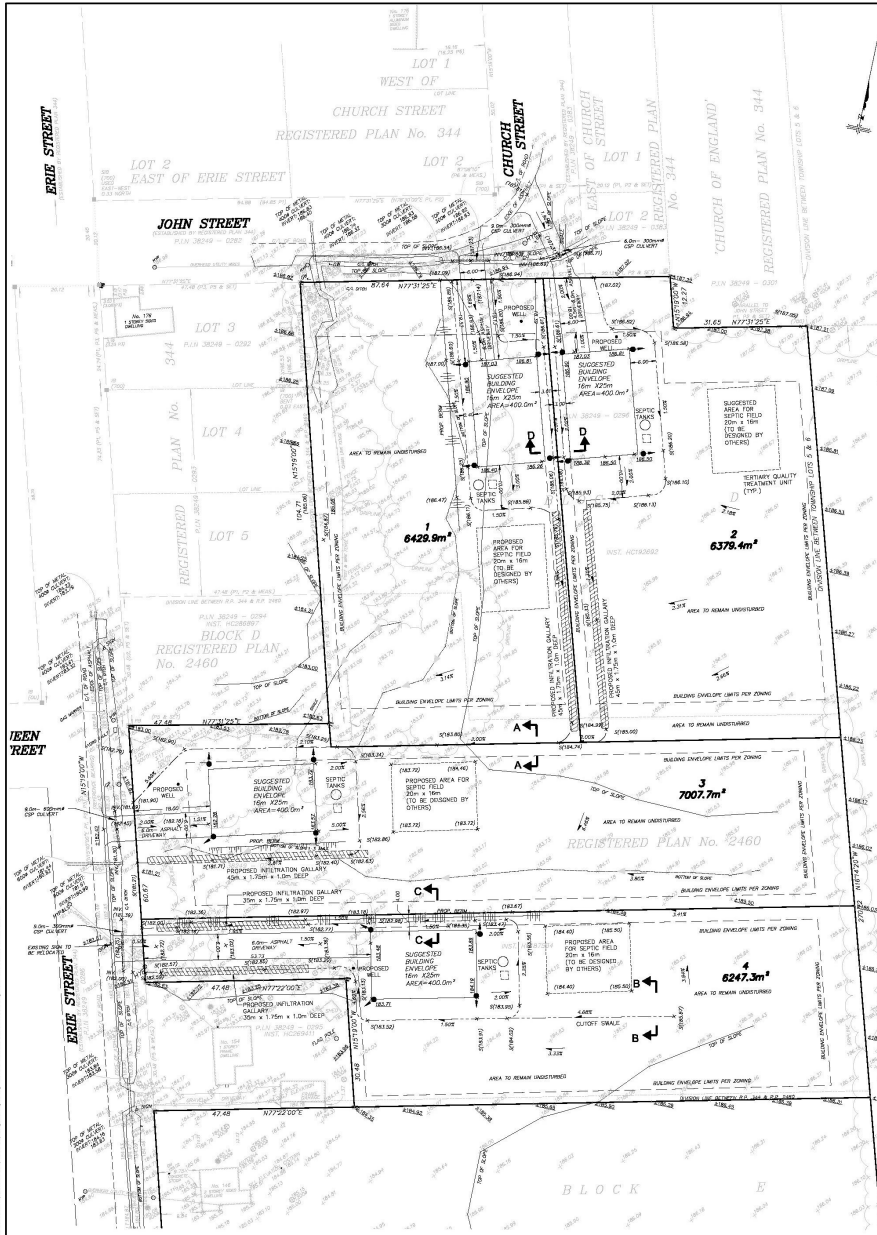


# Owner's Sketch 2 of 2 FILE #PLB-2024-182,183,184,185 APPLICANT: Jamieson & Monahan



146 ERIE STREET

146 ERIE STREET



### INFILTRATION SYSTEM CALCULATION

**Design Criteria**  
Runoff Coefficient "C" Value (Section H of HCDC):  
C Value for existing condition = 0.25  
C Value for proposed impervious areas = 0.85  
Rainfall Depth for 3 hours 100 year Chicago Storm Mount Hope, D = 86.08 mm  
Voids for 50mm Slope 1m<sup>2</sup> = 0.4

### LOT 1, 2 & 3

**IMPERVIOUS AREAS**  
Building envelope area = 400 m<sup>2</sup> (Assumed)  
Driveway area = 18m x 6m = 108 m<sup>2</sup>  
Total Impervious areas = 508 m<sup>2</sup>

Pre-Developmental Runoff Volume = 508 m<sup>2</sup> x 0.25 x 0.086 m = 10.92 m<sup>3</sup>  
Post-Developmental Runoff Volume = 508 m<sup>2</sup> x 0.85 x 0.086 m = 41.50 m<sup>3</sup>  
Volume of Storage Required = 30.58 m<sup>3</sup> x 0.35 = 10.70 m<sup>3</sup>  
Volume of Infiltration System Required = 30.58 m<sup>3</sup> / 0.4 = 76.45 m<sup>3</sup>

Proposed size of P&I = 45.0m long x 1.75m wide x 1.0m deep  
Volume provided = 78.75 m<sup>3</sup> > 76.45 m<sup>3</sup>

### LOT 4

**IMPERVIOUS AREAS**  
Building envelope area = 400 m<sup>2</sup> (Assumed)  
Driveway area = 6m x 6m = 360 m<sup>2</sup>  
Total Impervious areas = 760 m<sup>2</sup>

Pre-Developmental Runoff Volume = 760 m<sup>2</sup> x 0.25 x 0.086 m = 16.34 m<sup>3</sup>  
Post-Developmental Runoff Volume = 760 m<sup>2</sup> x 0.85 x 0.086 m = 68.10 m<sup>3</sup>  
Volume of Storage Required = 62.10 m<sup>3</sup> x 0.35 = 21.74 m<sup>3</sup>  
Volume of Infiltration System Required = 45.75 m<sup>3</sup> / 0.4 = 114.38 m<sup>3</sup>

Proposed size of P&I = 2 x 35 m long x 1.75m wide x 1.0m deep  
Volume provided = 122.5 m<sup>3</sup> > 114.38 m<sup>3</sup>

### LOT GRADING NOTES

#### GENERAL GRADING NOTES

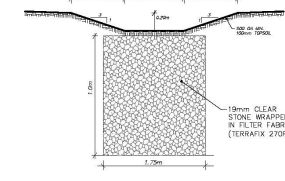
- Unless otherwise specified, grades to be established or proposed elevations with sodded slopes (min. 3:1 to 7:1) and retaining walls as specified.
- All retaining walls, retaining walls, walls, etc., shall be placed a min. of 0.45m off the property line. All walls 1.5m or higher shall be designed by a P.E.
- Should retaining walls be required, the top of all retaining walls shall be set 150mm above the proposed site grade.
- Retaining walls 0.6m in height or greater require construction of a fence or guard rail at the top of the rear of the wall.
- Grade for retaining walls shall be designed and constructed in accordance with the requirements of exterior grade as contained in the Ontario Building Code.
- Slopes of excavations for both back-to-front and "split" drainage shall be no less than 2.0% grade and no greater than 37% grade (3:1 slope).
- When required to existing properties where a 2.0% grade cannot be achieved, a 3% grade is permitted provided a 150mm sub-drain is installed below the wall and connected to a suitable outlet, with a minimum 0.2m cover over the top of the drain or other mitigation measures.
- Minimum grade for an excavation shall be the finished site top + 12%.
- Close adjacent walls, the ground between proposed elevations of site lots shall be graded as a straight line.
- The distribution shall be designed for a 150mm (6") above finished grade.
- Driveway slopes shall not be less than 2% and not more than 7.5%. Revealed slopes drainage in new developments are not permitted.
- Garage floor level to be set minimum 0.3m higher than back of wall, unless otherwise specified.
- All fit elevations shall be compared to minimum 90% 300' datum (whereas determined by the geotechnical engineer). All regional shall be placed in layers not exceeding 150mm fill.
- For retention of wet production areas, before, necessary protection operations, etc., refer to Tree Protection Plan.
- Lot grading for all site shall conform strictly with this plan. Any changes, unless approved prior to construction by the City, will result in non-compliance of the subdivision by the City.
- Grading is required on lands adjacent to the development which are not covered by the developer, then the developer must obtain written permission from the adjacent property owner to allow the developer to grade on the adjacent lands, otherwise retaining walls must be used.
- When other permission required from the adjacent landowner shall be obtained prior to entering the lands. Should permission not be obtained or is withdrawn prior to commencing the work, then the developer shall limit the activities to the lands of the developed site.
- Driveway and driveway approaches shall be located such that hydro valves and other street furniture are a min. of 1.2m from the projections of the outside garage walls.

#### BACKYARD GRADING NOTES

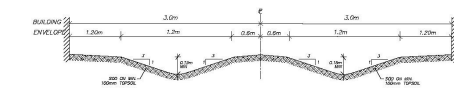
- Definition: "Required back yard" shall mean the lesser of the distance required by the zoning by-law or 6m.
- The maximum slope in the back yard adjacent to the building for distance equal to the required back yard shall be 2% except as set out in these notes.
- The 2% restriction shall not apply to the sides of a wall along the sides or back of the lot, providing the total width of the back yard not exceeds 10 meters or more.
- Where the 2% restriction on the back yard results in elevation differences between adjacent properties, retaining walls will be constructed along the rear and back of the lot. Slopes with a maximum of three horizontal to one vertical may replace the walls where the walls are not required to be constructed.
- Where the 2% restriction does not provide for walls in the required back yard, retaining walls shall be placed on the higher lands.
- The 2% restriction does not provide for walls in the required back yard, retaining walls shall be placed on the higher lands.
- Where the 2% restriction does not provide for walls in the required back yard, retaining walls shall be placed on the higher lands.
- Track is to be installed on the shoulders of the slopes in side yards, front yards and back yards, outside the area defined in 2.1 above, providing the slopes are stable for the life of the area (minimum 25 yrs).

### ROOFWATER LEADERS

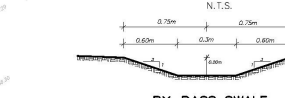
ROOFWATER LEADERS FOR ALL LOTS SHALL DRAIN ONTO THE GROUND VIA CONCRETE SPRAIN PADS, AND THEN TO GRASSED AREAS AT LEAST 0.6m FROM DWELLING FACE.



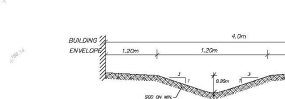
TYPICAL CROSS SECTION OF INFILTRATION SYSTEM  
N.T.S.



D-D CROSS SECTION  
N.T.S.



BY-PASS SWALE SECTION A-A  
N.T.S.



BY-PASS SWALE SECTION B-B  
N.T.S.

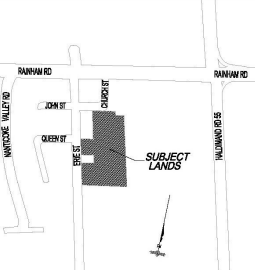


C-C CROSS SECTION  
N.T.S.

### LEGEND

- EXISTING GRADE ADJACENT
- ORIGINAL GROUND ELEVATION (SPOT)
- PROPOSED GROUND ELEVATION
- PROPOSED MIN. FINISHED GRADE AT DWELLING
- DIRECTION OF SURFACE DRAINAGE
- DIRECTION OF SHEET FLOW
- SMALL INVERT ELEVATION
- PROPERTY LOCATION
- TOP OF ROW
- PROP. BUILDING ENVELOPE
- EXISTING LIGHT STANDARD
- PROPOSED ROOFWATER LEADER
- EXISTING DITCH
- EXISTING BELL PEDESTAL
- EXISTING GUYE PEDestal
- EXISTING ROAD SIGN
- EXISTING GUYWIRE
- EXISTING FENCE
- HYDRO POLE
- GAS METER
- AIR CONDITIONER
- GUY POLE
- BELL PEDESTAL
- AIR CONDITIONER
- GUY POLE
- HYDRO POLE & LIGHT STANDARD
- GUY WIRE
- EXISTING BITUM WATER CULVERT
- EXISTING FENCE
- EXISTING CONIFEROUS TREE WITH TREE TRUNK # IN MILLIMETRES
- EXISTING DECIDUOUS TREE WITH TREE TRUNK # IN MILLIMETRES

SCALE: 1:500  
DATE: MAY 2024  
DESIGN: B.D. DRAWN: W.S.  
DWG: 238061 SHY: 1



KEY PLAN N.T.S.

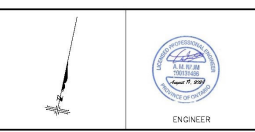
### BENCH MARK

MONUMENT No. 00119450147  
CALDONIA POLICE STATION (NOW FIRE STATION), DIRECTLY OPPOSITE POST OFFICE ON NORTH SIDE OF CARRHES STREET (HIGHWAY NO. 54), TABLET IN CONCRETE FOUNDATION WALL, 12m FROM SOUTHEAST CORNER AND 30cm BELOW BRICK.  
ELEVATION: 190.65m CGVD2013

NO.	REVISIONS	BY	DATE
1.	Field Submission	A.J.	August 19, 2024
2.			
3.			
4.			

### GENERAL NOTES

- TENDERS SHALL SATISFY THEMSELVES AS TO THE NATURE OF THE GROUND AND BID ACCORDINGLY.
- CONTRACTOR SHALL VERIFY LOCATIONS AND INVERTS OF ALL EXISTING SANITARY AND STORM SEWERS AND WATERMANS, PRIVATE SEWER DRAINS AND WATER SERVICES, GASMAINS, CABLE TV, HYDRO AND TELEPHONE DUCTS, ETC., AT START OF CONSTRUCTION.



PROJECT OWNER:  
C. J. JAMIESON & K. S. MONAHAN

MUNICIPALITY:  
HALDIMAND COUNTY  
HAMLET OF NANTICOKE

PROJECT NAME:  
146 ERIE STREET

**A. J. Clarke and Associates Ltd.**  
SURVEYORS • PLANNERS • ENGINEERS  
25 MAIN STREET WEST, SUITE 300  
HAMILTON, ONTARIO L8P 1H1  
Tel: 905.528.8111 Fax: 905.528.2289  
email: aj@ajclarke.com

TITLE:  
GRADING PLAN