

DECEMBER 4, 2025

Project No. 2024-056

11 CRAIGLEITH COURT, COLLINGWOOD FUNCTIONAL SERVICING REPORT

TOWN OF COLLINGWOOD



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1.0 Introduction

CAPES Engineering Ltd. has been retained by Leigh Goodall to prepare a functional servicing report in support of a lot severance for 11 Craigleith Court, in the Town of Collingwood. The existing lot is 0.40 ha in size and currently contains a single family residence. The Site is located on the south end of the Craigleith Court cul-de-sac in the Town of Collingwood. It is proposed to sever approximately 0.20 ha off the west side of the lot to create a new lot for a single family residence.

The existing residence has a Class 4 Septic System located on the west side of the property where the proposed lot to be severed is located. It is proposed the existing septic system would be removed and a new septic system constructed on the retained portion of the lot. A new home and septic system is proposed for the severed lot.

The purpose of this report is to provide details regarding the existing and proposed septic systems and provide support for the proposed lot severance.

2.0 Existing Site Conditions

The lot is legally described as Lot 44 Plan 51M-438, within Plan of Subdivision of Part of Lots 48 and 49 Concession 12 (formerly Township of Nottawasaga) in the Town of Collingwood, County of Simcoe. The overall subdivision legal plan prepared by Ron Emo in 1990 is included in **Appendix A** for reference.

The entirety of site is within a regulated area by the NVCA due to the proximity to a watercourse and potential for flooding. Silver Creek flows through adjacent properties 300 m to the east but does not actually flow through the subject property. A floodplain study has been completed for the area under separate cover and submitted to the NVCA. The report demonstrates that the area flooding only impacts the southern part of the site. Refer to **Appendix B** for the floodplain mapping for the property.

An EIS has been completed (by others) for the site which documents the natural features including a wetland feature along the south edge of the property. The natural heritage features have been shown on **Drawing S1** of this report. Please refer to the full EIS for additional details. There are residential homes to the east and west of the site, and the Georgian Trail along the south edge of the site.

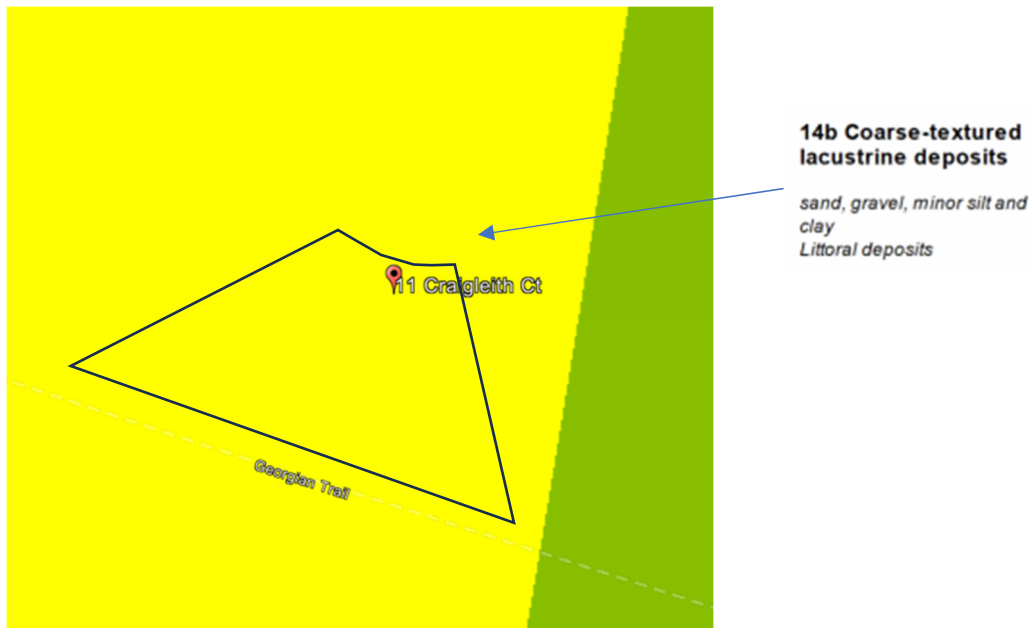
The existing lot is currently developed with a single-family residence on the east side of the lot. The home is on private septic which is located on the west side of the lot. Please refer to **Appendix C** for the existing Septic System information. Water supply is via a municipal water connection. The west side of the site is now largely tree covered with some open space where the septic bed is located.

The site has a low area along the south edge of the site adjacent to the Georgian Trail which floods and has been identified as wetland area in the EIS. There is a low rise in the property elevations which prevent further flooding north. The site slopes down from this low ridge to 11 Craigleith Court.

2.1 Geotechnical Information

A full Geotechnical Investigation has not been completed for the site however test pits were completed in 1997 for the septic design which indicate dark organic sand to a depth of 0.45 m (elevation 185.13) with topsoil at the surface.

Available Ontario Geological Survey (OGS) mapping shows the site as being within a sand layer which is consistent with the test pit information.



2.2 Existing Septic System

The existing septic system for the site (See **Appendix C**) was installed in 1997 on the western part of the site. The design was based on a 3 bedroom and 3 bathroom home and included a 5,450 L septic tank on the west side of the house. A 50 mm dia. forcemain pumped the sewage from a 1,000 L pump chamber to the leaching bed on the western part of the site. Based on the size of the septic tank the assumed calculated daily flow from 1997 for the home is 2,725 L ($5,450/2 = 2,725$ l/day).

An investigation into the septic bed has not been completed at this time, however the Owner indicates that there have been no issues and that the home is not used extensively. There is significant vegetation growth on the bed and mantle area, and the existing bed is reaching the normal operating lifespan for this type of septic bed (20-40 years), and is expected that it would need additional maintenance (removal of vegetation and rehabilitation) or replacement within the next 5-10 years.

2.3 Proposed Septic Systems

The existing home at 11 Craigleith Court is a 3 bedroom, 3 bathroom home with a 218 sq. m finished floor area. The bathrooms are 4, 3 and 2 piece respectively and there is also a kitchen sink and dishwasher for a total of 25 fixture units.

The existing septic system located on the west side of the site will need to be decommissioned and removed to allow for the proposed lot severance and to allow for a new home and septic system to be constructed.

Based on OBC Table 8.2.1.3A a 3 bedroom home will generate 1,600 L/day of flow, with an additional 200 L/day based on the finished floor area or 250 L/day for the fixture unit count. The total calculated daily sewage flow for the existing home is therefore 1,850 L/day.

Using an assumed soil T Time of 40 min/cm and an assumed imported T time of 6 min/cm this equates to a total required pipe length of 40 m for a proposed new shallow buried trench system.

It is proposed to utilize a Waterloo Biofilter (WBF) treatment system due to the site constraints (limited area) and advanced nitrogen removal capabilities. A Brooklin Concrete Ltd. ADIPC-6000 Anerobic Digester and BT-6000 is proposed which can provide treatment up to 2000 l/day. The shallow buried trench will consist of 4 runs of 10 m each and the system has no need for a mantle or expanded contact area.

The new septic bed will need to be located in the front yard of the home due to setback and size constraints and will require a modification to the existing driveway, walkway and landscaping to accommodate the system.

Please refer to **Appendix D** for information on the WBF system components and to **Drawing S1** for the septic layout.

The proposed severed lot is to be 0.20 ha in size and we have assumed a new home similar in size to the existing at 310 sq. m with no basement (crawl space, similar to the existing home on the site). We have assumed the same number of bedrooms and fixture units as the existing home. The calculated daily sewage flows are 1,600 L/day based on the bedrooms plus 1,100 L/day for the floor area or 250 L/day for the fixture unit count. This provides a total daily sewage flow of 2,700 L/day.

Using an assumed soil T Time of 40 min/cm and an assumed imported T time of 6 min/cm this equates to a total required pipe length of 60 m for a proposed new shallow buried trench system.

It is proposed to utilize a Waterloo Biofilter treatment system due to the site constraints (limited area) and advanced nitrogen removal capabilities. A Brooklin Concrete Ltd. ADIPC-7500 Anerobic Digester and BT-7500 is proposed which can provide treatment up to 3000 l/day. The shallow buried trench will consist of 5 runs of 12 m each and the system has no need for a mantle or expanded contact area.

The new septic bed will need to be located in the front yard of the home due to setback and size constraints.

Please refer to **Appendix D** for information on the WBF system components and to **Drawing S1** for the septic layout.

3.0 Conclusions

The proposed severance of 0.2 ha from the west side of the 0.40 ha site at 11 Craigleith Court, Collingwood will allow for the construction of a new single family residence. The proposed severed lot currently contains the septic system for the existing home on the east part of the site. The existing septic system was installed in 1997 and will need to be removed from the west part of the site to allow for the severance and construction of a new home.

There is sufficient room to install a new septic system in the front yard of the retained part of the site for the existing home. There is also sufficient room on the western severed lot to support a new septic system and new home.

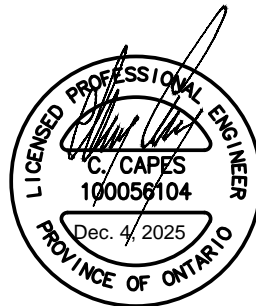
In both cases we recommend using a Waterloo Biofilter enhanced treatment system which allows for a reduced septic footprint and provides a higher level of nitrogen removal. The design presented in this report is intended to provide support for the lot severance and is conceptual. A more detailed design suitable for building permit stage will be required in the future.

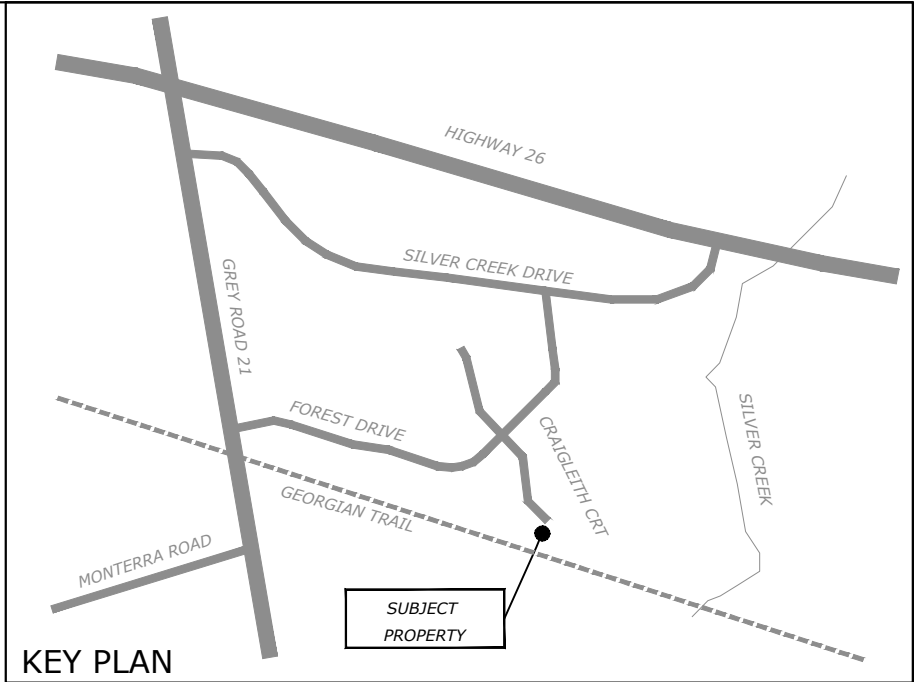
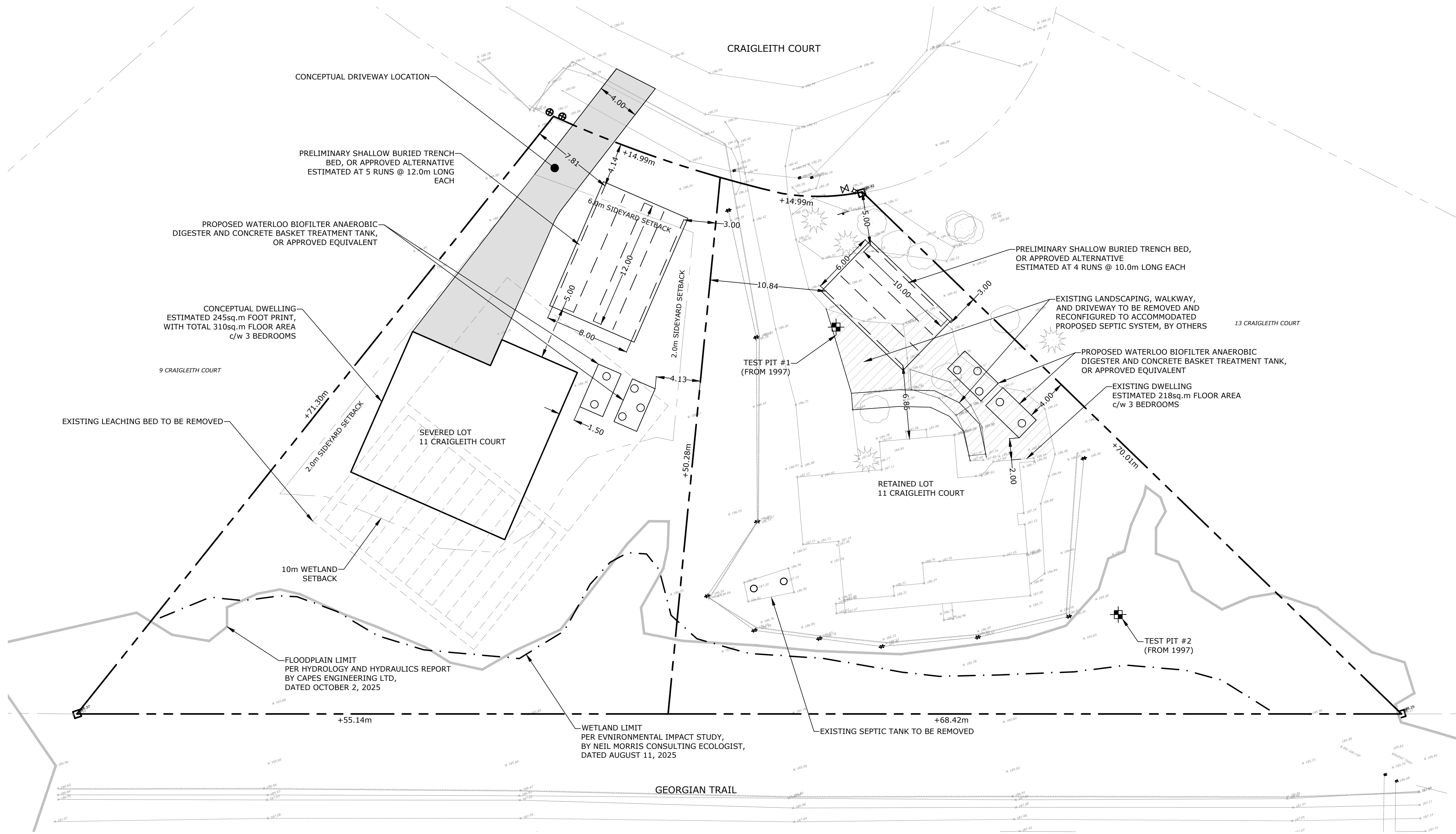
We believe that the retained and severed lots at 11 Craigleith Court can support two new septic systems.

Report Prepared By:



Clayton Capes, MSc. P.Eng.
CAPES Engineering





- LEGEND**
- EXISTING SANITARY SERVICE
 - SANITARY SERVICE
 - ROOF LEADER DISCHARGE LOCATION
 - SUMP PUMP DISCHARGE LOCATION TO SPLASH PAD, c/w AIR GAP
 - TEST PIT LOCATIONS
 - 3:1 SLOPING (MAXIMUM)
 - PROPOSED GRADE
 - EXISTING GRADE
 - PROPOSED SWALE AND FLOW DIRECTION AND SLOPE GRADE
 - PROPOSED SHEET FLOW DIRECTION AND GENERAL SLOPE
 - EXISTING SHEET FLOW DIRECTION

SEPTIC SYSTEM INFORMATION:

An EIS report prepared by Neil Morris Consulting notes the existing soils are noted as Tioga Sand. Test pits completed during the original construction in 1997 are noted as dark organic sand, and completed to a depth of 0.45m. No groundwater was noted at that time.

We have estimated "T" time of = 40min/cm.

Due to constraints on site, a shallow buried trench bed with a compatible treatment system should be considered. Conceptually, a Waterloo Biofilter (WBF) Treatment System is proposed for both lots, and the daily flow for the bed design should be rounded up to meet the treatment capacity of the WBF system.

FULL DETAILS ARE TO BE PROVIDED AT TIME OF PERMIT APPLICATION

RETAINED LOT:

The understanding is the existing dwelling has 3 bedrooms, complete with the following:

- a) A total finished floor area of 218sq.m, with a 1.2m high crawl space.
- b) 1 2-piece washroom, 1 3-piece washroom, 1 4-piece washroom, plus standard kitchen sink + dishwasher + clothes washer

The daily flow is 1,600 L/d based on bedrooms, with an extra 250 L/d based on fixture units, for a total of 1,850 L/d.

Therefore, a Brooklin Concrete Ltd. ADIPC-6000 Anaerobic Digester and BT-6000 is proposed, for a treatment capacity of 2,000 L/d.

The shallow buried trench bed will consist of 4 trenches, each 10m long.

SEVERED LOT:

The following assumptions have been made for the proposed dwelling:

- a) A total finished floor area of 310sq.m with no basement, matching the retained lot.
- b) 1 2-piece washroom, 1 3-piece washroom, 1 4-piece washroom, plus standard kitchen sink + dishwasher

The daily flow is 1,600 L based on bedrooms, with an extra 1,100 L based on floor area, for a total of 2,700 L.

Therefore, a Brooklin Concrete Ltd. ADIPC-7500 Anaerobic Digester and BT-7500 is proposed, for a treatment capacity of 3,000 L/d.

The shallow buried trench bed will consist of 5 trenches, each 12.0m long.

GROUNDWATER INFORMATION

GROUNDWATER DEPTH TO BE DETERMINED DURING TEST PIT EXCAVATION FOR SEPTIC SYSTEM DESIGN (BY OTHERS). CONTRACTOR TO INFORM CAPES ENGINEERING LTD. OF ANY DISCREPANCY.

TEST PIT INFORMATION

TEST PIT #1
0.00m TO 0.20m TOPSOIL
0.20m TO 0.45m TIOGA SAND
TERMINATION AT 0.45m

TEST PIT #2
0.00m TO 0.20m TOPSOIL
0.02m TO 0.45m TIOGA SAND
TERMINATION AT 0.45m

NOTES:

THIS PLAN IS NOT A LOT GRADING PLAN OR FORMAL SEPTIC DESIGN FOR BUILDING PERMIT. THIS DRAWING IS CONCEPTUAL ONLY IN SUPPORT OF A LOT SEVERANCE. DETAILED DRAWINGS TO BE COMPLETE AT BUILDING PERMIT STAGE.

NOTES

1. THE OWNER/BUILDER/APPLICANT MUST OBTAIN A ROAD OCCUPANCY PERMIT FROM PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS.
2. A COPY OF THE "ACCEPTED FOR CONSTRUCTION" LOT GRADING AND DRAINAGE PLAN IS ALWAYS TO BE ON SITE FOR REFERENCE DURING CONSTRUCTION.
3. THE OWNER IS RESPONSIBLE FOR OBTAINING UTILITY AND SERVICING LOCATES PRIOR TO ANY WORKS BEING UNDERTAKEN.
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED TO PREVENT MIGRATION OF SILT AND SEDIMENT FROM THE SUBJECT LOT TO ANY ADJACENT LOT, INCLUDING MUNICIPAL RIGHT-OF-WAY. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT SILT AND SEDIMENT LADEN SURFACE WATER DOES NOT ENTER ANY WATERCOURSES OR ENVIRONMENTALLY SENSITIVE AREAS, EITHER OVERLAND OR THROUGH THE STORM DRAINAGE SYSTEM.
5. ALL DOWNSPOUTS, SUMP PUMP AND OTHER DRAINAGE DISCHARGE POINTS SHALL DISCHARGE ONTO A SPLASH PAD OR APPROVED EQUIVALENT.
6. ALL DISTURBED AREAS ARE TO BE SOODED OVER A MINIMUM OF 100MM OF TOPSOIL OR APPROVED ALTERNATIVE GROUND COVER.
7. ALL WORK WITHIN THE TOWNSHIP RIGHT-OF-WAY MUST BE RESTORED TO EQUAL OR BETTER CONDITION.
8. RETAINING WALLS ARE TO BE CONSTRUCTED OF ACCEPTABLE ARCHITECTURAL BLOCK OR APPROVED EQUIVALENT. FILTER CLOTH SHALL BE PLACED BEHIND ALL RETAINING WALLS TO PREVENT THE MIGRATION OF FINES. RETAINING WALLS ARE NOT TO ENCRDACH INTO THE MUNICIPAL ROAD ALLOWANCE.
9. THE OWNER/BUILDER/APPLICANT MUST OBTAIN A ROAD OCCUPANCY PERMIT FROM PUBLIC WORKS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS.
10. INTERIM GRADING MEASURES MAY BE REQUIRED DURING BUILDING CONSTRUCTION TO ENSURE THAT DRAINAGE DOES NOT ADVERSELY AFFECT THE NEIGHBORING PROPERTIES. ROUGH GRADING OF THE PROPERTY SHALL BE COMPLETED SUCH THAT DRAINAGE IS CONTAINED ON SITE OR CONTROLLED TO A POSITIVE OUTLET.
11. HEADWALLS SHALL BE CONSTRUCTED OF RISE-STONE (PISA 2) ARCHITECTURAL BLOCK. COMPLETE WITH FILTER CLOTH TO PREVENT THE MIGRATION OF FINES.
12. ALL SWALES SHALL HAVE A MINIMUM DEPTH OF 150mm; 150mm DIAMETER SUBDRAINS SHALL BE PROVIDED UNDER ALL SWALES WITH GRADIENTS LESS THAN 1.0%. SUBDRAINS SHALL BE PERFORATED, CORRUGATED PIPE WITH GEOTEXTILE AND BE BEDDED IN A 300mmX300mm CLEAR STONE TRENCH WRAPPED WITH FILTER CLOTH.
13. EXISTING VEGETATION ON SITE TO BE REMOVED AND DISPOSED OF OFF SITE BEFORE LOT GRADING WORK AS SPECIFIED.
14. FOOTING WIDTH SHALL BE PER O.B.C. SECTION 9.15.3.4 WITH WIDTH ADJUSTMENTS IF FOOTINGS ARE LOCATED NEAR SEASONALLY HIGH GROUNDWATER AS PER O.B.C. SECTION 9.15.3.4.3.
15. AS PER SECTION 4.2.2.1 OF O. REG 332/12 BUILDING CODE A SUBSURFACE INVESTIGATION INCLUDING GROUNDWATER CONDITIONS IS REQUIRED PRIOR TO PLACING THE FOUNDATION. THE UNDERSIDE OF FLOOR SLAB AND ASSOCIATED DRAINS SHALL BE ENTIRELY LOCATED A MINIMUM SEPARATION OF 0.4m ABOVE THE SEASONAL HIGH GROUNDWATER LEVEL, OR AS REQUIRED PER HYDROSTATIC PRESSURES, BASED ON THE SUBSURFACE INVESTIGATION.
16. IT IS THE OWNER/CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL GROUNDWATER SEPARATIONS ARE ADHERED TO PRIOR TO CONSTRUCTION.

- Notes**
1. This drawing is the exclusive property of CAPES Engineering Ltd. The reproduction of any part without express written consent of this Corporation is strictly prohibited.
 2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to CAPES Engineering Ltd. prior to construction.
 3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.
 4. CAPES Engineering Ltd. accepts no responsibility for interpretation of third party information, contractor to verify all third party information prior to construction.
 5. This is not a plan of survey. Any and all representation of property boundaries are approximate only.

NOTES:

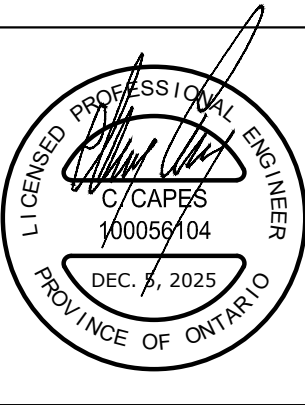
TOPOGRAPHIC SURVEY DATA PROVIDED BY JOETOPO SURVEYS AND CADD INC., AND SHOWN APPROXIMATELY HEREON FOR REFERENCE PURPOSES ONLY. PROPERTY BOUNDARY INFORMATION SHOWN IN APPROXIMATE ONLY BASED ON SIMCOE COUNTY GIS MAPPING PARCELS. THIS IS NOT A PLAN OF SURVEY.

LIDAR DATA PROVIDED BY LAND INFORMATION ONTARIO, ONTARIO CLASSIFIED POINT CLOUD (LIDAR-DERIVED), AND SHOWN APPROXIMATELY HEREON, CONTAINING INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENSE - ONTARIO. DATA HAS BEEN GLOBALLY VERTICALLY ADJUSTED BY 0.18m TO MATCH INTO DETAILED TOPOGRAPHIC SURVEY SOURCES NOTED, BY AVERAGE STANDARD DEVIATION CALCULATED BY CIVIL 3D TIN SURFACE COMPARISON.

SURVEY INFORMATION:
BENCHMARK REFERENCE:
ELEVATIONS SHOWN HEREON RE GEODETIC DERIVED FROM GPS REAL TIME NETWORK OBSERVATIONS USING THE "CAN-NET" VRS NETWORK.
DATUM: CGVD 2011
COORDINATES ARE IN NAD83-UTM17N (CANADA)

SITE BENCHMARK:
1. TOP OF IRON BAR, NORTHEAST LOT CORNER
ELEVATION = 186.42
DEC 8, 2025

No	Revision	Date
1	FOR REVIEW	2025-11-25
2	FOR APPROVAL	2025-12-05



Client
LEE GOODALL



11 CRAIGLEITH COURT
TOWN OF COLLINGWOOD
CONCEPTUAL SEPTIC PLAN

Designed B. HUFFMAN	Checked C. CAPES	Date 24/08/13	Drawing No.
Project No. 2024-056	Rev No. 1		
Scale 1:250	0 5.0 10.0 15.0m		

S1

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Appendices

Appendix A – Legal Plan

PLAN OF SUBDIVISION OF
PART OF LOTS 48 AND 49
CONCESSION 12
(FORMERLY TOWNSHIP OF NOTTAWASAGA)
TOWN OF COLLINGWOOD
COUNTY OF SIMCOE

SCALE 1:1000
0 5 10 15 20 40 METRES
ZUBEK EMO AND PATTEN LTD.
1990

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

CURVE DATA				
LOT	RADIUS	ARC	CHORD	CHORD BEARING
2	66.84	10.00	9.99	N4°45'55"W
3	66.84	54.16	52.69	N22°44'05"E
5	87.19	29.00	28.87	N34°32'00"W
6	87.19	23.21	23.14	N17°22'05"W
8	19.00	9.55	9.45	N1°13'35"W
9	19.00	22.85	21.50	N50°05'15"W
10	19.00	27.29	25.00	N54°19'00"E
11	19.00	34.94	30.22	N39°30'10"W
14	107.19	28.59	28.51	N17°23'00"W
15	107.19	28.59	28.51	N32°40'00"W
16	107.19	7.00	7.00	N42°10'50"W
16	81.46	16.00	15.97	N51°34'35"E
17	81.46	52.21	51.32	N75°34'00"E
18	81.46	20.00	19.95	N79°02'20"W
20	14.49	17.50	16.34	N52°47'25"E
22	22.00	21.69	21.00	N59°04'25"E
21	22.00	26.59	25.00	N4°03'00"W
22	22.00	26.59	25.00	N73°17'50"W
23	22.00	20.76	20.00	N45°02'40"E
28	80.85	31.21	31.02	N65°03'00"W
36	101.46	1.99	1.98	N79°24'55"W
37	101.46	29.26	29.16	N67°02'20"W
38	101.46	29.26	29.16	N76°26'10"E
39	101.46	36.00	35.81	N56°06'50"E
39	51.51	10.00	9.98	N38°29'20"W
40	51.51	36.75	35.97	N12°28'20"W
40	101.16	6.00	6.00	N61°15'00"E
41	101.16	28.17	28.08	N3°25'25"W
42	101.16	30.00	29.89	N19°53'40"W
43	101.16	31.50	31.37	N37°18'20"W
44	101.16	20.00	19.97	N51°53'15"W
44	22.00	9.99	9.90	N70°33'00"W
45	22.00	26.13	24.62	N62°25'15"E
46	22.00	33.00	30.00	N14°34'40"W
47	22.00	33.53	30.38	N78°47'35"E
47	81.16	23.04	22.97	N33°42'45"W
48	81.16	31.00	30.81	N14°38'30"W
49	81.16	16.51	16.48	N21°07'25"E
49	71.51	14.90	14.87	N1°55'45"E
50	71.51	31.00	30.76	N16°24'30"W
51	71.51	19.00	18.94	N36°26'20"W
52	86.84	10.36	10.35	N42°31'50"E
53	86.84	73.00	70.66	N15°01'50"E
BLK 54	101.46	3.35	3.35	N67°18'35"E

Approved under section 50 of
the PLANNING ACT, 1983.
This 25th day of May 1990
Brian K. Nixon
Brian K. Nixon
Manager
Plans Administration Branch
Central and Southwest
Ministry of Municipal Affairs

OWNERS CERTIFICATE

THIS IS TO CERTIFY THAT:
1. LOTS 1 TO 53 (BOTH INCLUSIVE) BLOCK 54, THE
RESERVES, BLOCKS 55, 56, 57 AND 58, THE STREETS
NAMED FOREST DRIVE, CRAIGLEITH COURT, GEORGIAN
COURT AND ALPINE COURT HAVE BEEN LAID OUT IN
ACCORDANCE WITH OUR INSTRUCTIONS.
2. THE STREETS ARE HEREBY DEDICATED AS PUBLIC
HIGHWAYS, TO THE CORPORATION OF THE TOWN OF COLLINGWOOD
DATED THIS 23rd DAY OF APRIL, 1990

ARMADALE PROPERTIES LIMITED

Robert Metcalf
PER ROBERT METCALF (PRESIDENT)
I HAVE THE AUTHORITY TO BIND THE
CORPORATION.

PLAN 51M-438

I CERTIFY THAT THIS PLAN 51M-438 IS
REGISTERED IN THE LAND REGISTRY OFFICE FOR
THE LAND TITLES DIVISION OF SIMCOE (No. 51) AT
15th 0' O'CLOCK ON THE 28th DAY OF MAY 1990
AND ENTERED IN THE REGISTER FOR PARCEL
SECTION 51M-438 AND REQUIRED CONSENTS AND
AFFIDAVITS ARE REGISTERED AS PLAN DOCUMENT
No. 174246

Alan Brown
Asst. DEPUTY LAND REGISTRAR

THIS PLAN COMPRISES ALL OF PARCEL 48-1,
SECTION 51- NOTT-12.

NOTES

BEARINGS HEREON ARE ASTRONOMIC AND ARE REFERRED TO
THE BEARING OF THE NORTHERLY LIMIT OF THE ABANDONED
RAILWAY RIGHT OF WAY SHOWN AS N72°01'30"W ON DEPOSITED
PLAN 51R-20761

CURVE FRONTAGES SHOWN ON PLAN ARE ARC DIMENSIONS.

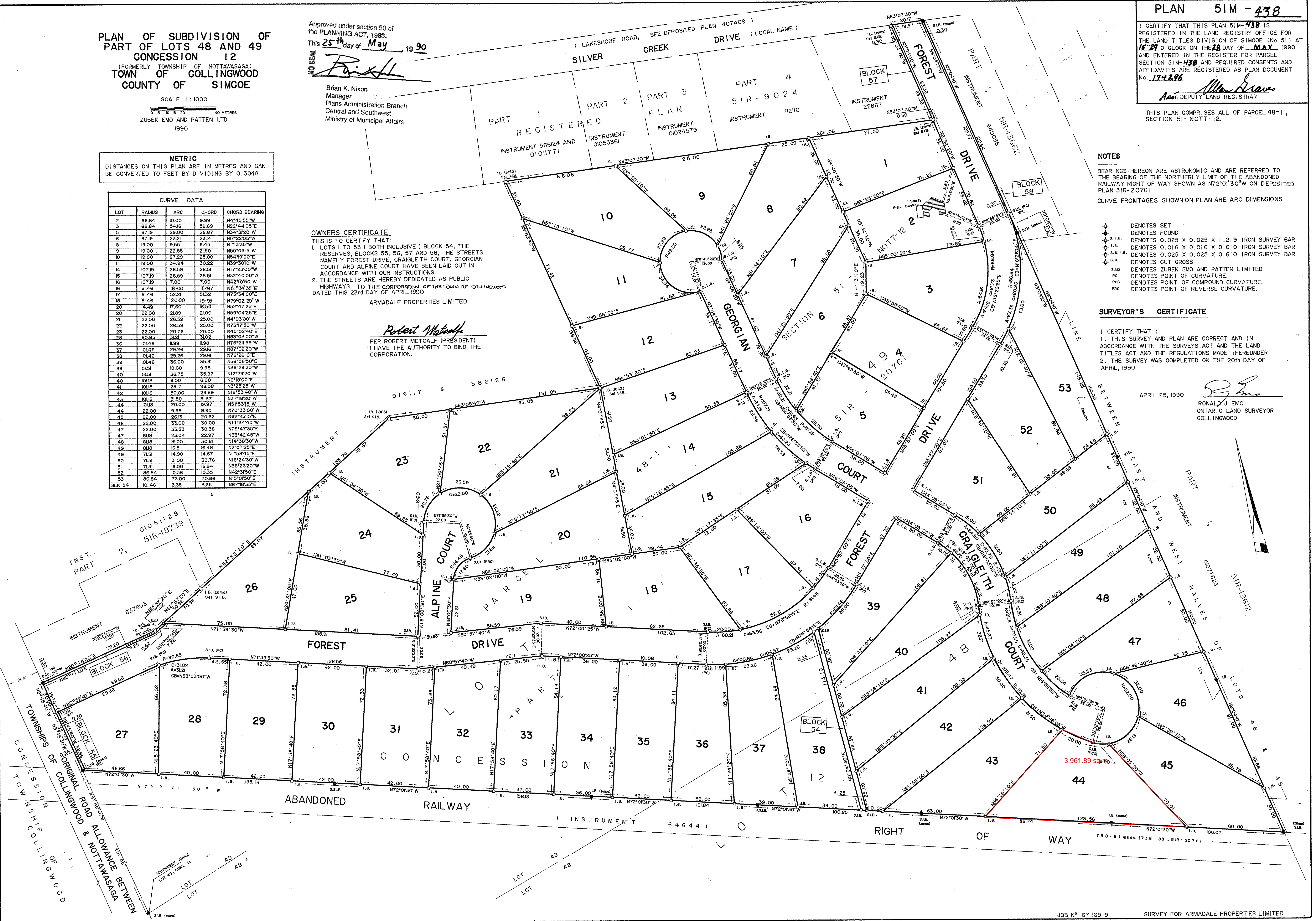
+ DENOTES SET
+ DENOTES FOUND
+ S.I.B. DENOTES 0.025 X 0.025 X 1.219 IRON SURVEY BAR
+ S.S.I.B. DENOTES 0.016 X 0.016 X 0.610 IRON SURVEY BAR
+ C.C. DENOTES 0.025 X 0.025 X 0.610 IRON SURVEY BAR
+ DENOTES CUT CROSS
+ DENOTES ZUBEK EMO AND PATTEN LIMITED
+ DENOTES POINT OF CURVATURE
+ PC DENOTES POINT OF COMPOUND CURVATURE.
+ PRC DENOTES POINT OF REVERSE CURVATURE.

SURVEYOR'S CERTIFICATE

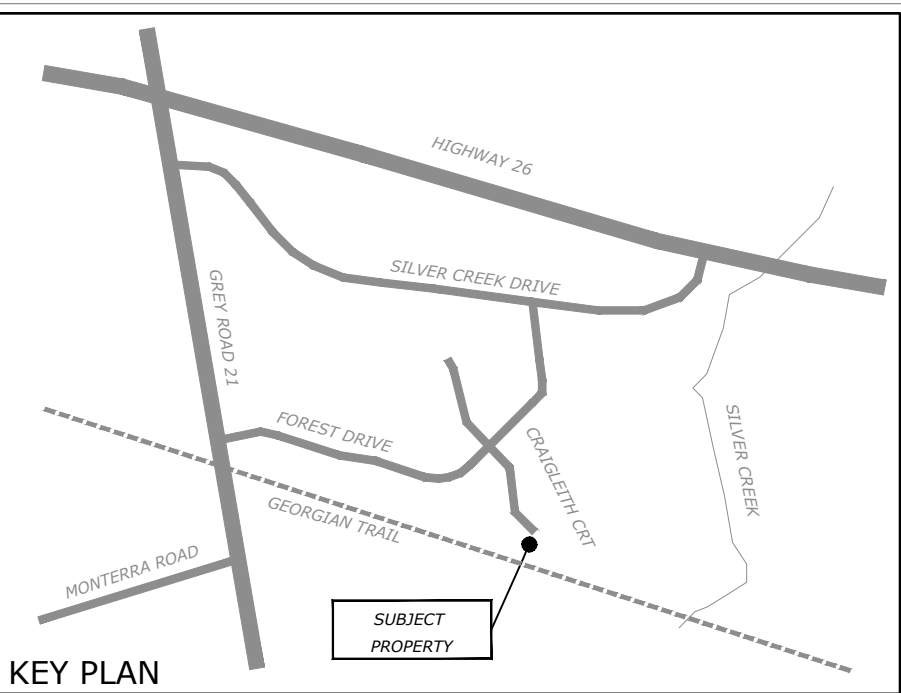
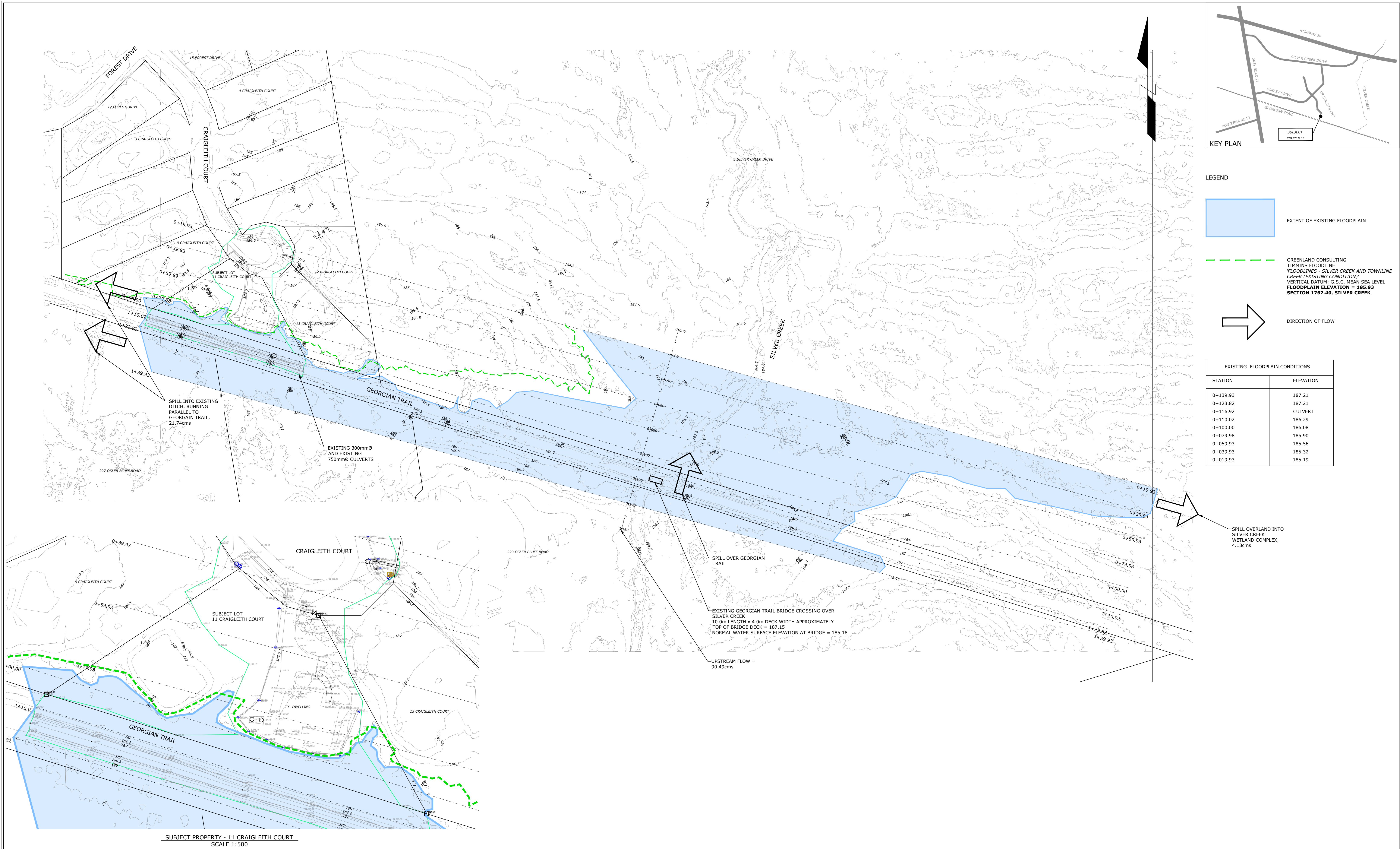
I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN
ACCORDANCE WITH THE SURVEYS ACT AND THE LAND
TITLES ACT AND THE REGULATIONS MADE THEREUNDER
2. THE SURVEY WAS COMPLETED ON THE 20th DAY OF
APRIL, 1990.

APRIL 25, 1990

Ronald J. EMO
RONALD J. EMO
ONTARIO LAND SURVEYOR
COLLINGWOOD



Appendix B – Floodplain Information



LEGEND

EXTENT OF EXISTING FLOODPLAIN

GREENLAND CONSULTING
TIMMINS FLOODLINE
'FLOODLINES - SILVER CREEK AND TOWNLINE
CREEK (EXISTING CONDITION)'
VERTICAL DATUM: G.S.C. MEAN SEA LEVEL
FLOODPLAIN ELEVATION = 185.93
SECTION 1767.40, SILVER CREEK

DIRECTION OF FLOW

EXISTING FLOODPLAIN CONDITIONS	
STATION	ELEVATION
0+139.93	187.21
0+123.82	187.21
0+116.92	CULVERT
0+110.02	186.29
0+100.00	186.08
0+079.98	185.90
0+059.93	185.56
0+039.93	185.32
0+019.93	185.19

SPILL OVERLAND INTO SILVER CREEK WETLAND COMPLEX, 4.13cms

SUBJECT PROPERTY - 11 CRAIGLEITH COURT
SCALE 1:500

Notes

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- CAPES Engineering Ltd. accepts no responsibility for interpretation of third party information, contractor to verify all third party information prior to construction.
- This is not a plan of survey. Any and all representation of property boundaries are approximate only.

No	Revision	Date
1	HYDRAULIC ANALYSIS	2025-03-21
2	REVISED HYDRAULIC ANALYSIS	2025-10-03

NOTES:

TOPOGRAPHIC SURVEY DATA PROVIDED BY JOETOPO SURVEYS AND CADD INC., AND SHOWN APPROXIMATELY HEREON FOR REFERENCE PURPOSES ONLY. PROPERTY BOUNDARY INFORMATION SHOWN IN APPROXIMATE ONLY BASED ON SIMCOE COUNTY GIS MAPPING PARCELS. THIS IS NOT A PLAN OF SURVEY.

LIDAR DATA PROVIDED BY LAND INFORMATION ONTARIO, ONTARIO CLASSIFIED POINT CLOUD (LIDAR-DERIVED), AND SHOWN APPROXIMATELY HEREON, CONTAINING INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENSE - ONTARIO. DATA HAS BEEN GLOBALLY VERTICALLY ADJUSTED BY 0.18m TO MATCH INTO DETAILED TOPOGRAPHIC SURVEY SOURCES NOTED, BY AVERAGE STANDARD DEVIATION CALCULATED BY CIVIL 3D TIN SURFACE COMPARISON.

SURVEY INFORMATION:
BENCHMARK REFERENCE:
ELEVATIONS SHOWN HEREON RE GEODETIC DERIVED FROM GPS REAL TIME NETWORK OBSERVATIONS USING THE ICA-NET VRS NETWORK
DATUM: CGVD 2011/78
COORDINATES ARE IN NAD83-UTM17N (CANADA)

SITE BENCHMARK:
1. TOP OF IRON BAR, NORTHEAST LOT CORNER
ELEVATION = 186.42

Client
LEE GOODALL

11 CRAIGLEITH COURT
TOWN OF COLLINGWOOD
EXISTING CONDITIONS FLOODPLAIN

Designed K. GRIFFIN	Checked C. CAPES	Date 24/08/13	Drawing No.
Project No. 2024-056	Rev No. 1		C1

Scale: 1:1,250

WWW.CAPESENGINEERING.COM

Appendix C – Existing Septic Info

Orange County District Health Unit

11 Craigleith Crt.

USE PERMIT

FOR CLASS 4,5,6 SEWAGE SYSTEMS

FILE NO. 97-C-16

TWSP. Collingwood
CONC. R.P. 438
LOT S.L. 44
DATE SENT

WORK AUTHORIZED BY THE CERTIFICATE OF APPROVAL HAS BEEN SATISFACTORILY COMPLETED AND INCLUDES:

- a) Septic tank/holding tank of working capacity of 5450 Litres (1200 Imp. Gals.) constructed of concrete ☒ fibreglass ☐ on site ☐ to serve 3 (no. of bedrooms) units Orangeville
- b) Leaching bed of total 150 Metres (492 Lineal Feet) of 3 inch diameter distribution pipe of IPEX PVC laid in 12 runs and fed by Gravity ☐ Siphon ☐ Pump ☒ 400 gal Orangeville pump chamber
- c) Other details 12 runs 12.5 long, distribution box

d) INSPECTION DATE: November 25/97

INSTALLER:

System components installed as shown on application supporting Certificate of Approval ☒ or revised as below ☐

LOCATION

REFER TO C.C. TATHAM & ASSOCIATES LTD.

AS CONSTRUCTED DRAWINGS

JOB NUMBER 97262

drawing SP-1

DATED DECEMBER 10, 1997

THE FOLLOWING WORK REMAINS TO BE COMPLETED.

- ☒ Backfill System and Complete ☒ Finish Grading to Shed Run-off and Divert Water Around Leaching Bed
- ☒ Stabilize all Sloped Surfaces ☐ Other

Any Use Permit issued hereunder may be revoked if this work is not completed promptly to health unit standards.

USE PERMIT

Under Section 67 of the Environmental Protection Act, 1980 and subject to the provisions of The Act and Regulations a Permit is hereby issued to (Owner): [REDACTED] Subsequent Owner(s):

For the use and operation of the Class 4 sewage system constructed/installed/enlarged/extended/alterd pursuant to the Certificate of Approval issued under the above application number in accordance with the application and Certificate of Approval with any changes indicated above.

INSPECTED AND RECOMMENDED BY J.L. Langlois P.Eng. PERMIT ISSUED BY Tom Leggatt, C.P.H.I.(C) DATE Dec 12/97
C.C. Tatham & Associates DIRECTOR 19

Section 64 of The Act provides that no change can be made to any building(s) or structure(s) in connection with which this sewage system is used, if the operation or affectiveness of the sewage system will or is likely to be affected by the change, unless a new Certificate of Approval is obtained.

SIMCOE COUNTY DISTRICT HEALTH UNIT

ENVIRONMENTAL HEALTH SERVICES

FILE
NUMBER

97-C-16

APPLICATION FORM
and CERTIFICATE OF APPROVAL
TO INSTALL A SEWAGE DISPOSAL SYSTEM

test holes dug.

FOR OFFICE USE ONLY

Twp

Con

Plan

Collingwood.

Twp. Lot

Sub. Lot

438

44

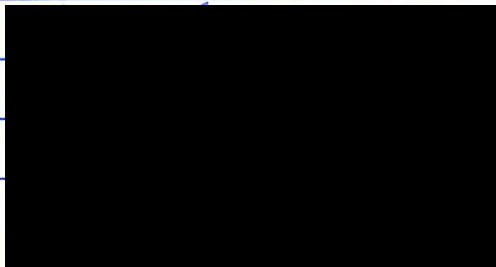
Date Rcvd:

97-09-23

Fee Rcpt. No:

0237

1 NAME and ADDRESS OF REGISTERED OWNER



BUS. PHONE

2 OWNER'S AUTHORIZED AGENT

C.C. Tatham & Associates LTD.

115 HURONTARIO ST., Suite 201

Collingwood ONT.

POSTAL CODE

HOME PHONE

BUS. PHONE

L9Y 2L9

444-2565

3

This Application refers to a property located as follows:

TWP - NEW NAME

TWP - OLD NAME

CONCESSION

TWP. LOT NO.

REG. PLAN NO.

SUB. LOT NO.

Town of
Collingwood

SIM-438

44

4 LOT DIMENSIONS:

and LOT AREA

sq. ft.

5 DIRECTIONS to LOT:

THE FOREST SUBDIVISION

6 Is this project under the ONTARIO NEW HOME WARRANTY PROGRAM?

☐ Yes☐ No

The building to be serviced is a

☒ New or ☐ Existing ☒ Single Family Home or ☐ _____ Unit Dwelling or ☐ Commercial or Industrial bldg.☒ Without Basement or ☐ With Basement that is ☐ Finished or ☐ Unfinished. The building has 1900 + 150 sq. ft. per floor

and 2 # of floors (including basement). FLOOR PLANS MAY BE REQUIRED.

The Septic System to serve the building will be a

☒ Class 4 - Trench Bed or ☐ Class 4 - Filter Medium System or ☐ Class 5 - Holding Tank or ☐ Class A - over 4500 Litres

7

BEDROOMS

WASHROOMS

LAUNDRY

KITCHEN SINKS

OTHER

STATE

2 Piece

3 Piece

4 Piece

Tubs

1 Comp.

Garborator

NO. OF

3

1

1

1

Auto. Washer

2 Comp.

Dishwasher

and "Roughed in" Plumbing for:

8 WATER SUPPLY is

☒ Existing or☐ Proposed

and comes from the following

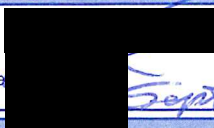
☒ Municipal / Communal System or☐ Drilled Well,☐ Dug or Bored Well,☐ Sandpoint,☐ Other (describe)...

9

IT IS AN OFFENCE UNDER THE ENVIRONMENTAL PROTECTION ACT TO GIVE FALSE INFORMATION ON THIS APPLICATION

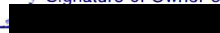
I CERTIFY THAT ALL INFORMATION GIVEN IS COMPLETE AND CORRECT
AND THAT IF APPROVED, THE WORK WILL CONFORM TO HEALTH
UNIT AND ENVIRONMENTAL PROTECTION ACT REQUIREMENTS

Date



Sept 22/97

Signature of Owner or Agent



This Application is not transferable

SIMCOE COUNTY DISTRICT HEALTH UNIT

ENVIRONMENTAL HEALTH SERVICES

FILE
NUMBER

97-C-16

11 Site Plan: see "Procedures for Obtaining a Certificate of Approval".

Scale Used:

Refer to C.C. Tetham and Associates Ltd.
Plan 97262 - SP-1

IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE ALL INFORMATION GIVEN IS ACCURATE AND COMPLETE

12 **CERTIFICATE OF APPROVAL
REFUSED; reasons attached**

Director

Date

13 **CERTIFICATE OF APPROVAL
GRANTED; conditions attached**

Director

Tom Lupton

C.P.H.I. (C)

Date Sept. 30/97

This Certificate is hereby issued under Section 77 of the Environmental Protection Act only for the proposal outlined on Pages 1 and 2 of this application and its attachments, as amended by the requirements and conditions of Section 9 of the Act provided that the sewage system shall be completed and a Use Permit issued within 12 months of the issue hereof or such extended period as the Director on application allows
DO NOT USE THE SYSTEM UNTIL A USE PERMIT IS ISSUED.

Under Section 139 of the Environmental Protection Act, an applicant may appeal a decision by writing to the Director and to the Environmental Appeal Board, 112 St. Clair Ave. West, Toronto, Ont., M4V 1N3 within 15 days of receipt of the decision.

An Application for which a Certificate of Approval cannot be issued within 1 year will be refused.

- 1 ☒ Sewage disposal system as set out in plans:

Prepared by: J.L. LANGLOIS P.ENG. C.C. TATHAM & ASSOCIATES LTD

Job No: 97262 SP-1

Dated: SEPT 22 / 97

Revision: _____

- 2 ☒ Consultant to check building footings for elevation and location before any further construction over the footings.

- 3 ☒ System to be left open for inspection and approval by both Health Unit inspector and by consultant.

- 4 ☒ Consultant to submit to Health Unit a written statement of the installation's compliance with the approved plans.

- 5 ☒ Consultant to submit "As - Built" drawings (3 copies) to Health Unit before a Use Permit will be issued.

IT IS THE APPLICANT'S RESPONSIBILITY TO ENSURE ALL INFORMATION GIVEN IS ACCURATE AND COMPLETE

12 CERTIFICATE OF APPROVAL
REFUSED; reasons attached

Director

Date

13 CERTIFICATE OF APPROVAL
GRANTED; conditions attached

Director

Tom Leger

Date SEPT 29 / 97

This Certificate is hereby issued under Section 77 of the Environmental Protection Act only for the proposal outlined on Pages 1 and 2 of this application and its attachments, as amended by the requirements and conditions of Section 9 of the Act provided that the sewage system shall be completed and a Use Permit issued within 12 months of the issue hereof or such extended period as the Director on application allows.
DO NOT USE THE SYSTEM UNTIL A USE PERMIT IS ISSUED.

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An Application for which a Certificate of Approval cannot be issued within 1 year will be refused.

Simcoe County District Health Unit

PUBLIC HEALTH INSPECTION SERVICES

REPORT

FILE NO. 97-C-16

TWSP.	Collingwood
CONC.	R.P. 438
LOT	S.L. 44
U.P. #	
DATE REC'D.	Sept.23/97

SUBJECT CONDITIONS OF APPROVAL

Install the sewage disposal system in accordance with C.C. Tatham & Associates Ltd. Plans, Project Number 97262, Drawing SP-1.

The Design Engineer shall set grade stakes, inspect the base and fill, conduct a final inspection and provide "as constructed" drawings to the Health Unit.

A joint final inspection shall be carried out.

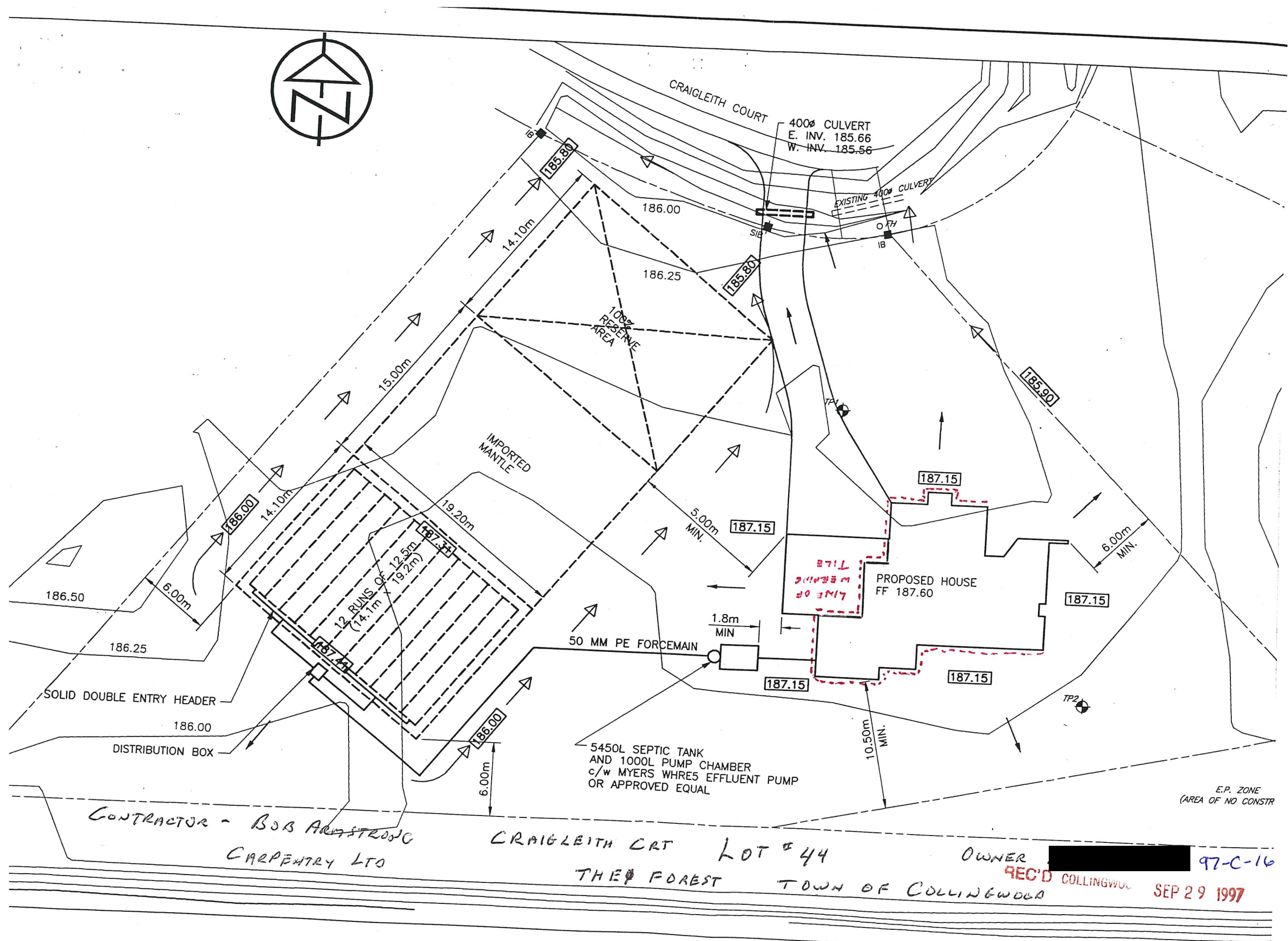
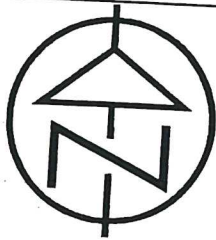
No variation from this design unless approved by the Design Engineer and the Health Unit.

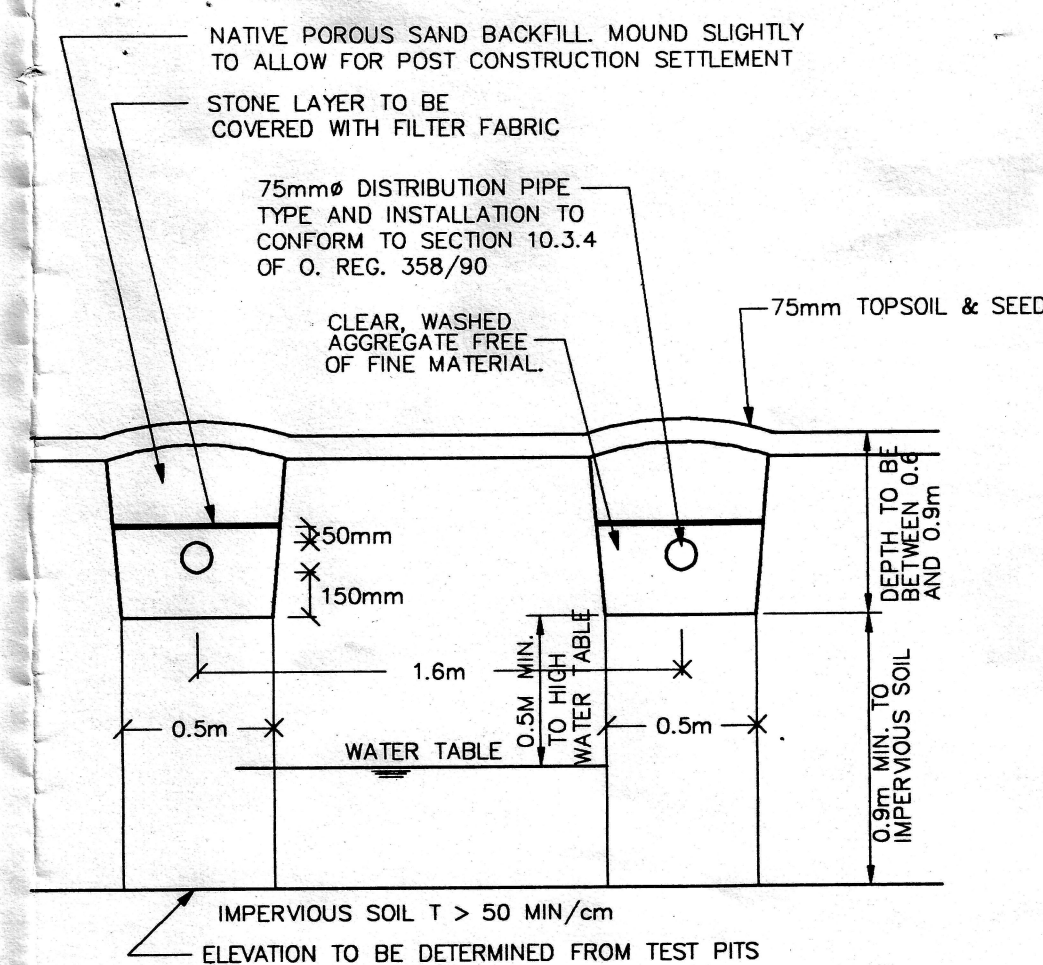
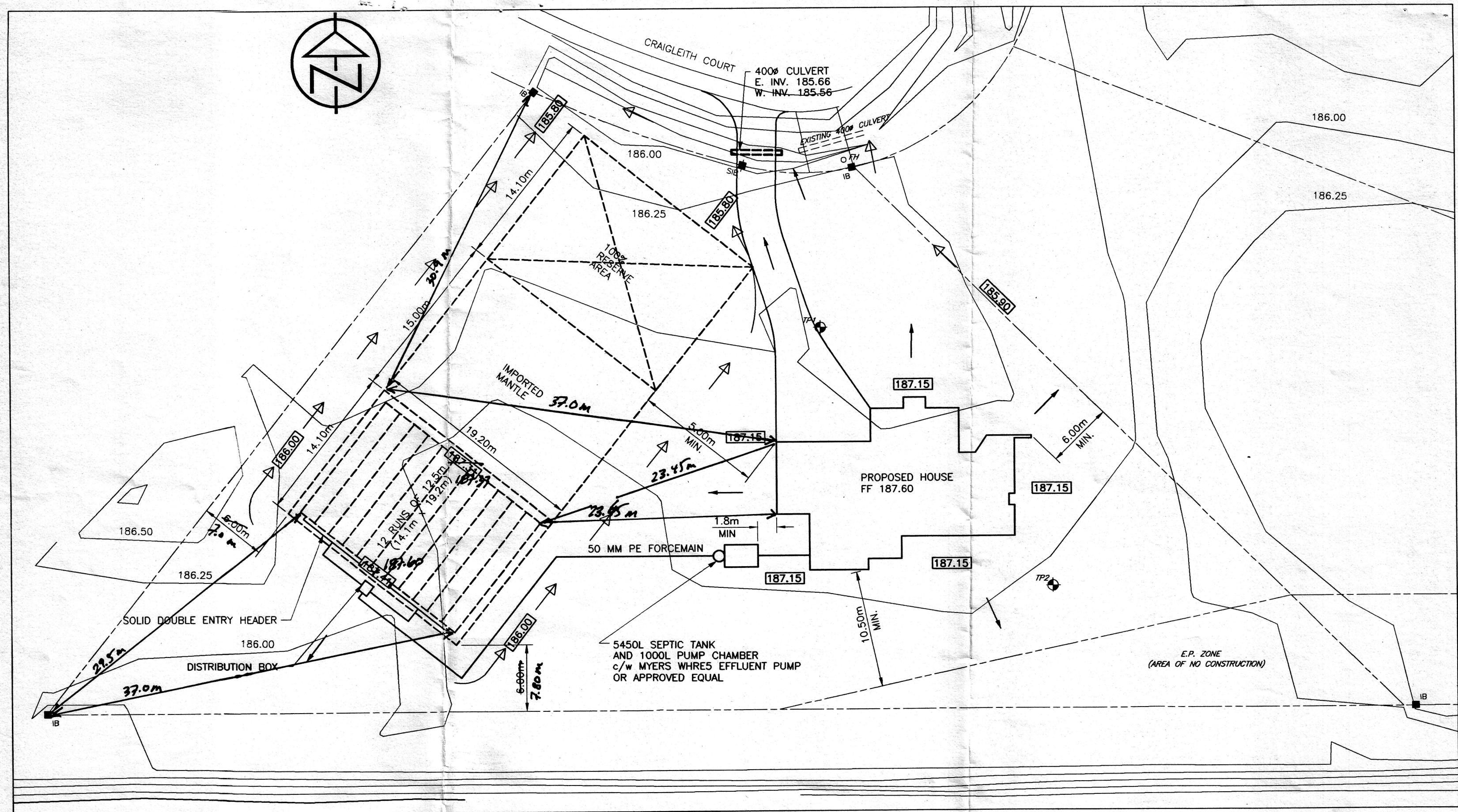
If a pump is required, the Design Engineer shall set the loading rates.

DATE OF REPORT: Sept.30/97

REPORT BY: Tom C. Leggatt, C.P.H.I.(C)

Tom Leggatt
SIGNATURE - INSPECTOR





TYPICAL SECTION THROUGH LEACHING BED

TEST PIT INFORMATION

- TEST PIT 1. ELEV. 186.17 GROUND
0.0 to 0.20m TOPSOIL
0.20m to 0.45m DARK ORGANIC SAND
BOREHOLE TERMINATED AT 0.45m
- TEST PIT 2. ELEV. 185.58 GROUND
0.0 to 0.20m TOPSOIL
0.20m to 0.45m DARK ORGANIC SAND
BOREHOLE TERMINATED AT 0.45m

CONSTRUCTION NOTES FOR LEACHING BED

- 1) ALL VEGETATION AND ORGANIC SOIL TO BE REMOVED FROM BED AND MANTLE AREA.
- 2) PREPARE SUBGRADE TO ELEVATIONS SHOWN BY CUTTING AND FILLING NATIVE MATERIAL.
- 3) PLACE IMPORTED SAND IN LEACHING BED AREA AND GRADE TO ELEVATIONS SHOWN (SEE GENERAL NOTES).
- 4) TRENCH IN PIPES.
- 5) ALL TILE BED CONSTRUCTION TO BE IN ACCORDANCE WITH MINISTRY OF ENERGY AND ENVIRONMENT STANDARDS AND REQUIREMENTS IN EFFECT AT TIME OF CONSTRUCTION.
- 6) THRUST BLOCKING TO BE PLACED AT ALL BENDS AND TEES ALONG PIPE FROM SEPTIC TANK TO LEACHING BED.

GENERAL NOTES

- 1) ALL ELEVATIONS AND DIMENSIONS ARE MINIMUM REQUIREMENTS UNLESS SHOWN OTHERWISE. SEE TABLE FOR IMPERIAL CONVERSION FACTORS.

IMPERIAL	CONVERSION	FACTORS
TO CONVERT	TO	MULTIPLY BY
METRES(m)	FEET(ft)	3.281
MILLIMETRES(mm)	INCHES(in)	0.03937
LITRES(L)	GALLONS(gal)	0.22

- 2) TBM - SOUTHWEST CORNER OF CONCRETE TRANSFORMER PAD OPPOSITE LOT 42. ELEVATION 186.055m.

- 3) SEE TABLE BELOW FOR ADDITIONAL DESIGN SPECIFICATIONS.

DESIGN SPECIFICATIONS

SIZE OF HOME TO BE SERVICED:	3 BEDROOM
TYPE OF SEWAGE SYSTEM:	CLASS 4 SEPTIC
LENGTH OF DISTRIBUTION PIPE:	150m
ELEVATION OF HEADER(TOP OF PIPE):	186.06
ELEVATION AT END OF PIPE(TOP OF PIPE):	186.06
ELEVATION OF FINISHED GRADE OVER HEADER(MIDPOINT):	187.31
ELEVATION OF FINISHED GRADE OVER END OF PIPE(MIDPOINT):	187.31
ELEVATION OF FINISHED FIRST FLOOR OF HOUSE:	187.60
SIZE/TYPE OF SEPTIC TANK:	5450L
SIZE/TYPE OF PUMP CHAMBER:	1000L

LOT COVERAGE

LOT AREA	3895 m ²
BUILDING FOOTPRINT	177 m ²
COVERAGE	5 %

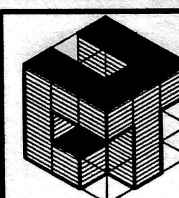
REVISION No. 1 AS-BUILT 12/10/97 J.L.

USF	UNDERSIDE OF FOOTINGS
TFW	TOP OF FOUNDATION WALL
FF	FINISHED FIRST FLOOR
+186.214	EXISTING GROUND ELEVATION
+186.30	PROPOSED GROUND ELEVATION
185.90	PROPOSED SUBGRADE ELEVATION
→	OVERLAND DRAINAGE DIRECTION
→	PROPOSED DRAINAGE SWALE



THE FOREST SUBDIVISION
TOWN OF COLLINGWOOD

SITE PLAN - LOT 44

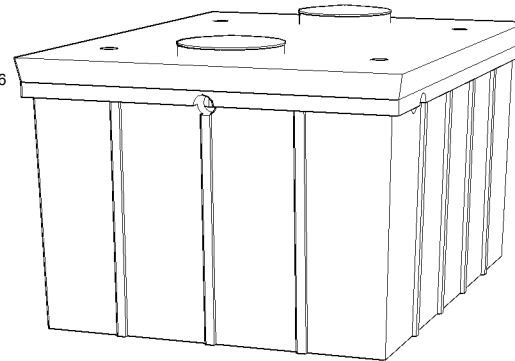
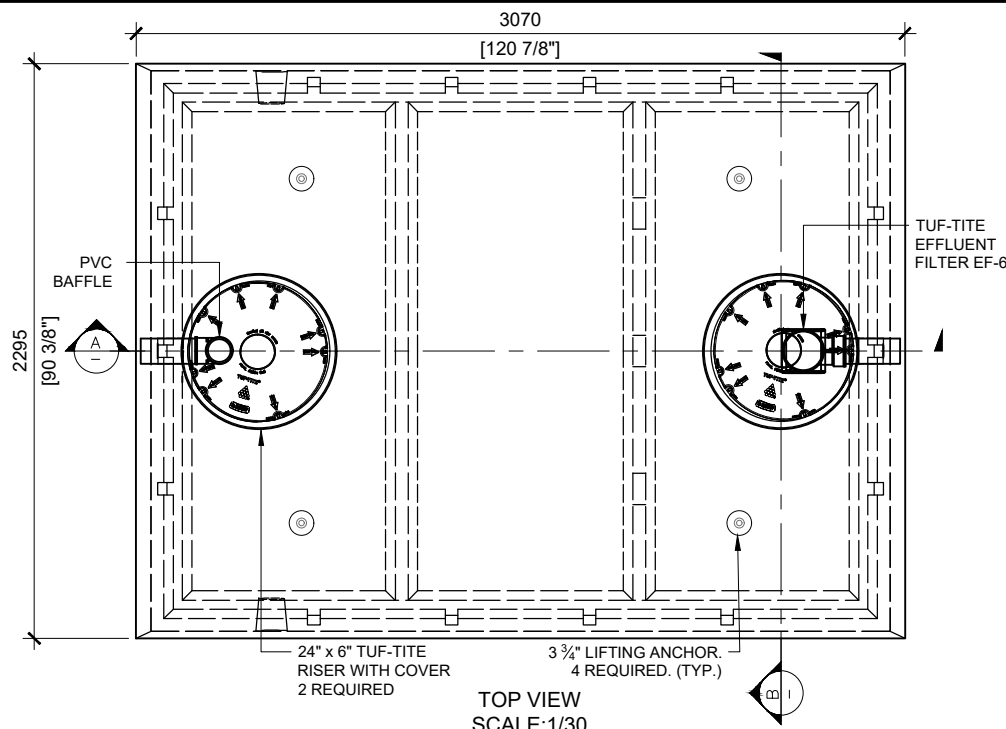


C.C. TATHAM & ASSOCIATES LTD.
Consulting Engineers

115 Hurontario St.
Suite 201
Collingwood, Ontario
L9Y 2L9
(705) 444-2565

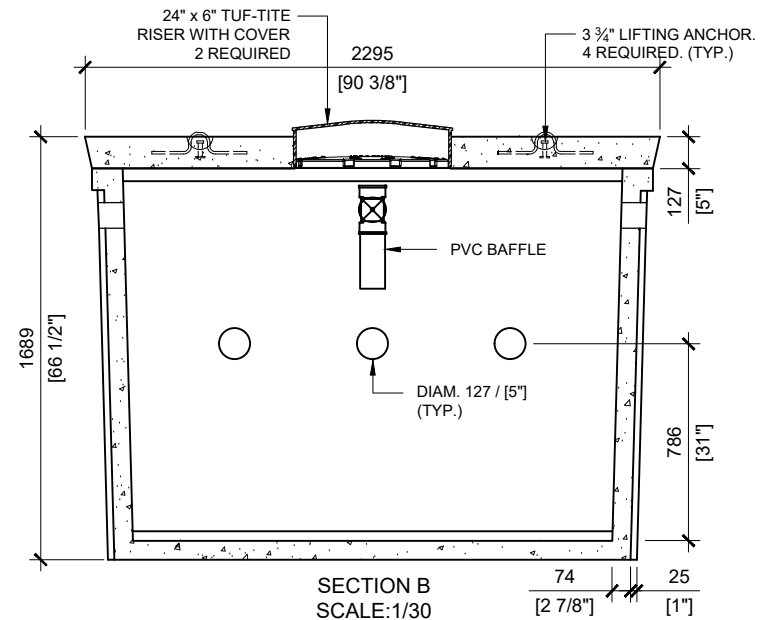
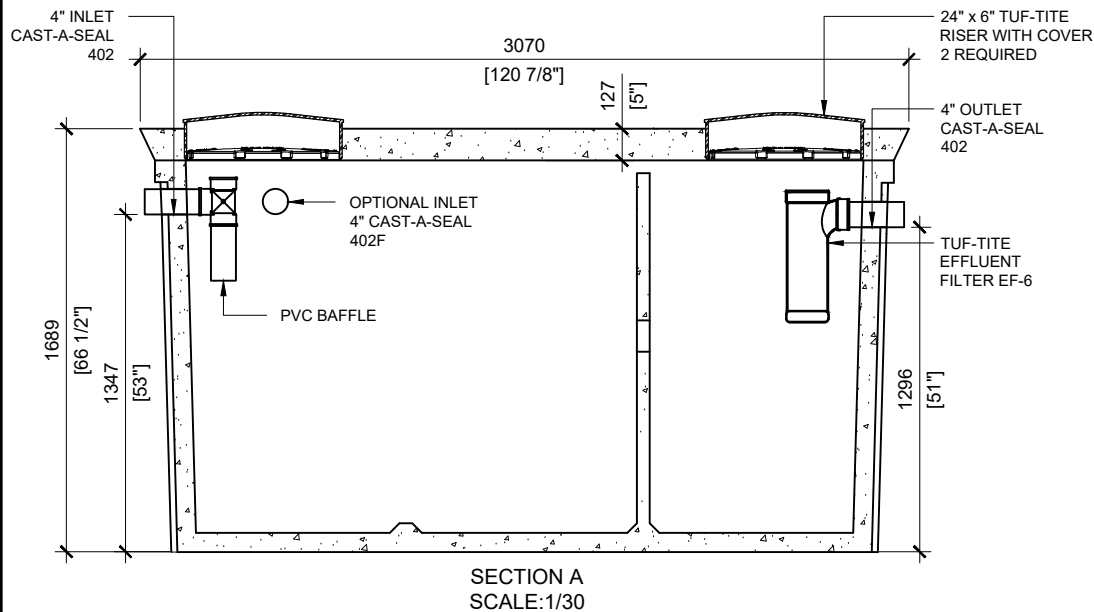
SCALE: 1:300	JOB NO. 97282
DESIGN: JLL	CHECKED: TC
DRAWN: WHG	DATE: SEP 1997
DWG. SP-1	

Appendix D – Proposed Septic Info



GENERAL NOTES:

1. UNITS ARE SEALED WITH BUTYL TAPE AT THE JOINTS
2. DELIVERY IS MADE BY CRANE-EQUIPPED TRUCKS
3. EXCAVATION MUST BE READY, SAFE AND ACCESSIBLE FOR UNLOADING FROM THE REAR OF THE TRUCK.
4. MIN OVERHEAD CLEARANCE OF 18FT (5.5 METRES) IS REQUIRED
5. ALL UNITS MUST BE HANDLED WITH PROPER LIFTING EQUIPMENT
6. MAXIMUM BURIAL DEPTH = 1 METRE IN FIRM SOIL AWAY FROM ANY VEHICULAR TRAFFIC
7. TUF-TITE SAFETY LIDS INSTALLED IN BOTH OPENINGS AS PER CSA-B66-21



MANUFACTURED:
LINDSAY, ON
1-800-655-3430

CONCRETE: 35MPa at 28 days/5000PSI
AIR ENTRAINMENT: 5-8%
REINFORCEMENT: STEEL TO CSA CAN
A23.1 /A23.3 G30.18 Fy=400MPa

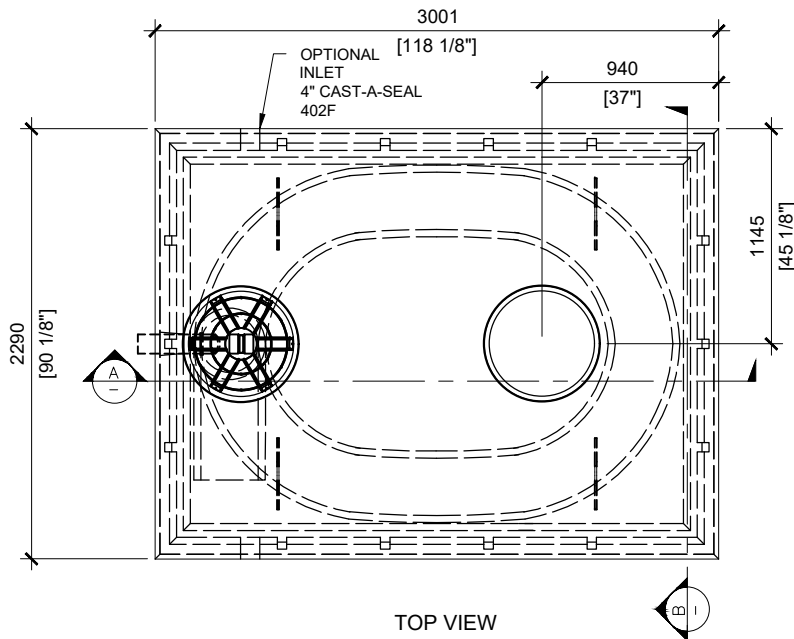
UNIT WEIGHT: 15,216lbs / 6,902kg
CPA CERTIFIED
MEETS CAN/CSA-B66
"AGINP"

DRAWN BY:
PRASHAN

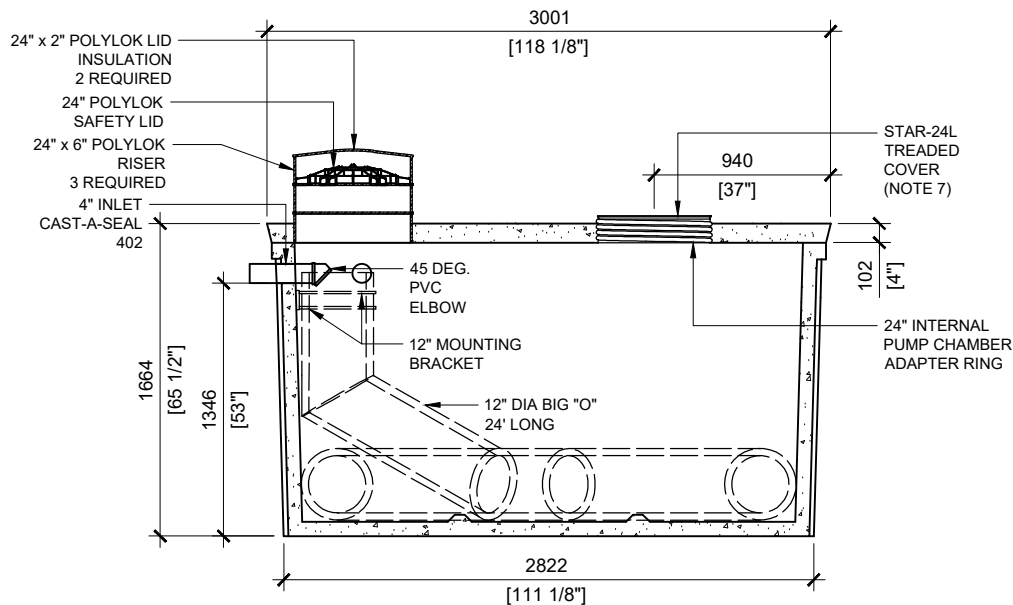
DATE:
MAR/2024

6000 LITRES SEPTIC TANK

WORKING CAPACITY: 6,154L TO INVERT OF OUTLET
TOTAL CAPACITY: 7,572L TO UNDERSIDE OF CHAMBER LID



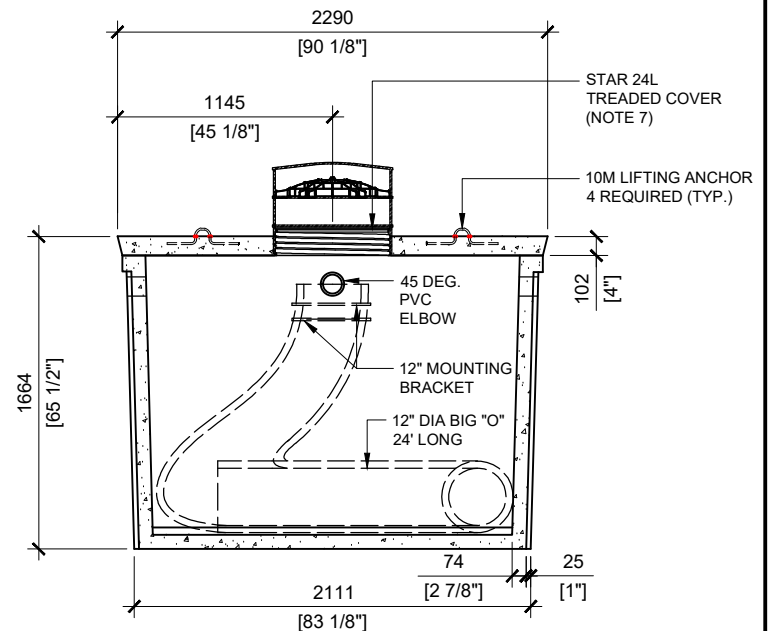
TOP VIEW
SCALE:1/40



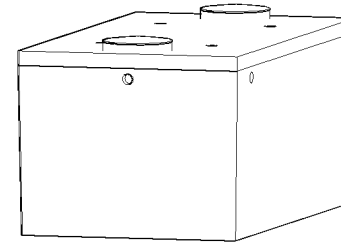
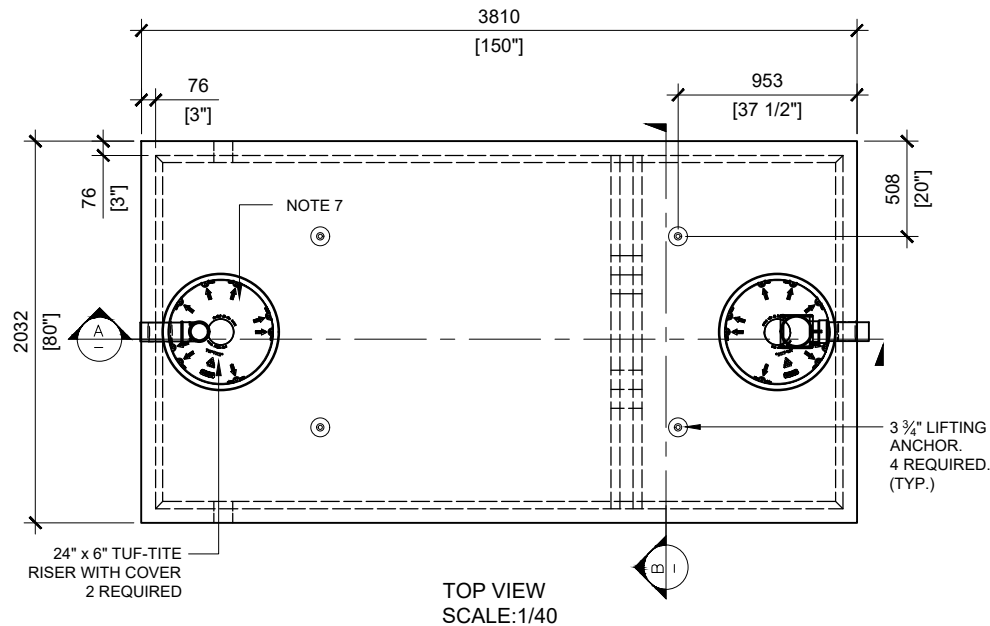
SECTION A
SCALE:1/40

GENERAL NOTES:

1. UNITS ARE SEALED WITH BUTYL TAPE AT THE JOINTS
2. DELIVERY IS MADE BY CRANE-EQUIPPED TRUCKS
3. EXCAVATION MUST BE READY, SAFE AND ACCESSIBLE FOR UNLOADING FROM THE REAR OF THE TRUCK.
4. MIN OVERHEAD CLEARANCE OF 18FT (5.5 METRES) IS REQUIRED
5. ALL UNITS MUST BE HANDLED WITH PROPER LIFTING EQUIPMENT (I.E. SPREADER BAR)
6. MAXIMUM BURIAL DEPTH = 1 METRE IN FIRM SOIL AWAY FROM ANY VEHICULAR TRAFFIC
7. THREADED COVER TO BE REMOVED AND REPLACED BY INTERNAL PUMP CHAMBER (PROVIDED BY WATERLOO) ON SITE

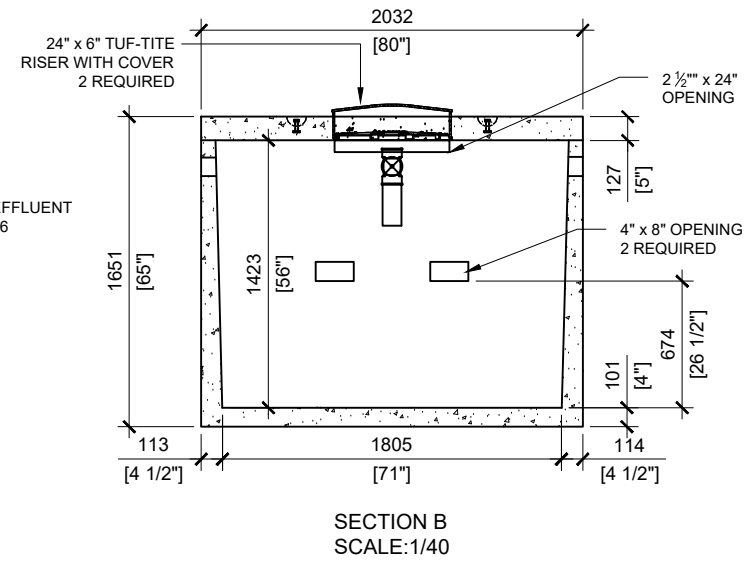
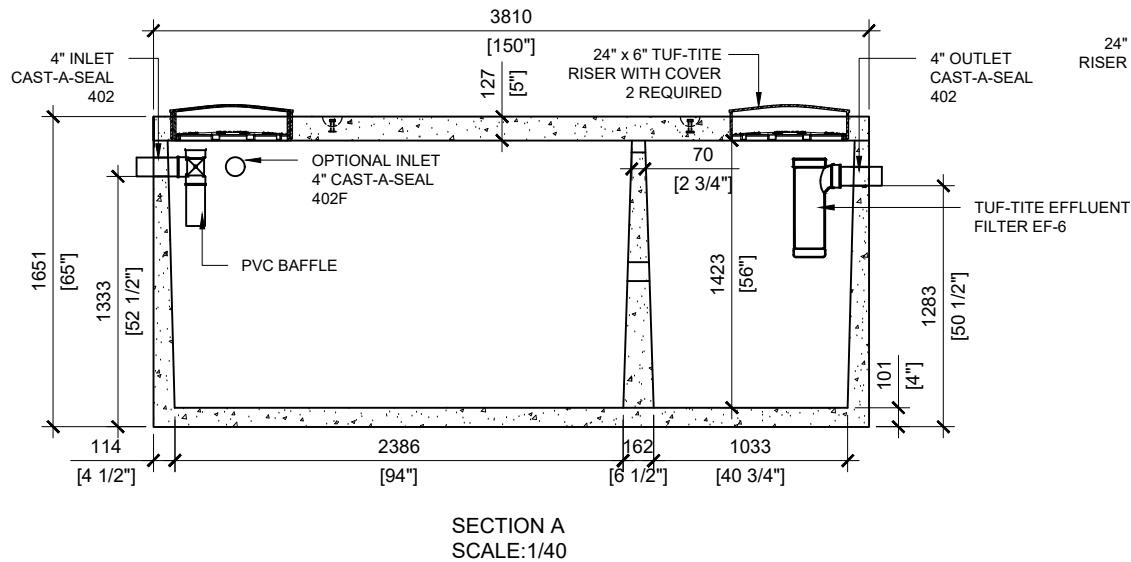


SECTION B
SCALE:1/40



GENERAL NOTES:

1. UNITS ARE SEALED WITH BUTYL TAPE AT THE JOINTS
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3. EXCAVATION MUST BE READY, SAFE AND ACCESSIBLE FOR UNLOADING FROM THE REAR OF THE TRUCK.
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6. MAXIMUM BURIAL DEPTH = 1 METRE IN FIRM SOIL AWAY FROM ANY VEHICULAR TRAFFIC
7. TUF-TITE SAFETY LIDS INSTALLED IN BOTH OPENINGS AS PER CSA-B66-21



MANUFACTURED:
LINDSAY, ON
1-800-655-3430

CONCRETE: 35MPa at 28 days/5000PSI
AIR ENTRAINMENT: 5-8%
REINFORCEMENT: STEEL TO CSA CAN
A23.1 / A23.3 G30.18 Fy=400MPa

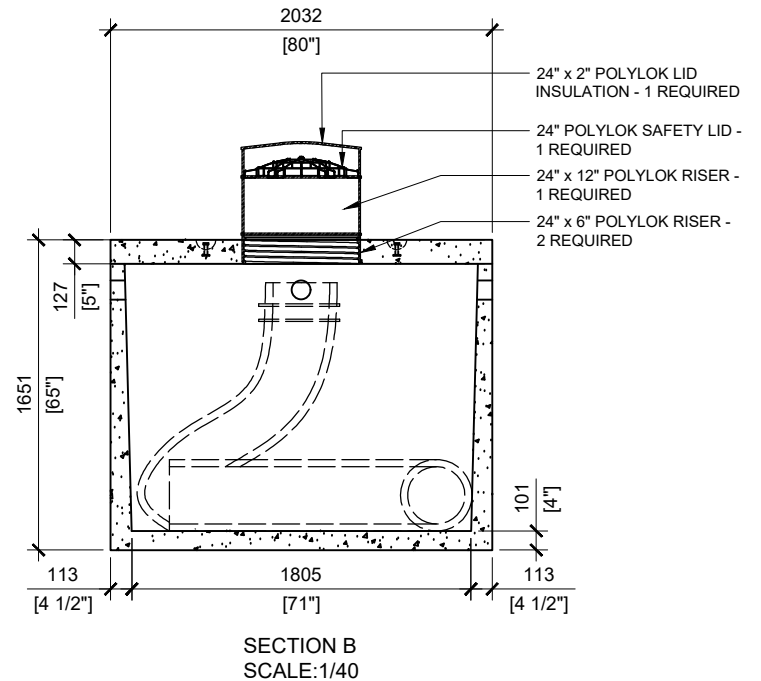
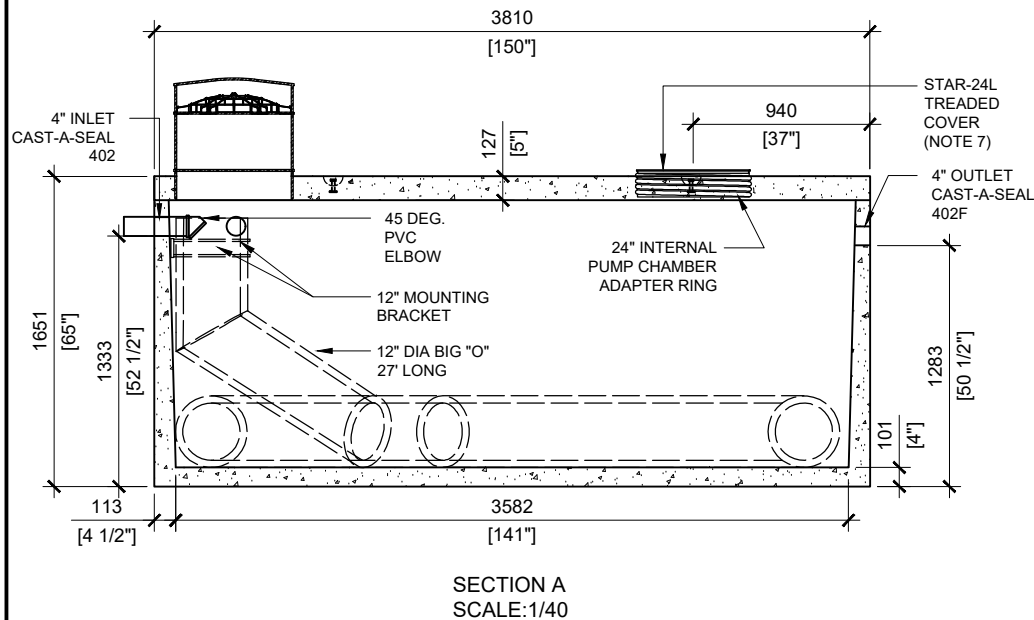
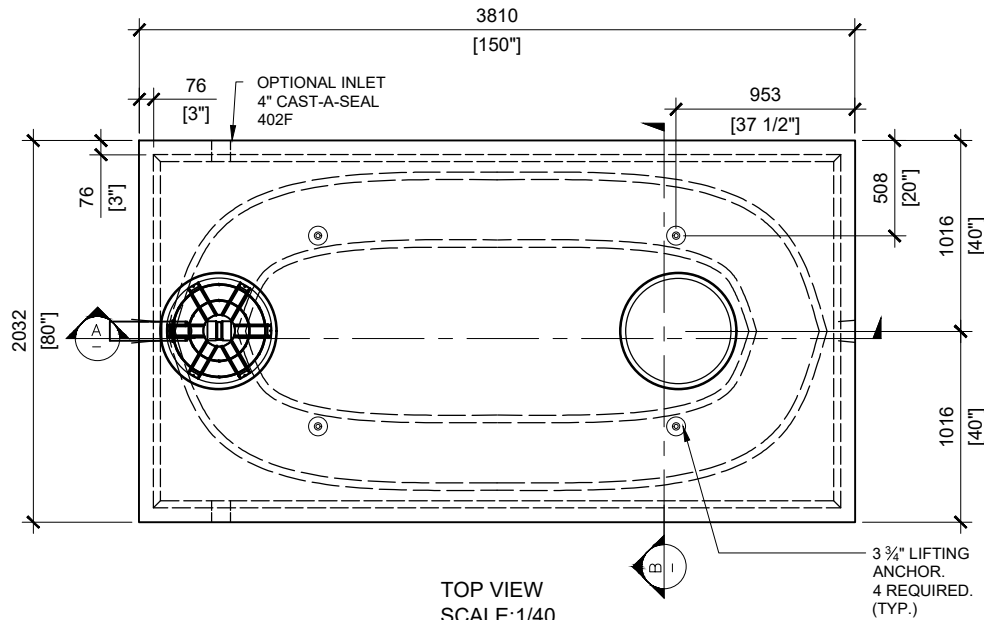
UNIT WEIGHT: 19,459lbs / 8,826kg
Tank: 14,112lbs / 6,401kg
Lid: 5,347lbs / 2,425kg
CPA CERTIFIED
MEETS CAN/CSA-B66 "AGINP"

DRAWN BY:
SR

DATE:
JAN/2024

7500 LITRES SEPTIC TANK

WORKING CAPACITY: 7,577L TO INVERT OF OUTLET
TOTAL CAPACITY: 9,191L TO UNDERSIDE OF CHAMBER LID



GENERAL NOTES:

1. UNITS ARE SEALED WITH BUTYL TAPE AT THE JOINTS
2. DELIVERY IS MADE BY CRANE-EQUIPPED TRUCKS
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