.391		1.80	10	18	41	4.33	0.18	0.62	0.80	0.013	200	0.50	23.19	0.28	94.2																						
A5	PUBLIC ROAD			N	9.249	20.827		1.80	142	256	1264	3.73	2.71	16.38	19.08	0.013	250	0.30	32.57	0.70																							
A6	PUBLIC ROAD			N	0.286	21.113				0	1264	3.73	2.74	16.38	19.12	0.013	250	0.30	32.57	0.70																							
A7 (COMMUNITY CENTRE)	PUBLIC ROAD			N	1.515	22.628				60	1324	3.72	2.94	17.09	20.03	0.013	250	0.30	32.57	0.71																							
A8	PUBLIC ROAD			N	8.934	31.562		1.80	164	295	1619	3.66	4.10	20.55	24.65	0.013	250	0.30	32.57	0.73																							
A9	PUBLIC ROAD			N	0.405	31.967				0	1619	3.66	4.16	20.55	24.70	0.013	250	0.30	32.57	0.73																							
A10	NEW LAKESHORE			N	1.648	33.615		2.75	6	17	1635	3.65	4.62	20.74	25.35	0.013	300	0.22	45.36	0.00																							
A11	NEW LAKESHORE			N	0.917	34.532		2.75	3	8	1644	3.65	4.87	20.83	25.71	0.013	300	0.22	45.36	0.67																							
A12	NEW LAKESHORE			N	0.890	35.422		2.75	3	8	1652	3.65	5.12	20.93	26.05	0.013	300	0.23	46.37	0.69																							
A13	NEW LAKESHORE			N	0.864	36.286		2.75	3	8	1660	3.65	5.37	21.02	26.39	0.013	300	0.24	47.37	0.70																							
A14	STREET A			N	0.564	0.564		1.80	7	13	13	4.40	0.07	0.19	0.27	0.013	200	1.00	32.80	0.21																							
A15	STREET A			N	0.511	1.075		1.80	9	16	29	4.36	0.14	0.44	0.58	0.013	200	1.00	32.80	0.28																							
A16	STREET A			N	0.528	1.603		1.80	9	16	45	4.32	0.21	0.68	0.88	0.013	200	0.40	20.74	0.27																							
A17	STREET A			N	0.290	1.893		1.80	5	9	54	4.31	0.25	0.81	1.05	0.013	200	0.40	20.74	0.30																							
A18	STREET A			N	0.173	2.066		1.80	3	5	59	4.30	0.27	0.89	1.16	0.013	200	0.40	20.74	0.32																							
A19	STREET A			N	0.110	2.176		1.80	1	2	61	4.30	0.28	0.91	1.20	0.013	200	0.40	20.74	0.32																							
A20	VIKING LANE			N	0.600	0.600		1.80	10	18	18	4.39	0.08	0.27	0.35	0.013	200	0.40	20.74	0.17																							
A21	STREET A			N	0.580	3.356		1.80	9	16	95	4.25	0.44	1.41	1.84	0.013	200	0.40	20.74	0.40																							
A22	GAMBLE			N	0.460	0.460		1.80	9	16	16	4.39	0.06	0.25	0.31	0.013	200	0.40	20.74	0.16																							
A23	STREET A			N	0.580	4.396		1.80	9	16	128	4.21	0.57	1.87	2.44	0.013	200	0.40	20.74	0.44																							
A24	SCHOONER			N	0.480	0.480		1.80	7	13	13	4.40	0.06	0.19	0.26	0.013	200	0.40	20.74	0.15																							
A25	STREET A			N	0.160	5.036		1.80	2	4	144	4.20	0.65	2.10	2.75	0.013	200	0.40	20.74	0.46																							
A26	STREET A			N	0.100	5.136		1.80	0	0	144	4.20	0.67	2.10	2.77	0.013	200	0.40	20.74	0.46																							
A27	NEW LAKESHORE			N	1.031	42.453		2.75	5	14	1818	3.62	6.32	22.83	29.16	0.013	300	0.27	50.25	0.75																							
A28	NEW LAKESHORE			N	1.709	44.162		2.75	6	17	1834	3.61	6.80	23.02	29.82	0.013	300	0.22	45.36	0.70																							
A29	NEW LAKESHORE			N	0.092	44.254		2.75	0	0	1834	3.61	6.83	23.02	29.85	0.013	300	0.25	48.35	0.73																							
A32	STREET B			N	0.108	0.108		1.80	0	0	0	4.50	0.01	0.00	0.01	0.013	200	0.40	20.74	0.09																							
A33	STREET B			N	0.374	0.482		1.80	5	9	9	4.42	0.06	0.14	0.20	0.013	200	0.40	20.74	0.14																							

APPENDIX D

Storm Sewer Design Sheet and Storm Drainage Area Plan Dover Coast Development Master Storm Area Plan and Storm Sewer Design Sheet

Southbridge Port Dover
1:5 yr Storm Design Sheet



PROJECT NO: 126012
DESIGNED BY: LSC
CHECKED BY: MS
DATE: May 13, 2026

AREA	FROM MH	TO MH	AREA (ha)			Runoff	INDIV 2.78 AC	ACCUM 2.78 AC	TIME OF CONC. (min)	RAINFALL INTENSITY (mm/hr)	CONTROLLED FLOW* Q (L/s)	PEAK FLOW Q (L/s)	PROPOSED SEWER								
			Total Area	C= 0.20	C = 0.95								TYPE OF PIPE	PIPE SIZE (mm)	PIPE ID (mm)	GRADE (%)	LENGTH (m)	CAPACITY (L/s)	FULL FLOW VELOCITY (m/s)	TIME OF FLOW (min)	PERCENTAGE OF CAPACITY
A1	CB 1	CBMH 2	0.502	0.309	0.193	0.49	0.68	0.68	10.00	96.03		65.4	PVC	375	381.0	0.40	42.8	115.7	1.01	0.70	57%
A2	CBMH 2	CBMH 3	0.182	0.074	0.108	0.65	0.33	1.01	10.70	92.54		93.3	PVC	450	457.2	0.30	21.9	162.9	0.99	0.37	57%
A3	CBMH 3	STMMH 108	0.179	0.076	0.103	0.63	0.31	1.32	11.07	90.84		120.1	PVC	450	457.2	0.30	44.5	162.9	0.99	0.75	74%
A4	CB 4	STMMH 108	0.101	0.093	0.008	0.26	0.07	0.07	10.00	96.03		7.0	PVC	300	304.8	1.00	17.2	100.9	1.38	0.21	7%
	STMMH 108	STMMH 106						1.40	11.82	87.59		122.2	PVC	450	457.2	0.30	46.7	162.9	0.99	0.78	75%
A5	CB 5	STMMH 104	0.925	0.666	0.259	0.41	1.05	1.05	10.00	96.03		101.2	PVC	375	381.0	0.50	9.0	129.3	1.13	0.13	78%
A6	BUILDING	STMMH 102	0.356		0.356	0.95	0.94	0.94	10.00	96.03		90.3	PVC	375	381.0	1.00	5.5	182.9	1.60	0.06	49%
	STMMH 102	STMMH 104						0.94	10.06	95.74		90.0	PVC	375	381.0	1.00	19.8	182.9	1.60	0.21	49%
	STMMH 104	STMMH 106						1.99	10.26	94.69		188.9	PVC	525	533.4	0.30	45.9	245.7	1.10	0.70	77%
	STMMH 106	EX STM CAP						3.39	12.60	84.47		286.3	PVC	600	609.6	0.50	6.1	452.9	1.55	0.07	63%
			2.245	1.218	1.027	0.543															
NOTES: 1) Refer to Novatech Drawing 126012-GP for storm structure designations, storm pipe details and control structure tables. 2) Refer to Novatech Drawing 126012-SWM for the on-site tributary drainage areas										Definitions Q = 2.78 AIR Q = Peak Flow, in Litres per second (L/s) A = Area in hectares (ha) I = Rainfall Intensity (mm/h) R = Runoff Coefficient				Notes: 1) Norfolk County Rainfall-Intensity Curve 2) Min Velocity = 0.75 m/sec. 3) 5 year Intensity = 583.017 / (Time in min + 3.007) ^{0.703}							



COEFFICIENT 'C'				FLOW Q = 2.78 ACl PARKS & PLAYGROUNDS RESIDENTIAL - SINGLE/SEMI COMMERCIAL & INDUSTRIAL										WHERE Q = PEAK FLOW IN LITRES PER SECOND (l/s) A = AREA IN HECTARES (ha) C = RUNOFF COEFFICIENT i = RAINFALL INTENSITY IN MILLIMETERS PER HOUR (mm/hr) RETURN PERIOD 5 YEARS										STORM SEWER DESIGN SHEET NORFOLK COUNTY (BASED ON NORFOLK COUNTY 5-YR STORM)										PROJECT: Dover Coast FILE No. DEL13-124 DESIGNED BY: JR CHECKED BY: LML/J DATE: June 20, 2017									
SEWER LOCATION		AREA				A X C						RAINFALL INTENSITY										PROFILE				VELOCITY (BASED ON ACTUAL FLOWS)																	
STREET	FROM	TO	AREA NUMBER	AREA ha.	TOTAL AREA ha.	RUNOFF COEFF.	INCR AxC	TOTAL SECTION AxC A X C	TOTAL LAT. A X C	TOTAL SEWER A x C	TOTAL SEW. 2.78 x AxC	TIME ENT. SECT. min.	MIN. ACCUM. min.	INTENS. 'I' mm/hr	TOTAL Q l/s	PIPE Dia mm	SLOPE			FINAL SLOPE	N	ACTUAL CAP. l/s	VELOCITY m/s.	LENGTH m	TIME OF FLOW minutes	MANHOLE LOSSES m	SEWER FALL m	INVERT U.S. m	ELEV. D.S. m	Q _{ACT} (m ³ /s)	Pipe Dia. (mm)	Pipe Slope %	Q _{FULL} (m ³ /s)	V _{FULL} (m/s)	Q _{ACT} / Q _{FULL}	V _{ACT} (m/s)							
																	FRICTION %	ENERGY																			E + F %						
Regatta Drive	ST36	ST35	A1	0.649	0.649	0.45	0.292			0.292	0.812	0.00	15.00	76.40	62.04	300	0.412	0.000	0.000	0.412	0.50	0.013	68.38	1.110	47.50	0.71		0.238	189.272	189.035	0.062	300	0.500	0.068	0.967	0.907	1.110						
Regatta Drive	ST35	ST34	A2	0.358	1.007	0.45	0.161	0.292		0.453	1.260	0.71	15.71	74.35	93.68	300	0.939	0.000	0.000	0.939	0.95	0.013	94.25	1.569	44.00	0.47		0.418	189.005	188.587	0.094	300	0.950	0.094	1.333	0.994	1.569						
Regatta Drive	ST34	ST33	A3	0.268	1.275	0.45	0.121	0.453		0.574	1.595	0.47	16.18	73.07	116.54	375	0.442	0.000	0.000	0.442	0.50	0.013	123.96	1.303	33.00	0.42		0.165	188.512	188.347	0.117	375	0.500	0.124	1.122	0.940	1.303						
Regatta Drive	ST33	EX. STMH	A4	0.171	1.446	0.45	0.077	0.574		0.651	1.809	0.42	16.60	71.96	130.18	375	0.552	0.000	0.000	0.552	0.60	0.013	135.79	1.436	30.10	0.35	0.326	0.181	188.317	188.136	0.130	375	0.600	0.136	1.230	0.959	1.436						
															*(includes 453.5 l/s from Phase 1, 289 l/s from SWMF C & 170 l/s (100yr from SWMF C) ref. Vallee design)																												
Schooner Drive	ST10	ST9	A5	0.675	0.675	0.45	0.304			0.304	0.844	0.00	15.00	76.40	64.48	300	0.445	0.000	0.000	0.445	0.50	0.013	68.38	1.124	42.60	0.63		0.213	189.743	189.530	0.064	300	0.500	0.068	0.967	0.943	1.124						
Schooner Drive	ST9	ST8	A6	0.528	1.203	0.45	0.238	0.304		0.541	1.505	0.63	15.63	74.58	112.24	375	0.410	0.000	0.000	0.410	0.40	0.013	110.87	1.182	80.00	1.13		0.320	189.460	189.140	0.112	375	0.400	0.111	1.004	1.012	1.182						
Storm Outlet - SWMF D	EX. STMH	SWMF D			1.446			0.651		0.651	1.809	0.35	16.95	71.07	1041.07	900	0.331	0.000	0.000	0.331	0.40	0.013	1144.93	2.066	113.10	0.91		0.452	187.611	187.130	1.041	900	0.400	1.145	1.800	0.909	2.066						
Schooner Drive	ST13	ST12	A7	0.820	0.820	0.45	0.369			0.369	1.026	0.00	15.00	76.40	78.39	300	0.657	0.000	0.000	0.657	0.66	0.013	78.56	1.308	58.20	0.74		0.384	190.311	189.926	0.078	300	0.660	0.079	1.111	0.998	1.308						
Schooner Drive	ST12	ST11	A8	0.273	1.093	0.45	0.123	0.369		0.492	1.367	0.74	15.74	74.27	101.53	375	0.335	0.000	0.000	0.335	0.40	0.013	110.87	1.155	58.20	0.84		0.233	189.851	189.618	0.102	375	0.400	0.111	1.004	0.916	1.155						
Schooner Drive	ST14	ST11	A9	0.928	0.928	0.45	0.418			0.418	1.161	0.00	15.00	76.40	88.70	375	0.256	0.000	0.000	0.256	0.60	0.013	135.79	1.331	88.10	1.10	0.279	0.529	190.225	189.696	0.089	375	0.600	0.136	1.230	0.653	1.331						
EXTERNAL	EXT.	ST11	EXT.1	6.570	6.570	0.28	1.840			1.840	5.114	45.00	45.00	38.35	196.10	450	0.473	0.000	0.000	0.473	0.50	0.013	201.60	1.486	10.00	0.11	0.279	0.050	189.850	189.800	0.196	450	0.500	0.202	1.267	0.973	1.486						
Storm Outlet - SWMF C	ST11	HW1			8.591					2.749	7.642	0.11	35.38	44.88	342.99	675	0.166	0.000	0.000	0.166	0.65	0.013	677.71	1.911	106.70	0.93		0.694	189.390	188.700	0.343	675	0.650	0.678	1.894	0.506	1.911						
DOVER COAST BOULEVARD	ST7	ST6	A10	0.916	0.916	0.50	0.458			0.458	1.273	0.00	15.00	76.40	97.26	375	0.308	0.000	0.000	0.308	0.50	0.013	123.96	1.245	43.90	0.59		0.220	189.680	189.460	0.097	375	0.500	0.124	1.122	0.785	1.245						
DOVER COAST BOULEVARD	ST6	ST5	A11	0.088	1.004	0.50	0.044	0.458	0.458	0.502	1.396	0.59	15.59	74.69	104.27	375	0.354	0.000	0.000	0.354	0.50	0.013	123.96	1.260	39.90	0.53		0.200	189.430	189.231	0.104	375	0.500	0.124	1.122	0.841	1.260						
DOVER COAST BOULEVARD	STUB	ST5	A12	4.454	4.454	0.45	2.004			2.004	5.572	0.00	20.00	64.31	358.35	600	0.341	0.000	0.000	0.341	0.50	0.013	434.16	1.717	11.10	0.11		0.056	189.065	189.009	0.358	600	0.500	0.434	1.535	0.825	1.717						
DOVER COAST BOULEVARD	ST5	ST4	A13	0.167	5.625	0.50	0.084	2.004	0.502	2.590	7.200	0.11	20.11	64.10	461.50	675	0.301	0.000	0.000	0.301	0.50	0.013	594.39	1.839	72.40	0.66		0.362	188.934	188.572	0.461	675	0.500	0.594	1.661	0.776	1.839						
DOVER COAST BOULEVARD	ST4	ST3	A14	0.165	5.790	0.50	0.083	2.590		2.672	7.429	0.66	20.77	62.84	466.85	675	0.308	0.000	0.000	0.308	0.60	0.013	651.13	1.996	72.40	0.60		0.434	188.542	188.105	0.467	675	0.600	0.651	1.819	0.717	1.996						
DOVER COAST BOULEVARD	STUB	ST3	A15	4.224	4.224	0.45	1.901			1.901	5.284	0.00	20.00	64.31	339.83	600	0.306	0.000	0.000	0.306	0.50	0.013	434.16	1.702	11.10	0.11		0.056	188.236	188.180	0.340	600	0.500	0.434	1.535	0.783	1.702						
DOVER COAST BOULEVARD	STUB	ST3	A16	1.260	1.260	0.73	0.920			0.920	2.557	0.00	15.00	76.40	195.36	450	0.470	0.000	0.000	0.470	1.00	0.013	285.10	1.955	15.40	0.13		0.154	188.484	188.330	0.195	450	1.000	0.285	1.793	0.685	1.955						
DOVER COAST BOULEVARD	ST3	ST1	A17	0.169	11.443	0.50	0.085	0.920	4.573	5.577	15.505	0.11	20.11	64.10	993.82	825	0.480	0.000	0.000	0.480	0.70	0.013	1200.61	2.514	71.10	0.47	0.349	0.498	187.960	187.461	0.994	825	0.700	1.201	2.247	0.828	2.514						
DOVER COAST BOULEVARD	ST2	ST1	A18	0.255	0.255	0.50	0.128			0.128	0.354	0.00	15.00	76.40	27.05	300	0.078	0.000	0.000	0.078	0.50	0.013	68.38	0.892	25.40	0.47	0.349	0.127	187.853	187.726	0.027	300	0.500	0.068	0.967	0.396	0.892						
Storm Outlet - SWMF E	ST1	HW3			11.698			5.577	0.128	5.705	15.860	0.47	20.44	63.46	1006.50	900	0.309	0.000	0.000	0.309	0.45	0.013	1214.39	2.136	15.40	0.12		0.069	187.169	187.100	1.006	900	0.450	1.214	1.909	0.829	2.136						
Schooner Drive	ST20	ST19	A19	0.633	0.633	0.45	0.2																																				

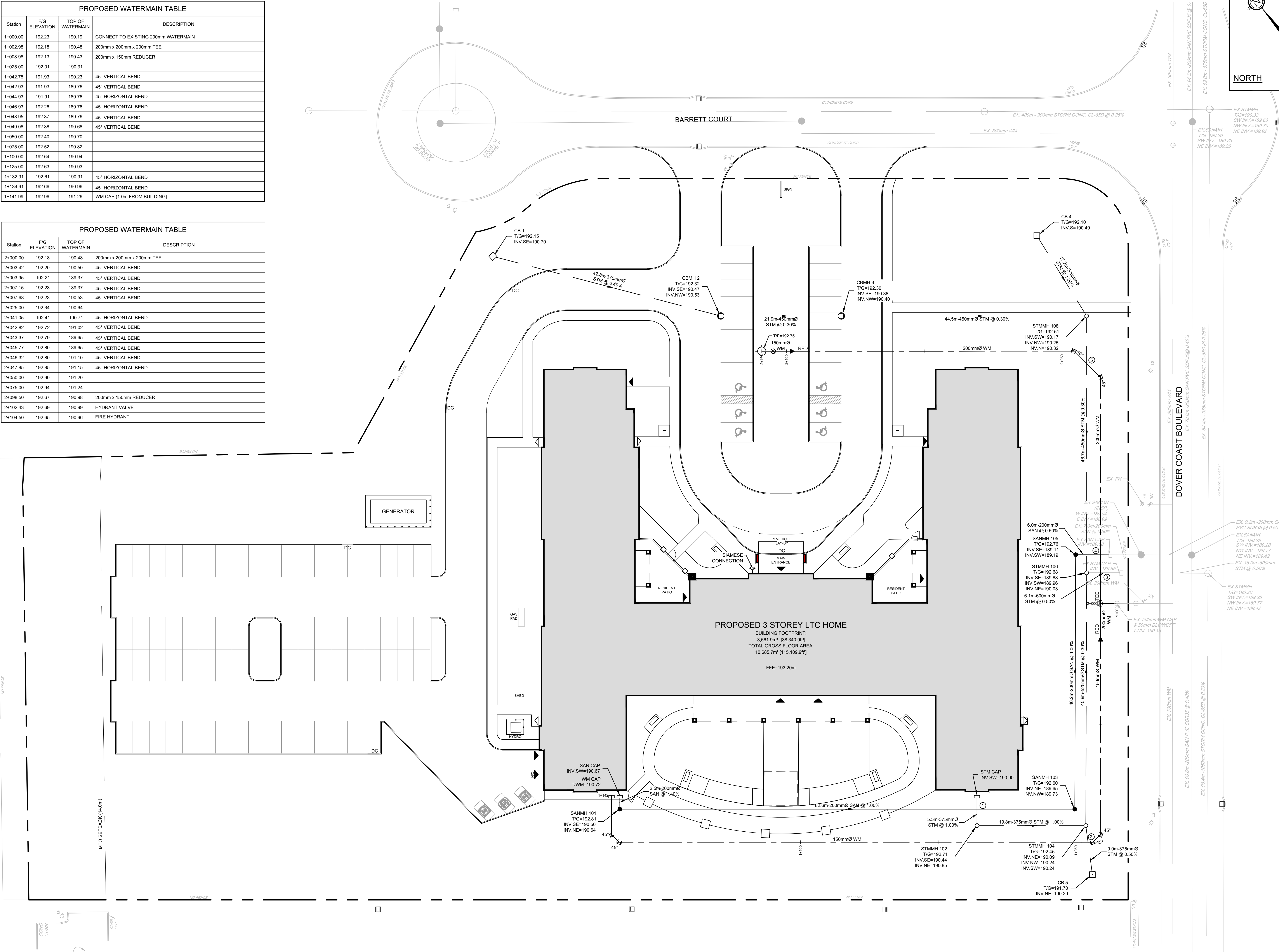
APPENDIX E

Drawings

PIPE CROSSINGS				
CROSSING NO.	SANITARY	STORM	WATERMAIN	CLEARANCE
①	190.10(CBV)	190.88 (INV)	-	0.78m
②	-	190.26 (INV)	189.76 (TWM)	0.50m
③	-	189.87 (INV)	189.37 (TWM)	0.50m
④	189.29 (CBV)	-	190.35 (BWM)	1.06m
⑤	190.15 (INV)	-	186.65 (TWM)	0.50m

PROPOSED WATERMAIN TABLE			
Station	FIG ELEVATION	TOP OF WATERMAIN	DESCRIPTION
1+000.00	192.23	190.19	CONNECT TO EXISTING 200mm WATERMAIN
1+002.98	192.18	190.48	200mm x 200mm x 200mm TEE
1+008.98	192.13	190.43	200mm x 150mm REDUCER
1+025.00	192.01	190.31	
1+042.75	191.93	190.23	45° VERTICAL BEND
1+042.93	191.93	189.76	45° VERTICAL BEND
1+044.93	191.91	189.76	45° HORIZONTAL BEND
1+046.93	192.26	189.76	45° HORIZONTAL BEND
1+048.95	192.37	189.76	45° VERTICAL BEND
1+049.08	192.38	190.68	45° VERTICAL BEND
1+050.00	192.40	190.70	
1+075.00	192.52	190.82	
1+100.00	192.64	190.94	
1+125.00	192.63	190.93	
1+132.91	192.61	190.91	45° HORIZONTAL BEND
1+134.91	192.66	190.96	45° HORIZONTAL BEND
1+141.99	192.96	191.26	WM CAP (1.0m FROM BUILDING)

PROPOSED WATERMAIN TABLE			
Station	FIG ELEVATION	TOP OF WATERMAIN	DESCRIPTION
2+000.00	192.18	190.48	200mm x 200mm x 200mm TEE
2+003.42	192.20	190.50	45° VERTICAL BEND
2+003.95	192.21	189.37	45° VERTICAL BEND
2+007.15	192.23	189.37	45° VERTICAL BEND
2+007.68	192.23	190.53	45° VERTICAL BEND
2+025.00	192.34	190.64	
2+041.05	192.41	190.71	45° HORIZONTAL BEND
2+042.82	192.72	191.02	45° VERTICAL BEND
2+043.37	192.79	189.65	45° VERTICAL BEND
2+045.77	192.80	189.65	45° VERTICAL BEND
2+046.32	192.80	191.10	45° VERTICAL BEND
2+047.85	192.85	191.15	45° HORIZONTAL BEND
2+050.00	192.90	191.20	
2+075.00	192.94	191.24	
2+098.50	192.67	190.98	200mm x 150mm REDUCER
2+102.43	192.69	190.99	HYDRANT VALVE
2+104.50	192.65	190.96	FIRE HYDRANT



LEGEND

- PROPERTY LINE
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED WATER SERVICE
- PROPOSED VALVE AND SERVICE BOX
- PROPOSED CAP
- PROPOSED FIRE HYDRANT
- PROPOSED SIAMESE CONNECTION
- PROPOSED SANITARY SERVICE c/w MANHOLE
- PROPOSED STORM SEWER AND MANHOLE
- PROPOSED BUILDING ENTRANCE
- PROPOSED BUILDING EXIT
- DIRECTION OF FLOW
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED STORM SEWER WITH INSULATION
- PROPOSED WATER METER
- PROPOSED LINE PAINTING
- EXISTING WATERMAIN C/W VALVE & VALVE CHAMBER
- EXISTING HYDRANT C/W VALVE & LEAD
- EXISTING SANITARY MANHOLE & SEWER
- EXISTING STORM MANHOLE & SEWER
- EXISTING CATCHBASIN
- EXISTING SWALE

WATERMAIN NOTES:

- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	701	OPSS
THERMAL INSULATION IN SHALLOW TRENCHES	1109.030	OPSS
HYDRANT INSTALLATION	1105.010	OPSS
WATERMAIN	PVC DR 18	
- SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE COUNTY OF NORFOLK AND THE ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL, RESTORATION, CONNECTIONS AND SHUT-OFFS AT THE MAIN AND ORIFICATION OF THE WATER SYSTEM SHALL BE PERFORMED BY THE CONTRACTOR.
- WATERMAIN SHALL BE MINIMUM 1.7m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. WHERE THE DEPTH OF COVER IS LESS THAN 1.7m, WATERMAIN SHALL BE INSULATED AS PER OPSS 1109.030.
- PROVIDE MINIMUM 0.50m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

GENERAL NOTES:

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE MUNICIPALITY OF NORTH GRENVILLE BEFORE COMMENCING CONSTRUCTION. AN EXCAVATION PERMIT WILL BE REQUIRED FROM THE MUNICIPALITY PRIOR TO ANY WORKS ON PUBLIC PROPERTY.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE. ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$2,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED AND THE COUNTY OF NORFOLK AS THIRD PARTY.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD. ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE COUNTY OF NORFOLK.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ALL ORGANIC MATERIAL AND DEBRIS. ALL CONTAMINATED MATERIAL, IF ANY, SHALL BE DEPOSED OF AT A LICENSED LANDFILL FACILITY.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
- SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES AND GRADING PLAN INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIE ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS, ANY ALIGNMENT CHANGES, AND ALL SURFACE ELEVATION AS BUILT GRADES.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL INFORMATION PROVIDED BY MTE CONSULTANTS INC. DATED MAY 8, 2026. FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO THE SERVING STUDY AND STORMWATER MANAGEMENT REPORT NO. R-2026-041, PREPARED BY NOVATECH.

SEWER NOTES:

- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
STORM / SANITARY MANHOLE (12000)	701.010	OPSD
STORM / SANITARY MANHOLE (15000)	701.011	OPSD
CATCHBASIN (800x500mm)	705.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
SANITARY COVER	401.020	OPSD
SEWER TRENCH	410	OPSS
SANITARY SEWER	PVC SDR 35	
STORM SEWER (<450mmØ)	PVC SDR 35	
STORM SEWER (450mmØ +)	CONC CLASS 650	
SEWER INSULATION SHALLOW TRENCH	1109.030	OPSD
- SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
- SEWER CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES FOR EXAMPLE KOR-A-SEAL, PSK POSITIVE SEAL AND DURASEAL. THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN.
- STORM MANHOLES AND CBMHs ARE TO HAVE 300mm SLUMPS UNLESS OTHERWISE INDICATED.
- SUBDRAIN INVERTS SHOULD BE APPROXIMATELY 300mm BELOW SUBGRADE LEVEL. THE SUBGRADE SURFACE SHOULD BE SHAPED TO PROMOTE WATER FLOW TO THE DRAINAGE LINES.
- CONTRACTOR TO TELEWISE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

SCALE			
1:300			
0 3 6 9 12			
1.	ISSUED FOR SITE PLAN APPLICATION	MAY 15/26	MS
No.	REVISION	DATE	BY

FOR REVIEW ONLY

MS/CV
MS
CV
MS
JLS

DESIGN
CHECKED
DRAWN
CHECKED
APPROVED

PROFESSIONAL ENGINEER
M. SAVIC
100102651
5/15/2026
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

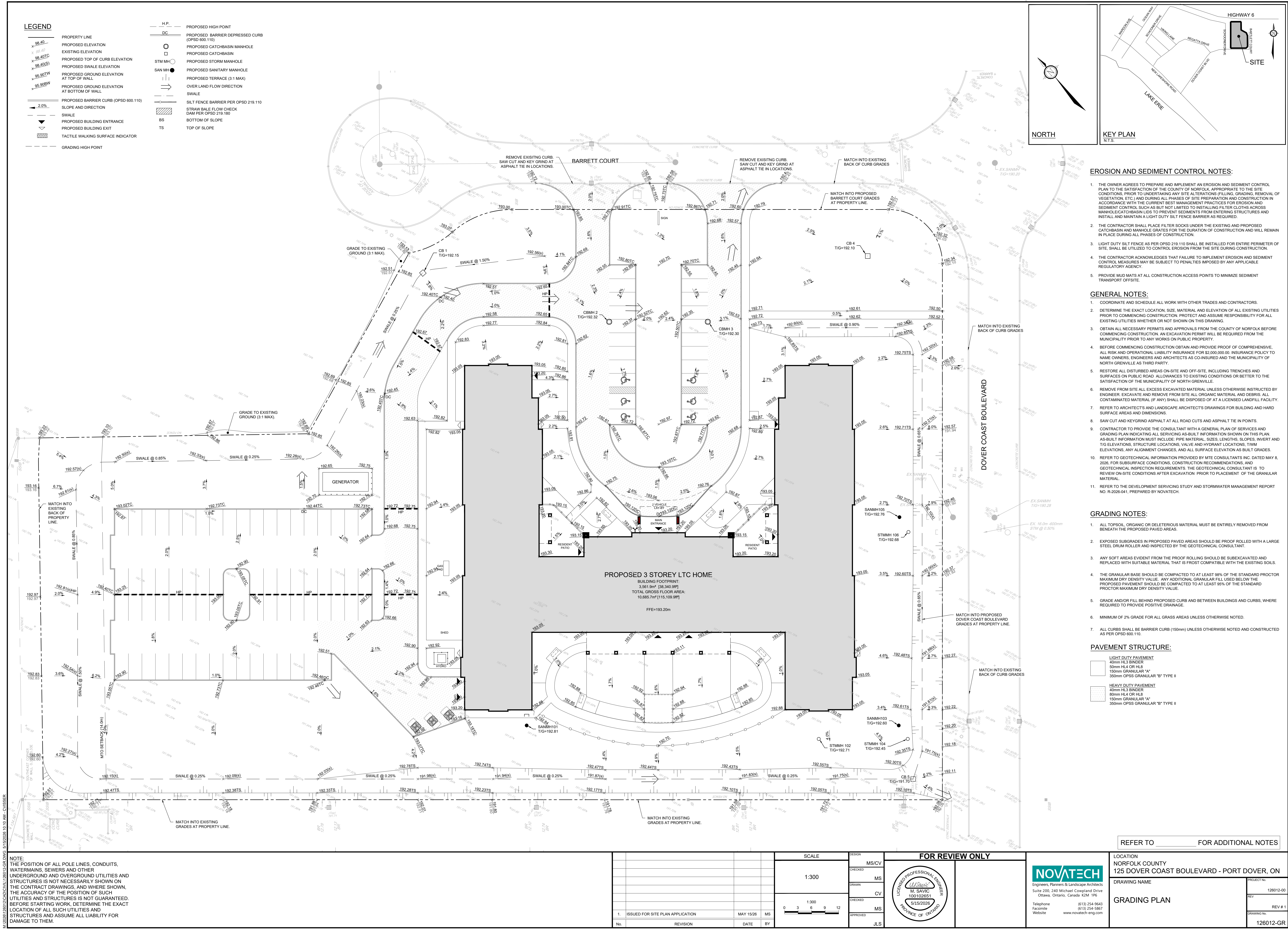
LOCATION
NORFOLK COUNTY
125 DOVER COAST BOULEVARD - PORT DOVER, ON

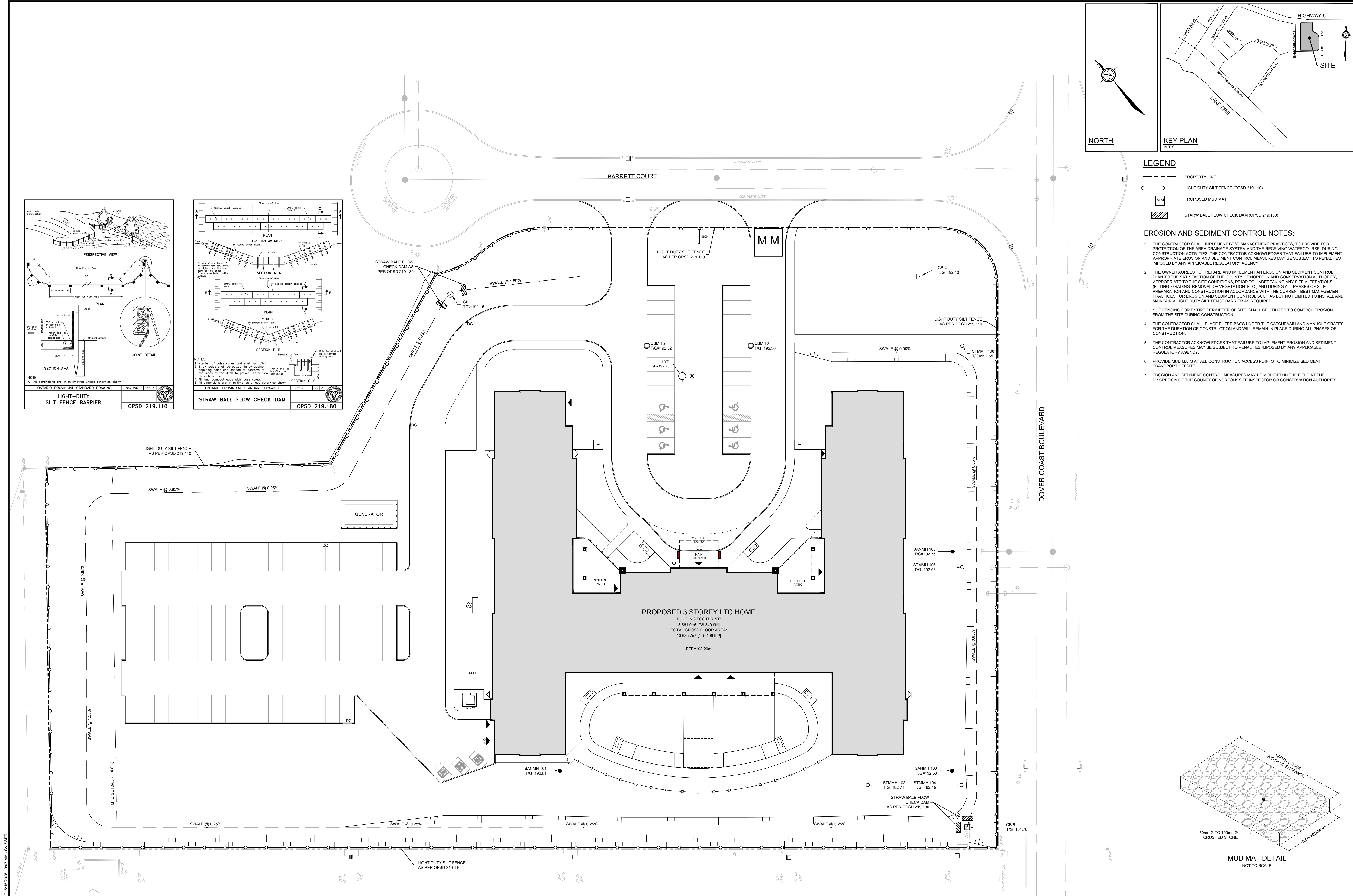
DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No.
126012-00

REV
REV #1

DRAWING No.
126012-GP





NOTE:
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No.	REVISION	DATE	BY
1.	ISSUED FOR SITE PLAN APPLICATION	MAY 15/26	MS

SCALE

1:300

0 3 6 9 12

DESIGN	MS/CV
CHECKED	MS
DRAWN	CV
CHECKED	MS
APPROVED	JLS

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
M. SAVIC
100102651
5/15/2026
PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
NORFOLK COUNTY
125 DOVER COAST BOULEVARD - PORT DOVER, ON

DRAWING NAME
SEDIMENT AND EROSION CONTROL PLAN

PROJECT No.
126012-00

REV
REV #1

DRAWING No.
126012-ESC

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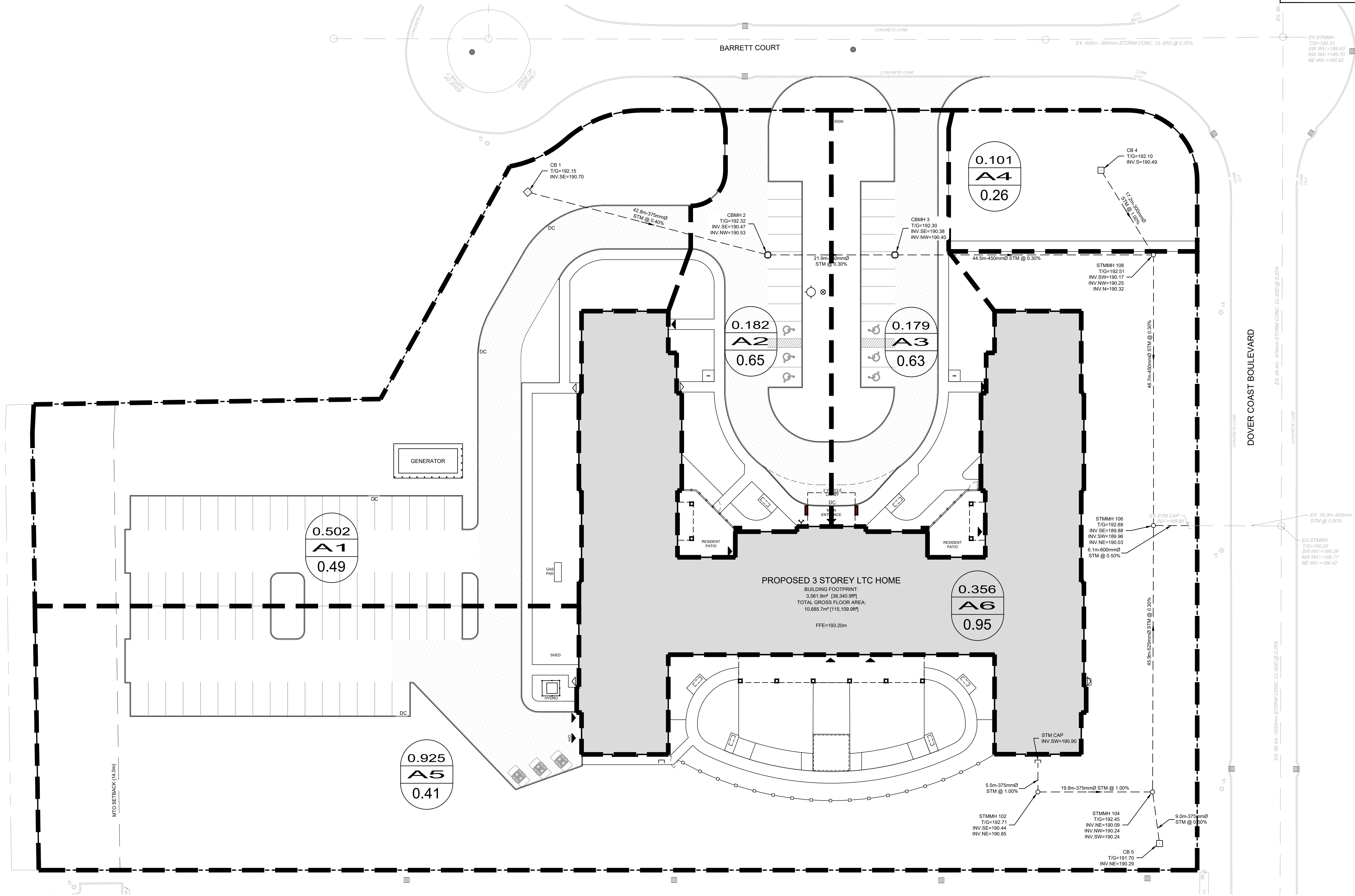
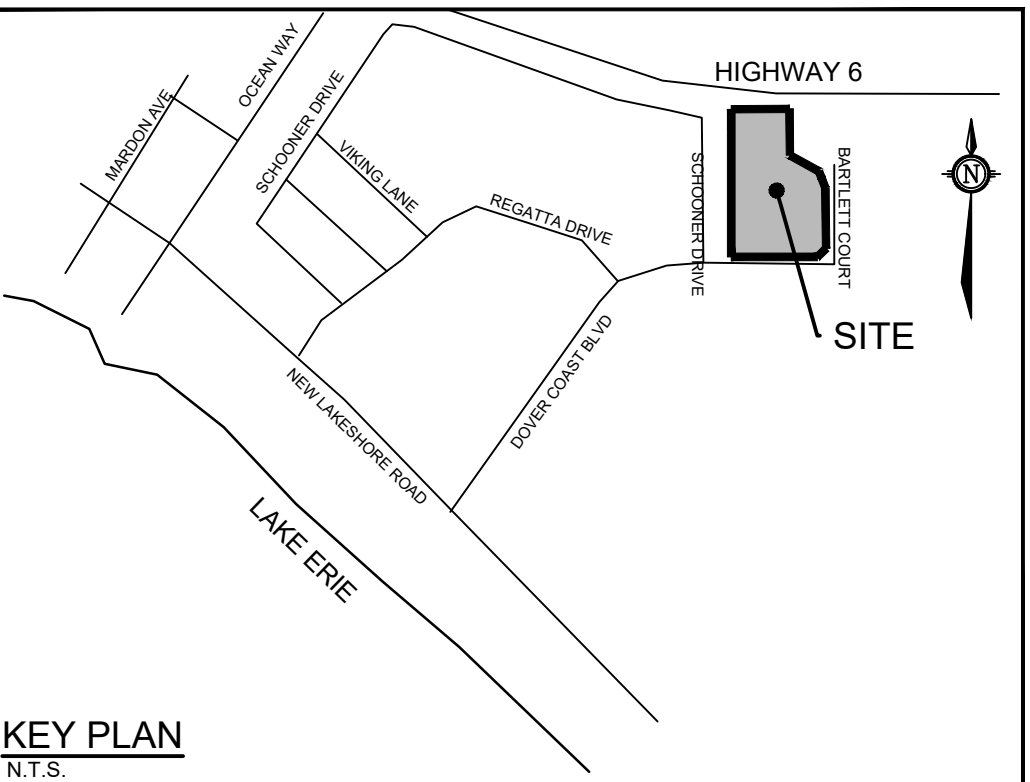
PLANSET 126012 - 10/3/2026 10/3/2026

LEGEND

	DRAINAGE AREA LIMITS		PROPERTY LINE
	POST-DEVELOPMENT AREA ID		EXISTING EDGE OF PAVEMENT
	POST-DEVELOPMENT DRAINAGE AREA (ha)		EXISTING VALVE & VALVE BOX
	1.5 YEAR WEIGHTED RUNOFF COEFFICIENT		EXISTING SERVICE POST
	PROPOSED BARRIER CURB		EXISTING HYDRANT
	PROPOSED DEPRESSED CURB		EXISTING CATCH-BASIN
	PROPOSED STORM MANHOLE		EXISTING CATCH-BASIN/MH
	PROPOSED CATCHBASIN		EXISTING UTILITY POLE
	PROPOSED CATCHBASIN MANHOLE		EXISTING STORM MH & SEWER

NORTH

KEY PLAN
N.T.S.



NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS,
WATERMANS, SEWERS AND OTHER
UNDERGROUND AND OVERGROUND UTILITIES AND
STRUCTURES IS NOT NECESSARILY SHOWN ON
THE CONTRACT DRAWINGS, AND WHERE SHOWN,
THE ACCURACY OF THE POSITION OF SUCH
UTILITIES AND STRUCTURES IS NOT GUARANTEED.
BEFORE STARTING WORK, DETERMINE THE EXACT
LOCATION OF ALL SUCH UTILITIES AND
STRUCTURES AND ASSUME ALL LIABILITY FOR
DAMAGE TO THEM.

1.	ISSUED FOR SITE PLAN APPLICATION	MAY 15/26	MS
No.	REVISION	DATE	BY

SCALE

1:300

0 3 6 9 12

DESIGN

MSCV

CHECKED

MS

DRAWN

CV

CHECKED

MS

APPROVED

JLS

FOR REVIEW ONLY



REFER TO _____ FOR ADDITIONAL NOTES

LOCATION
NORFOLK COUNTY
125 DOVER COAST BOULEVARD - PORT DOVER, ON

DRAWING NAME

STORM DRAINAGE AREA PLAN

PROJECT No.

126012

REV

REV # 1

DRAWING No.

126012-STM

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NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS,
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NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

May 15, 2026

Norfolk County
Planning Department
County Administration Building
50 Colborne Street South
Simcoe, ON N3Y 4H3

Attention: Kendall Wharton, Planner

**Reference: 125 Dover Coast Boulevard, Port Dover, ON
Site Plan Control Application
Our File No.: 126012**

On behalf of Southbridge Health Care LP, Novatech is submitting the enclosed Site Plan Application for the property municipally known as 125 Dover Coast Boulevard in Port Dover, Ontario ("the Subject Site"). The Southbridge proposal involves constructing a 3-storey, 160-bed long-term care home with a gross-floor area of 10,693 m² on the Subject Site. A pre-consultation meeting to discuss the proposal was held on March 25, 2026, with County of Norfolk staff. Following the meeting, further discussions were held with staff to coordinate the requirements for concurrent building permit and site plan control application submissions. This letter provides details of the development proposed for the site and demonstrates the development is consistent with the Provincial Planning Statement, and the County of Norfolk Official Plan including the Lakeshore Special Policy Area Secondary Plan.

Site Location and Description

The Subject Site is an approximately 2.2 ha vacant parcel of serviced land located 500m east of the community of Port Dover within the County of Norfolk. The site has frontage on Dover Coast Boulevard, Barrett Court and Highway 6. The Subject Site is legally described as:

PART LOT 15, CONCESSION 1 WOODHOUSE SUBJECT TO AN EASEMENT IN GROSS AS IN NK115294 NORFOLK COUNTY

The site is surrounded by low-rise residential housing to the west, vacant rural lands on the north side of Highway 6, and vacant lands, including a golf course on other sides. Access to the property would be on Barrett Court via Dover Coast Boulevard, which are two local roads connecting to Highway 6. The site is designated "Urban Residential" in the Norfolk County Official Plan and subject to the Lakeshore Special Policy Area Secondary Plan. The property is zoned "Urban Residential Type 5 (R5)" in the Zoning By-law No. 1-Z-2014, as amended. It is noted that Special Provision "14.886" applies to the subject lands, which permits a long-term care facility as a permitted use in addition to those uses permitted in the R5 zone.

Proposed Development

As indicated on the site plan, a new 3-storey 160-bed long-term care facility with a building footprint of 3,569 m² is proposed to accommodate demands for health services in the community and to meet Ministry of Health and Long-Term Care standards.

The Site Plan has been carefully laid out to comply with zoning requirements. The Site Plan incorporates a combined total of 91 parking spaces, including 6 accessible spaces, with a loading zone and a concrete pad for earth bins situated to the side of the building. The landscaping plan includes coniferous plantings to screen the facility and parking area from residential homes to the rear of the site. Common amenity space for residents will be provided in a secure resident courtyard to the rear of the building. All resident areas will be enclosed with a fence/guard of at least 1.6 in height.

Planning Analysis

The Subject Site is located within the urban settlement area of Port Dover, being an unincorporated community located in Norfolk County. Policies in the Provincial Planning Statement (2024) include focusing growth and development towards settlement areas (Section 2.3.1.1) and supporting economic development and competitiveness (Section 2.8.1). The proposed development is an institutional use, which contributes to the provision of an appropriate mix of uses in the community and provides opportunities for a diversified economic base. The proposed development is consistent with the Provincial Planning Statement (2024).

The Subject Site is designated “Urban Residential” in the Norfolk County Official Plan (OP), which applies to the urban areas of the County. The Site is subject to the Lakeshore Special Policy Area Secondary Plan (LSPA). The LSPA and supporting community guidelines address the special lakeshore attributes and the unique local land use arrangements to ensure the community, environmental and economic sustainability of the County’s waterfront.

The LSPA states that the two urban areas of Port Dover and Port Rowan shall accommodate a range of residential, commercial, employment, institutional, entertainment, cultural and health and social service activities. Section 6.5 of the County OP states that urban areas within the County will continue to function as the focal points for growth and development activity, and that urban areas should incorporate a concentration of community services for the County, including social, cultural, entertainment, health, educational and other supporting facilities.

Senior citizens homes include senior citizens’ homes or similar housing facilities for senior citizens including nursing homes are permitted in accordance with the medium density residential policies for the designation. The development will incorporate and has been designed to satisfy the medium density residential land use policies. The proposed development within an urban settlement area meets the intent of the County OP.

The property is zoned “Urban Residential Type 5 (R5)” in the Zoning By-law No. 1-Z-2014, as amended. It is noted that Special Provision “14.886” applies to the subject lands, which permits a long-term care facility as a permitted use in addition to those uses permitted in the R5 zone. The proposed new facility and site plan, prepared by Lawrence Architects, has been designed to comply with all applicable zoning provisions and to provide a functional layout for the proposed use.

Conclusion

The proposed long-term care facility is consistent with the Provincial Planning Statement, is in conformity with the *County of Norfolk Official Plan* and is in compliance with *Zoning By-law 1-Z-2014*. The proposed development is considered desirable for the use of the land and represents good land use planning.

The following documents are being submitted in relation to the application:

- Completed Site Plan Control Application Form
- Architectural Package (Issued for Site Plan Control) prepared by Lawrence Architects dated May 2026
- Plan 37R-11575 prepared by KRCMAR Surveyors Ltd. dated August 29, 2022
- Servicing and Stormwater Management Report prepared by Novatech dated May 15, 2026
- Traffic Impact Study Brief prepared by Novatech dated May 2026
- Geotechnical Investigation prepared by MTE Consultants Inc. dated May 8, 2026
- Landscape Plan - prepared by Novatech dated May 15, 2026
- Grading Plan - prepared by Novatech dated May 15, 2026
- General Plan of Services prepared by Novatech dated May 15, 2026
- Storm Drainage Area Plan – prepared by Novatech dated May 15, 2026
- Sediment and Erosion Control Plan prepared by Novatech dated May 15, 2026

Yours truly,

NOVATECH



Devin Rajala
Planner



Steve Pentz, MCIP, RPP
Senior Project Manager

Cc: Kathy Kakish, Director – Planning and Real Estate Southbridge Health Care LP
Brandon Lawrence, Director – Lawrence Architects



Respond By

File Number SPPL2026106

Norfolk County has received a development application concerning lands within your jurisdiction. To assist us in preparing a recommendation, we would appreciate your comments on the application. Please provide your comments and conditions by adding them to CityView Reviews through the Portal or Workspace. An agency shall be considered as having no objection to an application if it does not reply within the time limit.

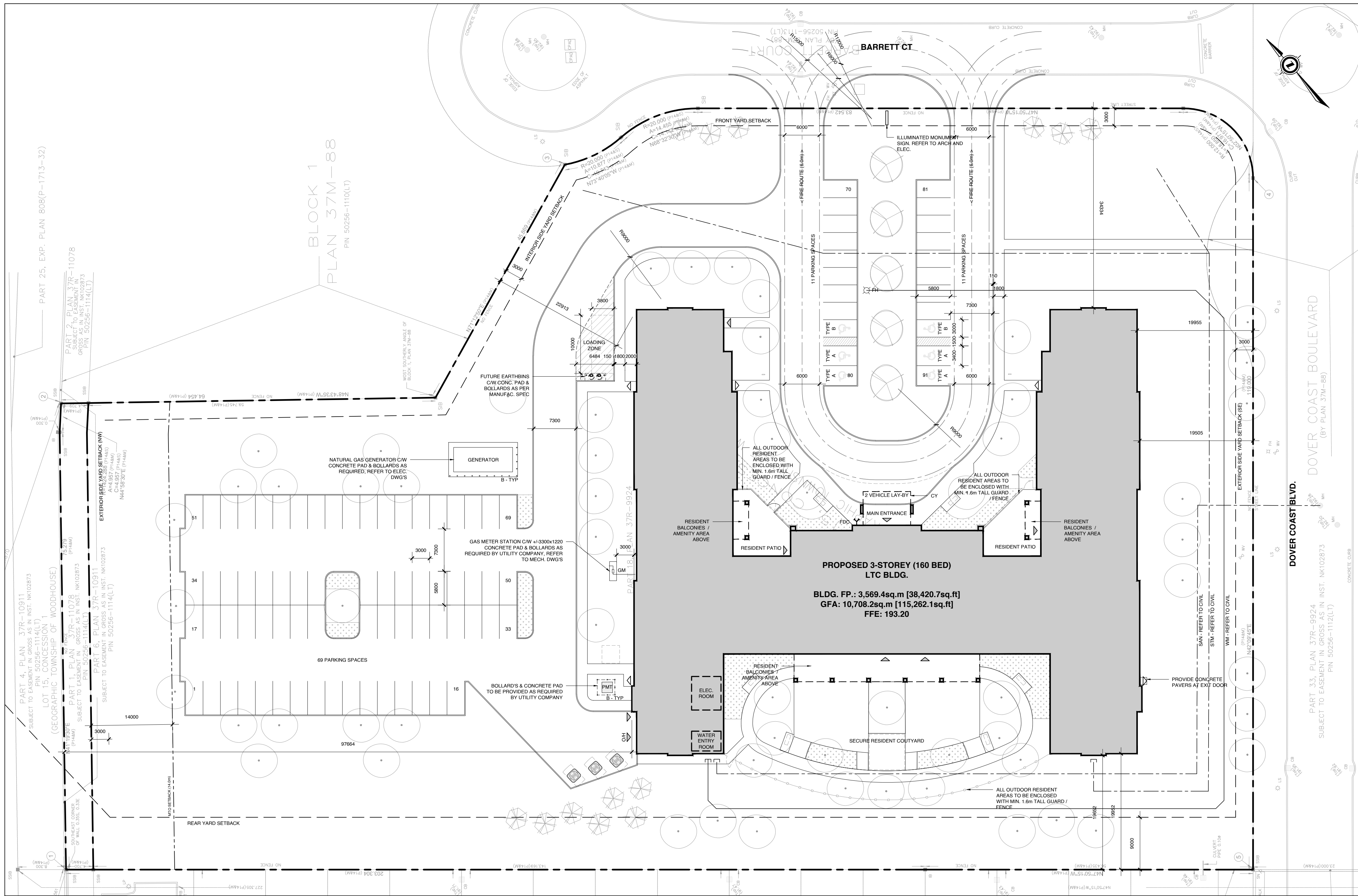
Thank you.

Date	
Related File Number	
Roll Number	3310337040190310000
Location Description	WDH CON 1 PT LOT 15 RP 37R9924, PT PARTS 18 31 32 RP 37R10911, PARTS 1 AND 2 PT PARTS 6 RP 37, PART 1 PT PARTS 3 8, 9.67AC FR D
Applicant	Devin Rajala 240 Michael Cowpland Drive, Suite 200 Ottawa, ON K2M 1P6
Owner	1000246784 ONTARIO INC C/O REVERA INC BAY ADELAIDE CENTRE 2010-22 ADELA TORONTO, ON M5H 4E3

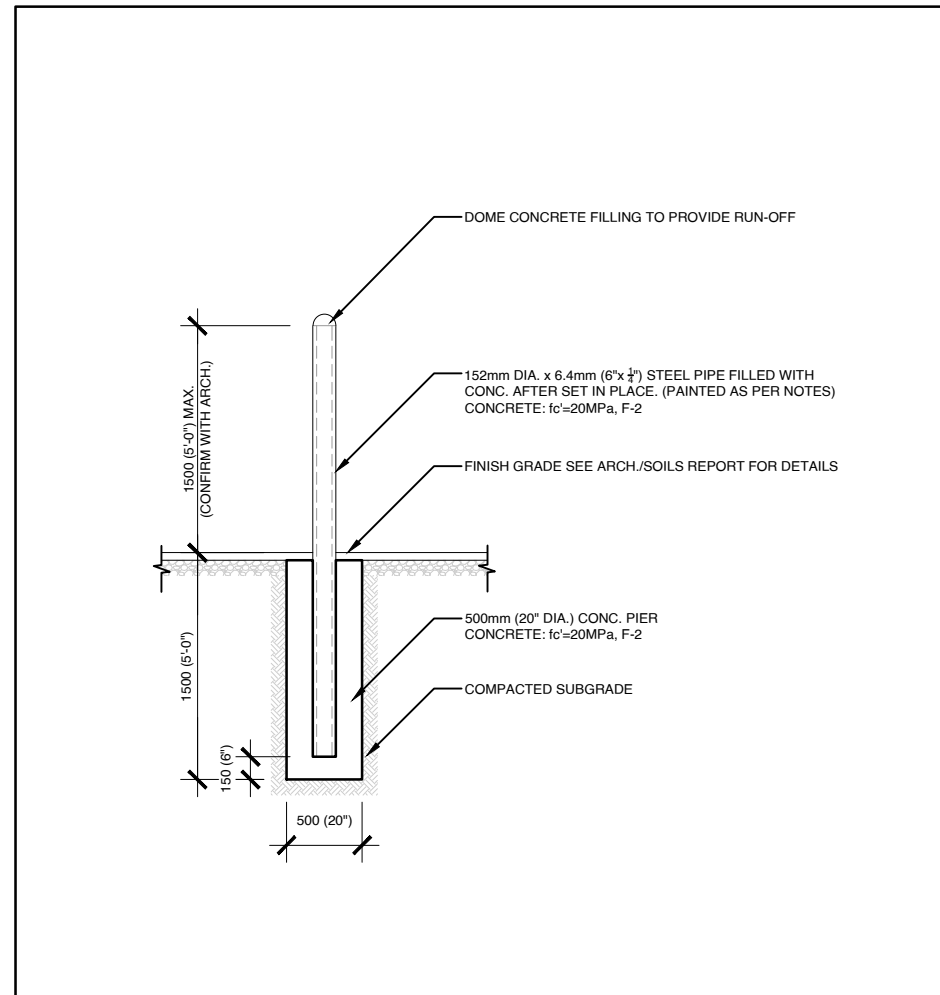
To view this application please follow the link:

Purpose and Effect

An application has been received to



01 PROPOSED SITE PLAN
A1.0 SCALE: 1:400



02 TYPICAL BOLLARD @ GRADE DETAIL
A1.0 SCALE: 1:50

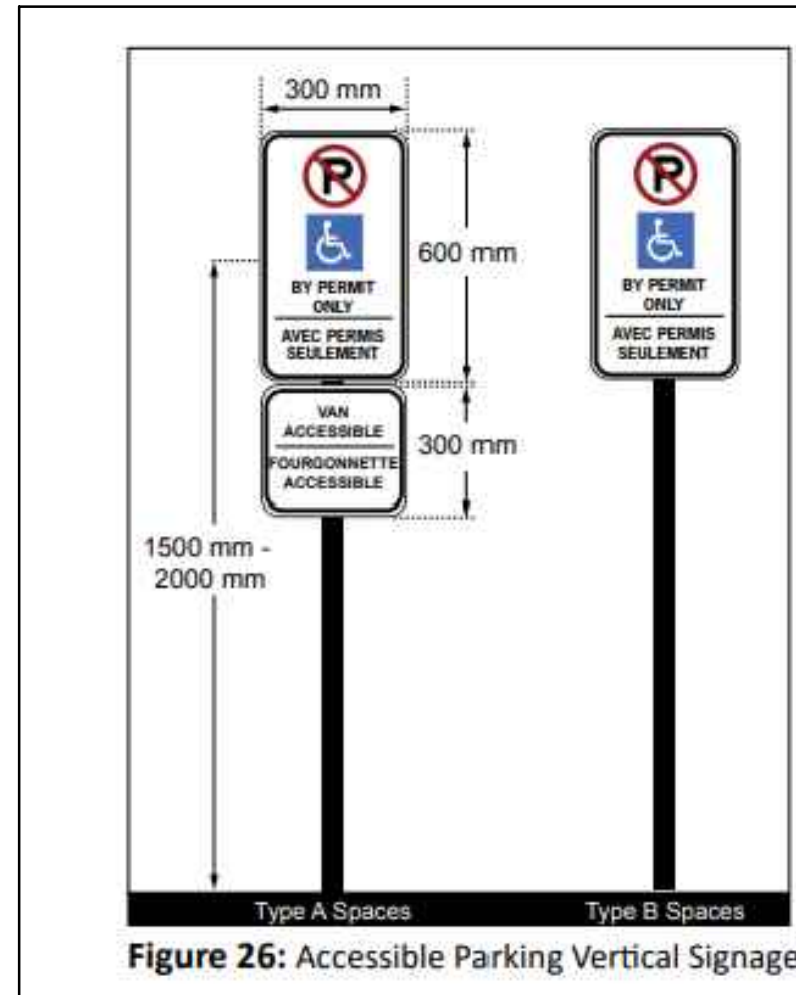


Figure 26: Accessible Parking Vertical Signage

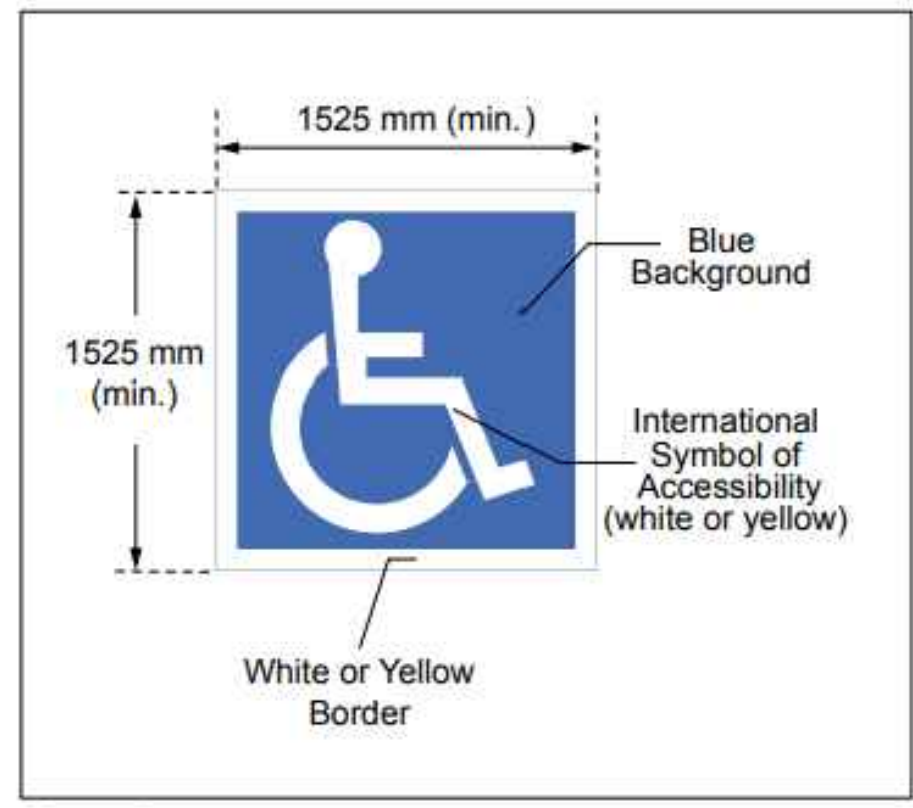


Figure 27: Accessible Parking Pavement Marking

03 ACCESSIBLE PARKING SIGNAGE DETAIL
A1.0 SCALE: NTS



04 KEY PLAN
A1.0 SCALE: N.T.S.

PROPERTY LEGAL DESCRIPTION		
PLAN OF SURVEY OF		
PART OF LOT 15,		
CONCESSION 1		
GEOGRAPHIC TOWNSHIP OF WOODHOUSE		
NORFOLK COUNTY		
Prepared by KRCMAR Surveyors Ltd. Dated August 29, 2022		
BUILDING AREAS	SQ.M.	SQ.FT.
BUILDING FOOTPRINT	3,569.4m ²	38,420.7ft ²
GROSS FLOOR AREA:		
GROUND FLOOR	3,569.4m ²	38,420.7ft ²
SECOND FLOOR	3,569.4m ²	38,420.7ft ²
THIRD FLOOR	3,569.4m ²	38,420.7ft ²
TOTAL	10,708.2m ²	115,262.1ft ²
PROJECT ZONING REVIEW/STATISTICS		
MUNICIPALITY:	NORFOLK COUNTY	
MUNICIPAL ADDRESS:	125 DOVER COAST BLVD., PORT DOVER, ON	
REGISTERED OWNER:	SOUTHBIDGE CARE HOMES	
LOT AREA:	22,382.1m ² (5.5 ACRES)	
ZONING ANALYSIS	R5 - URBAN RESIDENTIAL TYPE 5 ZONE (14.880)	
NORFOLK COUNTY	3-STORY LTC HOME (160 BEDS)	
ZONE:		
PROPOSED USE:		

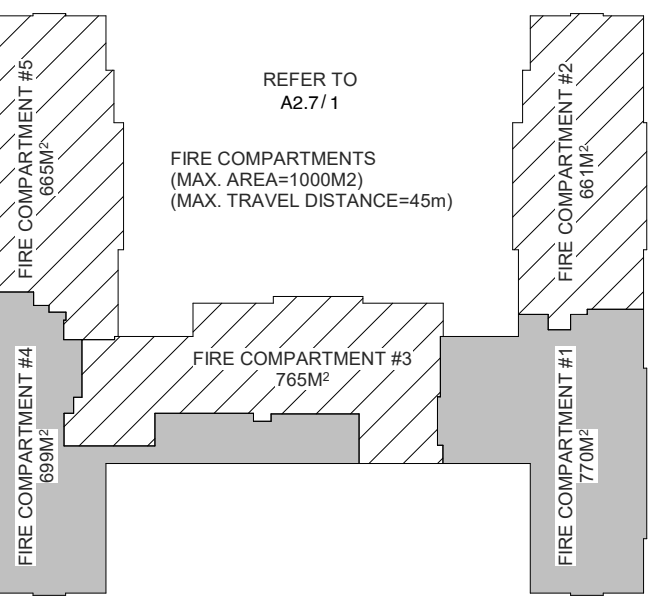
ZONING MECHANISM (IL9)	REQUIRED	PROVIDED
MINIMUM LOT AREA	N/A	22,382.1m ²
MINIMUM LOT FRONTAGE	30.0m	83.7m
MAXIMUM BUILDING HEIGHT	3-STORIES	3-STORIES (13.0m)
MINIMUM FRONT YARD SETBACK	3.0m	34.3m
MINIMUM REAR YARD SETBACK	9.0m	19.6m
MINIMUM INTERIOR SIDE YARD SETBACK	3.0m	22.9m
MINIMUM EXTERIOR SIDE YARD SETBACK (NW)	3.0m	97.6m
MINIMUM EXTERIOR SIDE YARD SETBACK (SE)	3.0m	19.5m
% OF SOFT LANDSCAPING	-	58%
PARKING & LOADING SPACE PROVISIONS		
MINIMUM REQUIRED VEHICLE PARKING SPACES	LONG-TERM CARE FACILITY (160 BEDS) = 40 SPACES 1 PER 4 BEDS	40 SPACES
PROVIDED PARKING	REGULAR SPACES (NEW)	= 40 SPACES
	ACCESSIBLE SPACE (TYPE A)	= 1 SPACE
	ACCESSIBLE SPACE (TYPE B)	= 1 SPACE
	MINIMUM VISITOR PARKING	= 0 SPACES
	TOTAL	= 42 SPACES
MINIMUM AISLE WIDTH	PARKING LOT: 7.3m	7.3m
MINIMUM PARKING SPACE DIMENSIONS	LENGTH: 5.8m WIDTH: 3.0m	LENGTH: 5.8m WIDTH: 3.0m
MINIMUM WIDTH OF DRIVEWAY ACCESSING LOADING SPACE	SINGLE TRAFFIC LANE: 7.3m	7.3m
MINIMUM WIDTH OF LOADING SPACE	3.0m	3.8m
MINIMUM LENGTH OF LOADING SPACE	10.0m	10.0m

SITE PLAN NOTES	NOTE
(E)AS	EXISTING ASPHALT SURFACE - REFER TO SURVEY
(E)BU	EXISTING BUSHES - REFER TO SURVEY
(E)CSW	EXISTING CONCRETE CURB - REFER TO SURVEY
(E)GSW	EXISTING CONCRETE SIDEWALK - REFER TO SURVEY
(E)OHW	EXISTING OVERHEAD UTILITY WIRES - REFER TO SURVEY
(E)RW	EXISTING RETAINING WALL - REFER TO SURVEY
(E)T	EXISTING TREE - REFER TO SURVEY
(E)TR	EXISTING TREE TO BE REMOVED - REFER TO SURVEY
B	BOLLARD: 6MM X 125MM DIA. X 1050MM PAINTED GALVANIZED STEEL BOLLARD C/W WELDED CAP AND (6MM X 150MM BASE PLATE WITH 4 BOLT HOLES, SECURE TO PAVEMENT OR SIDEWALK AT LOCATIONS INDICATED WITH 16MM DIA. GALVANIZED CONCRETE OR ASPHALT ANCHORS DEPENDANT ON LOCATION.
BFPS	PROVIDE VERTICALLY-MOUNTED SIGN, MINIMUM 300MM WIDE X 600MM HIGH, MARKED WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY. MOUNT NOT LESS THAN 150MM ABOVE GRADE AND NOT MORE THAN 200MM ABOVE GRADE. ENSURE TONAL CONTRAST BETWEEN BP PARKING SIGN AND BACKGROUND ENVIRONMENT. PROVIDE INFORMATION TEXT COMPLIANT WITH CITY OF OTTAWA BY LAW REQUIREMENTS. PROVIDE ADDITIONAL BILINGUAL SIGNAGE THAT IDENTIFIES TYPE "A" SPACES AS "VAN ACCESSIBLE/ FOURGONNETTE ACCESSIBLE".
BR	BIKE RACK - REFER TO LANDSCAPE
CC	CONCRETE CURB - REFER TO CIVIL
CP	CONCRETE PAD - REFER TO CIVIL
CSW	CONCRETE SIDEWALK - REFER TO CIVIL
CY	CANOPY C/W RECESSED POT LIGHTS - REFER TO ELECTRICAL
DC	DEPRESSED CONCRETE CURB - REFER TO CIVIL
FDC	FIRE DEPARTMENT CONNECTION / SIAMESE CONNECTION - REFER TO CIVIL & MECH.
FH	FIRE HYDRANT - REFER TO CIVIL
GM	GAS METER - REFER TO SITE SERVICING
PMT	PAD MOUNT TRANSFORMER - REFER TO ELEC.
PP	PAINTED PARKING LINES, TYP. - REFER TO CIVIL
RSL	ROOF STORM LINE - REFER TO CIVIL
RW	RETAINING WALL - REFER TO CIVIL
SL	SANITARY LINE - REFER TO CIVIL
STL	STORM LINE - REFER TO CIVIL
SW	SWALE - REFER TO CIVIL
TWSI	TACTILE WALKING SURFACE INDICATOR (TWSI), FULL WIDTH OF CURB RAMP, RECESSED TO BE FLUSH WITH CONCRETE WALKING SURFACE - REFER TO CIVIL
WTS	WATER SERVICE - REFER TO CIVIL
WTL	WEAVING TILE STORM LINE - REFER TO CIVIL

SITE PLAN SYMBOLS	
DN	NEW OVERHEAD DOOR
DN	NEW DOOR / ENTRANCE
DN	NEW EXIT
DN	BICYCLE PARKING SPACE (1.8Mx0.6M)
DN	NO PARKING LINES
DN	PARKING STALL COUNT PER ROW
DN	NEW SIGN, REFER TO SIGN LEGEND
DN	FIRE ROUTE SIGN
DN	STREET LIGHT
DN	DESIGNATED ACCESSIBLE PARKING SPACE AS PER AQDA STANDARDS
DN	VISITOR PARKING
DN	TWO WAY TRAFFIC
DN	DEPRESSED CURB (DC)
DN	TACTILE WALKING SURFACE INDICATORS (TWSI)
DN	PROPERTY LINE
DN	MINIMUM SETBACKS (ZONING)
DN	NEW CONSTRUCTION
DN	EXISTING BUILDINGS
DN	SOFT LANDSCAPING
DN	CONCRETE SIDEWALK
DN	BUILDING MOUNTED LIGHTS REFER TO ELECTRICAL DWGS
DN	INDICATION OF COMPACT PARKING SPACES

- NOTES:
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 - DO NOT SCALE DRAWINGS.
 - ALL SUB-CONTRACTORS TO TAKE THEIR OWN ON-SITE MEASUREMENTS AND BE RESPONSIBLE FOR THEIR ACCURACY.
 - NOTIFY LAWRENCE ARCHITECTS INC. FOR ANY ERRORS AND/OR OMISSIONS PRIOR TO START OF WORK.

No.	DATE	REVISION
04	2026.05.13	ISSUED FOR SPC
03	2026.03.06	ISSUED FOR LTC PRELIMINARY PLAN SUBMISSION
02	2026.02.13	ISSUED PRE-CONSULTATION
01	2026.02.10	ISSUED FOR REVIEW





LAWRENCE
ARCHITECTS

T: (613) 739.7770
E: INFO@LAWRENCEARC.COM

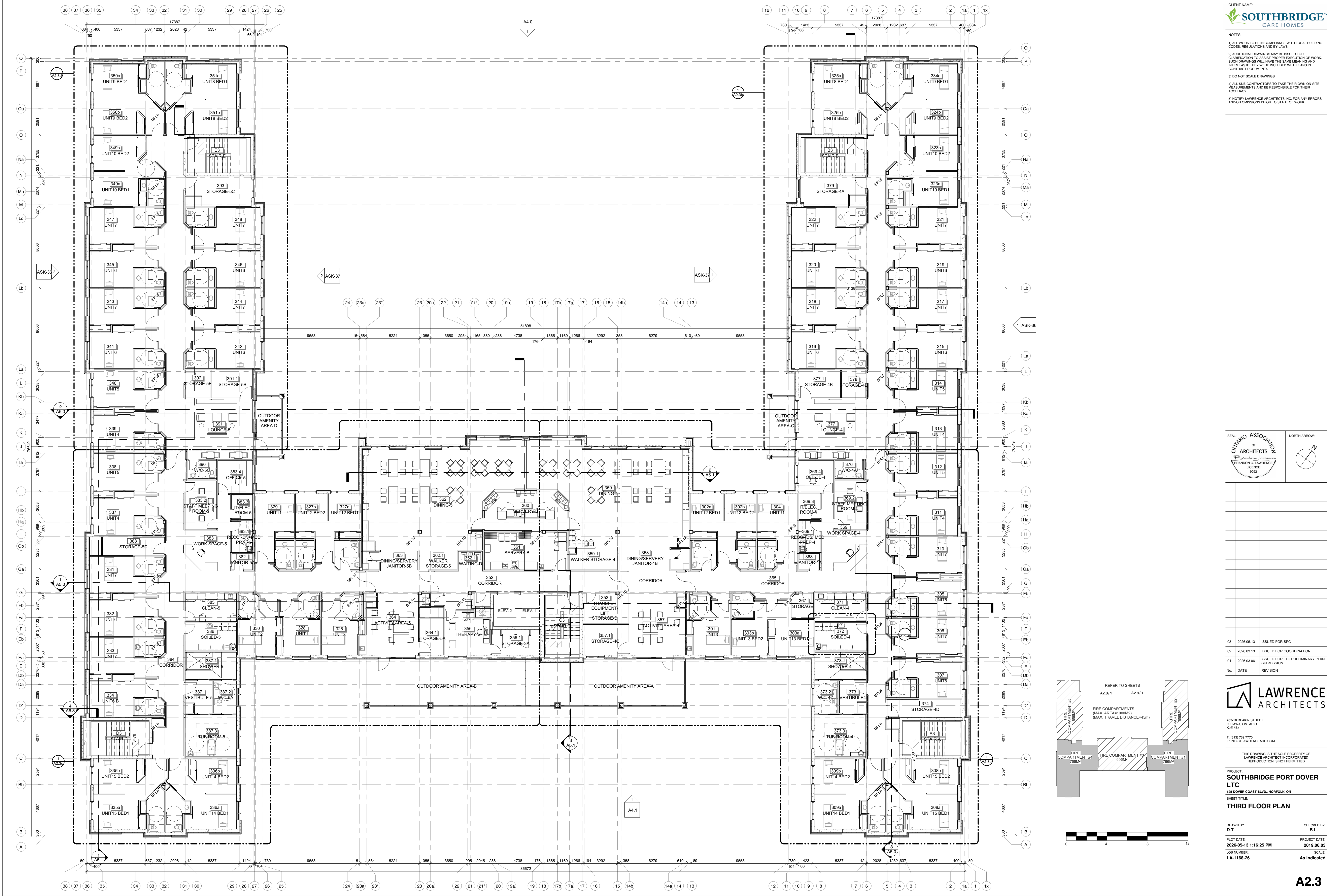
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PROJECT:
**SOUTHBRIDGE PORT DOVER
LTC**
125 DOVER COAST BLVD., NORFOLK, ON

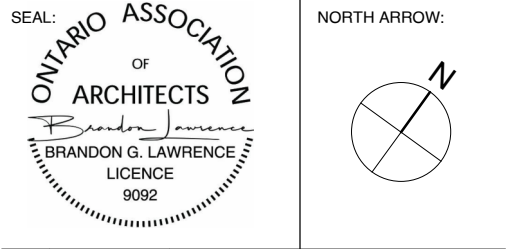
SHEET TITLE:
SECOND FLOOR PLAN

DRAWN BY: DT CHECKED BY: BJ

PLOT DATE:	PROJECT DATE:
2026-05-13 1:16:20 PM	2019.06.03
JOB NUMBER:	SCALE:
LA-1168-26	As indicated



- NOTES:
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No.	DATE	REVISION
03	2026.05.13	ISSUED FOR SPC
02	2026.03.13	ISSUED FOR LTC SUBMISSION
01	2026.03.06	ISSUED FOR LTC PRELIMINARY PLAN SUBMISSION



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PROJECT:
**SOUTHBRIDGE PORT DOVER
LTC**
125 DOVER COAST BLVD., NORFOLK, ON
SHEET TITLE:
THIRD FLOOR PLAN

DRAWN BY:
D.T.

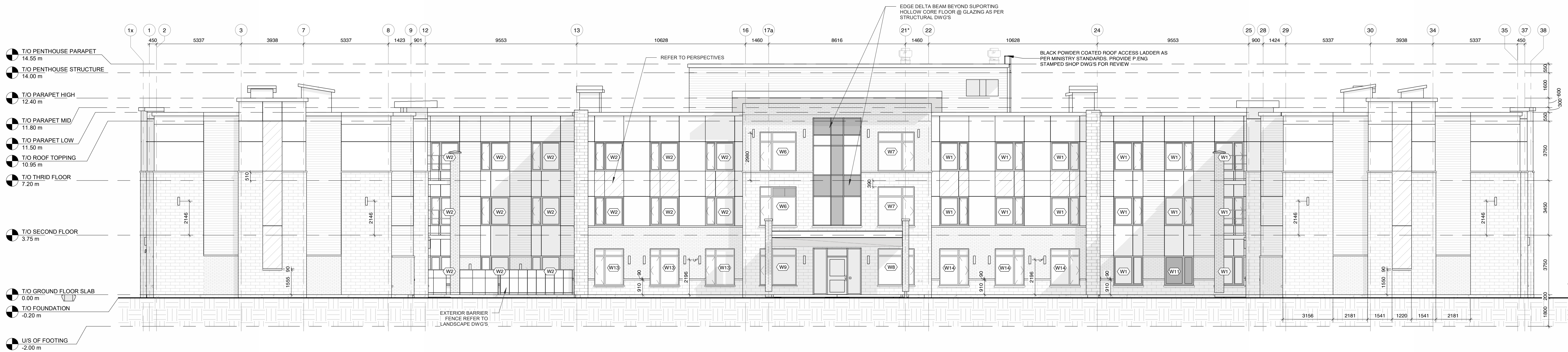
CHECKED BY:
B.L.

PLOT DATE:
2026-05-13 1:16:25 PM

PROJECT DATE:
2019.06.03

JOB NUMBER:
LA-1168-26

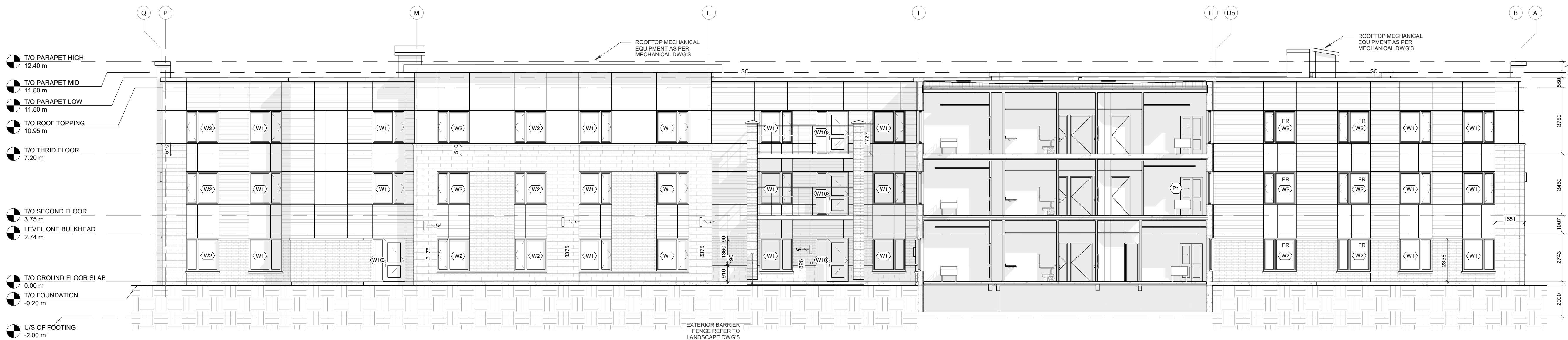
SCALE:
As Indicated



1 NORTH (FRONT) ELEVATION
A4.0 1 : 125



2 WEST (SIDE) ELEVATION
A4.0 1 : 125

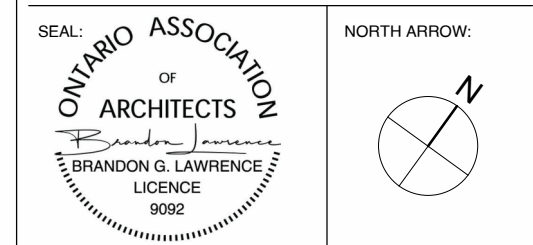


3 WEST INTERIOR ELEVATION
A4.0 1 : 125

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KEYNOTES-ELEVATION	
NOTE NUMBER	NOTE TEXT

ELEVATION LEGEND	
	BLUE STUCCO
	SPANDREL PANEL
	FR FROSTED GLASS
	SC SCUPPER



03	2026.05.13	ISSUED FOR SPC
02	2026.03.13	ISSUED FOR COORDINATION
01	2026.03.06	ISSUED FOR LTC PRELIMINARY PLAN SUBMISSION
No.	DATE	REVISION



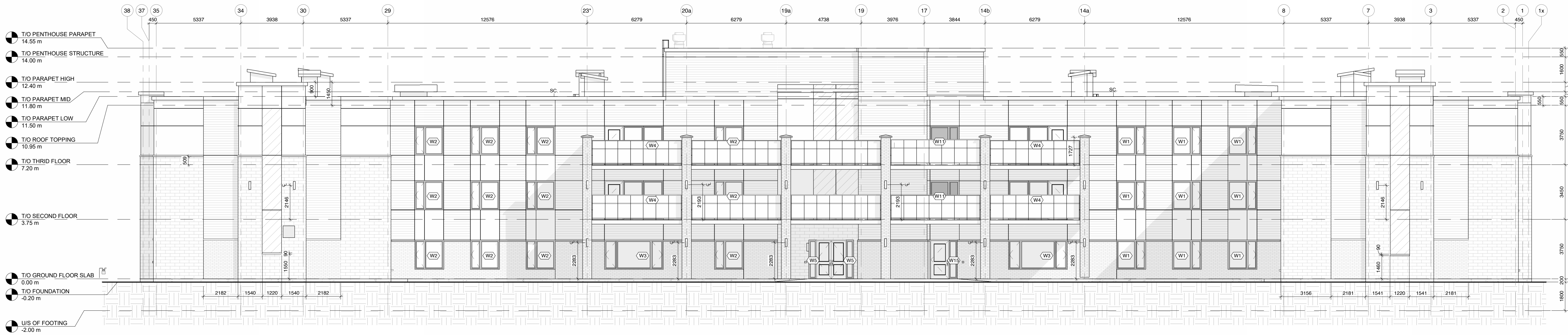
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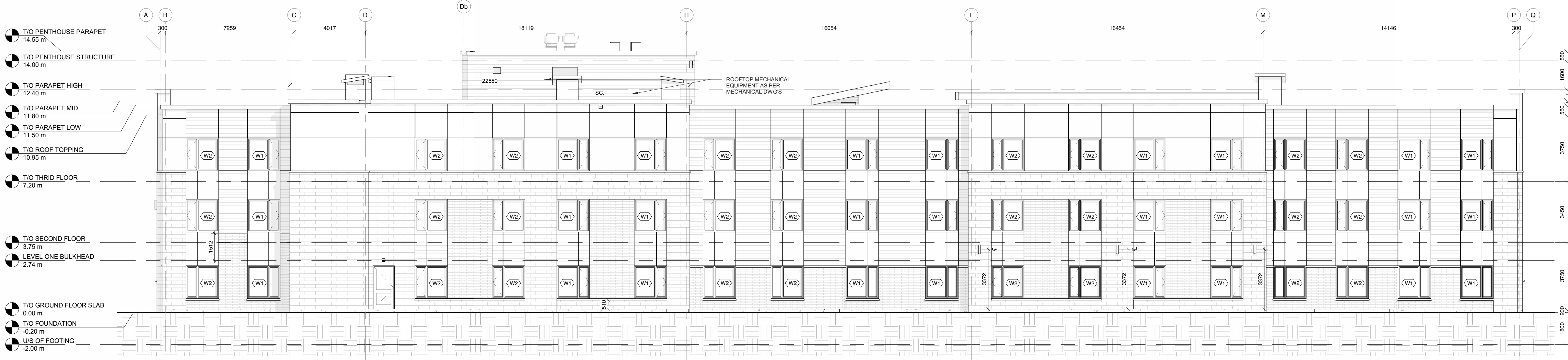
PROJECT:
**SOUTHBRIDGE PORT DOVER
LTC**
125 DOVER COAST BLVD., NORFOLK, ON
SHEET TITLE:
EXTERIOR ELEVATIONS

DRAWN BY: D.T.	CHECKED BY: B.L.
PLOT DATE: 2026-05-13 9:27:55 AM	PROJECT DATE: 2019.06.03
JOB NUMBER: LA-1168-26	SCALE: As indicated

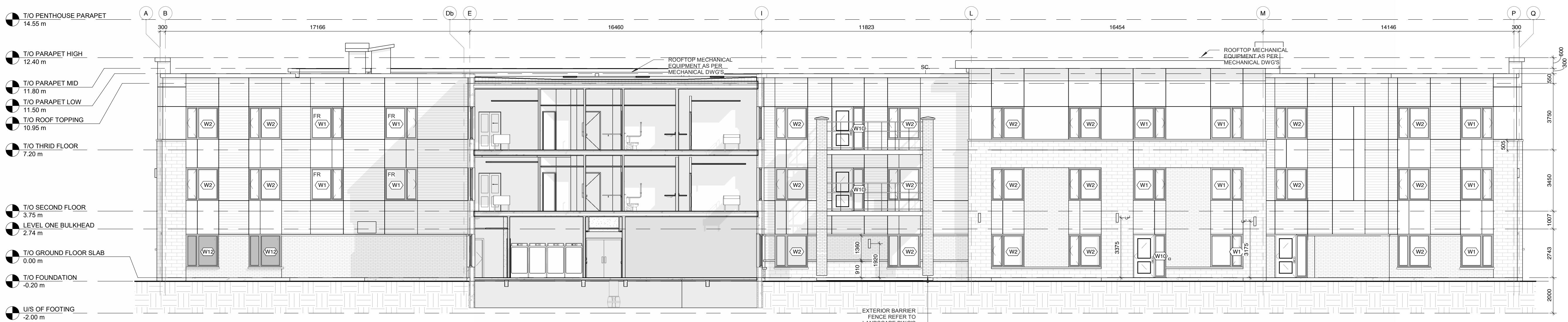




1 SOUTH (REAR) ELEVATION
A4.1 1 : 125



2 EAST (SIDE) ELEVATION
A4.1 1 : 125

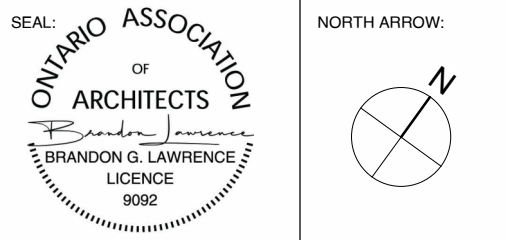


3 EAST INTERIOR ELEVATION
A4.1 1 : 125

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KEYNOTES-ELEVATION	
NOTE NUMBER	NOTE TEXT

ELEVATION LEGEND	
	BLUE STUCCO
	SPANDREL PANEL
	FROSTED GLASS
	SCUPPER



03	2026.05.13	ISSUED FOR SPC
02	2026.03.13	ISSUED FOR COORDINATION
01	2026.03.06	ISSUED FOR LTC PRELIMINARY PLAN SUBMISSION

No.	DATE	REVISION
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PROJECT:
**SOUTHBRIDGE PORT DOVER
LTC**
125 DOVER COAST BLVD., NORFOLK, ON

SHEET TITLE:
EXTERIOR ELEVATIONS

DRAWN BY: D.T.	CHECKED BY: B.L.
PLOT DATE: 2026-05-13 9:28:11 AM	PROJECT DATE: 2019.06.03
JOB NUMBER: LA-1168-26	SCALE: As indicated



37R2022E-4519

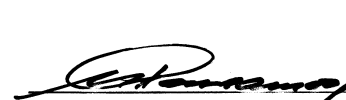
I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT.

PLAN 37R-11575

RECEIVED AND DEPOSITED

DATE AUGUST 29, 2022

DATE November 16, 2022


S.N. RAMSAMOOJ
ONTARIO LAND SURVEYOR


R. COLEMAN
REPRESENTATIVE FOR LAND REGISTRAR FOR THE LAND TITLES DIVISION NORFOLK COUNTY (NO.37)

SCHEDULE

PART	LOT	CONCESSION	PIN	AREA(ha)
1	PART OF LOT 15	1	ALL OF PIN 50256-1119(LT)	2.2446
2				0.0377

PART 2 IS SUBJECT TO EASEMENT IN GROSS AS IN NK115294

PLAN OF SURVEY OF
PART OF LOT 15
CONCESSION 1
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)
NORFOLK COUNTY

SCALE 1:1000

0 20 40 60 80 100m

KRCMAR SURVEYORS LTD. 2022

METRIC: DISTANCES AND COORDINATES SHOWN HEREON ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

BEARING

BEARINGS SHOWN HEREON ARE GRID BEARINGS DERIVED FROM HORIZONTAL CONTROL MONUMENTS No. 00819980720 AND No. 00819980721, AND ARE REFERRED TO THE 3° MTM COORDINATE SYSTEM, ZONE 10, CENTRAL MERIDIAN 79°30' WEST LONGITUDE.
(3° MODIFIED TRANSVERSE MERCATOR PROJECTION, NAD 83 (CSRS)(2010)).
DISTANCES SHOWN HEREON ARE GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.99991413.

NOTES

BEARINGS AND DISTANCES AND IN ACCORDANCE WITH PLAN 37R-9924, PLAN 37R-10911, PLAN 37R-11078, PLAN 37M-88 AND FIELD NOTES BY KRCMAR SURVEYORS LTD. O.L.S. WHERE APPLICABLE.
ALL FOUND MONUMENTS ARE BY KRCMAR SURVEYORS LTD. (1370), UNLESS NOTED OTHERWISE.

INTEGRATION DATA

3° MTM ZONE 10 COORDINATES		
NAD 83 (CSRS)(2010) CENTRAL MERIDIAN 79°30' WEST LONGITUDE		
THE MTM COORDINATES LISTED BELOW ARE TO URBAN ACCURACY AND COMPLY WITH SUBSECTION 14(2) OF ONTARIO REGULATION 216/10 FILED UNDER THE SURVEYORS ACT.		
SPECIFIED CONTROL POINTS		
MONUMENT ID.	NORTHING	EASTING
HCM 00819980720	4 738 903.217	248 142.495
HCM 00819980721	4 739 601.181	249 457.016
REFERENCE POINTS		
POINT	NORTHING	EASTING
1	4 739 677.50	249 565.31
2	4 739 731.94	249 624.65
3	4 739 671.93	249 571.46
4	4 739 623.02	249 802.69
COORDINATE VALUES SHOWN ARE FOR GEOGRAPHIC INFORMATION SYSTEM INTEGRATION ONLY. COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.		

LEGEND

- DENOTES SURVEY MONUMENT FOUND
- DENOTES SURVEY MONUMENT PLANTED
- HCM DENOTES HORIZONTAL CONTROL MONUMENT
- SIB DENOTES STANDARD IRON BAR
- SSIB DENOTES SHORT STANDARD IRON BAR
- IB DENOTES IRON BAR
- (M) DENOTES MEASURED
- (S) DENOTES SET
- (P13) DENOTES PLAN 37R-11078
- (P14) DENOTES PLAN 37M-88
- (1370) DENOTES KRCMAR SURVEYORS LTD. O.L.S.
- EXP. DENOTES EXPROPRIATION

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
- THE SURVEY WAS COMPLETED ON THE 22nd DAY OF AUGUST, 2022

DATE AUGUST 29, 2022


S.N. RAMSAMOOJ
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER V-30630

PLAN AVAILABLE AT www.ProtectYourBoundaries.ca					
FIELD:	J.Z.	DRAWN:	S.D.	CHECKED:	S.N.R. / JOB NO: 05-213
DWG NAME:	05-213RP16	PLOT INFO:	10:32 29/AUG/2022	WORK ORDER NO:	32141
1137 Centre Street Thornhill ON L4J 3M6 905.738.0053 F 905.738.9221 www.krcmar.ca					

KRCMAR

