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CONSULTING ENGINEERS • INGENIEURS CONSEILS

GAËTAN H. LASCELLES ING. P.ENG.
MANON C. RODRIGUE ING. P.ENG.

L04-120
March 21, 2005

South Nation Conservation
15 Union Street
Berwick, Ontario K0C 1G0

Attention: Jennifer Lynn Boyer, M.SC., B.E.S.
Watershed Planner

Dear Ms. Boyer:

Re: Application for Land Subdivison, Robert Lafrance
Part of Lot 13, Concession 4
Township of East Hawkesbury,
Hydrogeological Study (Policy 2.5.8.4 Minimum Lot Size Requirements),

The following is a consolidated report appending all the information provided to date including the recommendations regarding the septic system, well construction and protection of the water supply aquifer as per your letter dated March 8, 2005.

The following report of the hydrogeological study was prepared to satisfy the requirements the South Nation Conservation on their recommendation letter dated October 25, 2004. Revisions from our letters dated February 10 and March 4 and 7, 2005 are incorporated in the following report.

Hydrogeological Study:

The hydrogeological study was prepared to satisfy the requirements of policy 2.5.8.4 Minimum Lot Size Requirements of the United Counties of Prescott and Russell Official Plan for the above referenced consent applications. The hydrogeological study was prepared in order to demonstrate sustainable ground water quantity and acceptable quality and to demonstrate soil conditions and their ability to accommodate the effluent load from a septic field along with its replacement area.

1. General

i)Site Description:

We have visited the site on November 17, 2004 in order to prepare a site assessment to demonstrate that the nature of the soil and the dimensions of the retained and detached lots can accommodate the proposed land use.

870 JAMES ST., HAWKESBURY, ONTARIO K6A 2W8 Tel.: (613) 632-0241 Fax: (613) 632-1669 e-mail: lascelles@bellnet.ca

The site is located on part of lot 13, Concession 4 in the township of East Hawkesbury, being part 3 of plan 46R-5423. The house at the site is located at civic number 4700 County Road no.14 and the total site frontage is 361.79 m and the depth is 76.215 m a total area of 2.75 ha. The site is relatively flat. The proposed lots 1 to 4 have areas of 4594 m^2 while lot 5 has an area of 4595 m^2 and the retained lot 6 has an area of 4538 m^2. Drainage is overland towards a ditch along County Road 14.

There is a house with detached garage located on lot 6, civic number 4700. The water supply for the house is from a drilled well 20 m deep. Surrounding land use are residential and agricultural. The site is located across from a strip development. The site is on the west side of the village of St-Eugène.

ii) Site Geology:

The type of bedrock at the site is Middle Upper Ordovician Lindsay formation which is a limestone and calcareous shale described by Williams as interbedded light to dark grey to brownish grey sublithographic to coarsely crystalline fossiliferous limestone with shaly partings and interbeds, up to 5 cm thick, of dark grey calcareous shale. The thickness is reported as 19 metres near the Ottawa river and thickening to the southeast. According to the MOE water well logs, the limestone bedrock is found at depths of 20 to 40 feet below ground level. According to the test pits dug on site and to the soil map of Prescott County the soil at the site is a sandy loam over clay described as St-Thomas fine sandy loam described as reddish brown, loose sandy soils with sorted non-calcareous fine sand parent material. The Ontario Geological Survey map 5514 from the Southern Ontario Engineering Geology Terrain Study by Ringrose, Roed and Sauriol describes the terrain as clayey silt material glaciomarine landforms with till ground moraine subordinate landforms and mainly low local relief washed terrace with dry surface conditions. The soil at the site has a percolation T-time of 4 to 10 minutes per centimetres. Soil tests were performed on soil from test pit #1 at depths of 3' and test pit #2 at depth 4'.

From the MOE Water well logs, the overburden at the site consists of a brown sand for 3 to 6 feet with grey clay hardpan to depths of 20 feet. No variations in the overburden was noticed at the site.

The terrain at the site is relatively flat with a high point of 58.54 on lot 4 and sloping toward lot 6 with low elevation of 55.5 m in north corner and sloping toward the south west corner with low elevation of 55.8 m. The site is delineated to the east by the county road, to the north by the a creek, to the west and south by agricultural land. Across the county road is a strip of residential lots with single family houses with septic system and private wells.

iii) Surrounding Land Use

The surrounding land use within 500 metres is residential, agricultural with and commercial (one restaurant and one garage located along County Road 10). No sand pit, golf course or landfills are located within 500 metres of the proposed development.

The neighbouring septic systems are located downgradient from the site and no impact is expected form the septic systems.

iv) Soil Testing:

Five test holes were dug by backhoe on November 3, 2004 and we inspected them on the same day.

Test hole #1: Located on proposed Lot 1

Depth: 8'-0"
Ground water: No water observed
Stratigraphy:

0	-	8"	topsoil
8"	-	3'	silty sand
3'	-	7'	clay and brown silty sand
7'	-	8'	grey clay

No bedrock
Samples taken: sand at 2' and clay at 7'

Test hole #2: Located on proposed Lot 2 north of Lot 1

Depth: 8'-0"
Ground water: No water observed
Stratigraphy:

0	-	8"	topsoil
8"	-	3'	silty sand
3'	-	7'	clay and brown silty sand
7'	-	8'	grey clay

No bedrock
No samples taken

Test hole #3: Located on proposed Lot 3 north of Lot 2

Depth: 8'-0"
Ground water: No water observed
Stratigraphy:

0	-	8"	topsoil
8"	-	3'	silty sand
3'	-	7'	clay and brown silty sand
7'	-	8'	grey clay

No bedrock
No samples taken

Test hole #4: Located on proposed Lot 4 north of Lot 3

Depth: 8'-0"
Ground water: No water observed
Stratigraphy:

0	-	8"	topsoil
8"	-	3'	silty sand
3'	-	7'	clay and brown silty sand
7'	-	8'	grey clay

No bedrock
No samples taken

Test hole #5: Located on proposed Lot 5 north of Lot 4

Depth: 8'-0"
Ground water: No water observed
Stratigraphy:

0	-	8"	topsoil
8"	-	3'	silty sand
3'	-	7'	clay and brown silty sand
7'	-	8'	grey clay

No bedrock
No samples taken

Jar tests were performed in-house and the resulting estimated T-time rate for the soil at the site is 4 to 10 minutes per centimetres.

2. Septic System

The proposed tile beds shall be sized according to L= QT/200, i.e. L= 1600 litres x 10 min/cm / 200 = 80 metres of tile over 900 mm of sand or original soil in order to accommodate a three-bedroom house. We have also shown on the site plan the sewage system envelope necessary to accommodate a septic system including the mantle and a replacement area for the septic system. Using the formula A=Q/6, this area is 270 m^2 . This area meets the minimum distances as described in Part 8 of the Ontario Building Code. A separation distance of 15 metres from drilled wells and 30 metres from dug wells is necessary.

i) Impacts on Creek

There are no impacts expected on the neighbouring creek as proper dilution is provided on site with the lot areas and location of the septic beds with respect to the creek.

ii) Flow directions for the septic effluent

The flow directions from the septic system effluent will be down into the soil to the clay layer and northeast towards the creek.

iii) Soil Analysis

Soil tests were performed on the soil samples which were collected at the site at the time of soil investigations. The soil is a fine sandy loam well distributed with a T time of 10 minutes per centimetre and is adequate for conventional septic systems.

iv) Receiving Aquifer Investigations

Receiving aquifer investigations due to the agricultural activities were not obtained because the test holes could not obtain groundwater due to the depth of the groundwater at the site. Neighbouring fields are separated from the site by a ditch to the west and to the north. There is also a ditch south of the trail which was the railroad tracks shown south of the site. The water sampled at the culvert under the trail was a shallow standing pool of water which overflows to the south.

v)Sewage Disposal System Effluent:

The soil at the site is suitable for sewage disposal system with a T time of 4 to 10 minutes per centimetres and an equivalent hydraulic conductivity of 4 to 1 X 10^{-2} cm/sec. The effluent migration will be directed in a downgradient towards the ditches along the property and towards the creek north of the site.

3. Nitrate Dilution and Isolation:

The nitrate levels in the drilled well were below the detection limit of 0.10 mg/L. This is below the allowable 10 mg/L drinking water standard. The effluent migration is towards the creek north of the site via the overburden groundwater. No water was encountered in the test pits or the ditch surrounding the site. I t is anticipated that denitrification will be provided by the available 7 feet of soil above the overburden groundwater level and from the sediment layer at the creek. A water sample was collected from the creek upstream of the box culvert. The nitrate level was 2.33 mg/L and the ammonia was 0.39 mg/L and the total phosphorous was 0.15 mg/L.

Nitrate dilution have been calculated as follows with the available water surplus value of 372.2 mm/year for sandy soils. Average water surplus was taken from The Canadian Climate Center Atmospheric Environment Service water budget means for the period 1983 to 2002 at Ottawa International airport.

The diluted concentration of nitrate at the site can be calculated by simple dilution as follows:

C diluted = Mass nitrates / Volume for dilution where
Mass nitrates = number houses x C effluent x V effluent
= 6 houses x 40 mg/L x 1000 L/day/house
= 240000 mg as NO_3

and V total = V infiltration + V effluent

Since V Infiltration = A x Infiltration
And A = 27509 m^2 ,

Infiltration for a flat site with St-Thomas sand group A soil:
of which: - 324 m^2 impervious per lot(house and driveway) = 324 x 6 = 1944 m^2 at 0 infiltration
- remainder of lot is urban lawns = 27509 - 1944 = 25565 m^2 with water surplus of 372.2 mm/year x infiltration factor of 0.7 (flat to rolling land 0.25 + open sandy loam 0.4 + urban lawns 0.05) = 0.7 results in infiltration of 0.26054 m/year

Therefore V Infiltration = 1944 x 0 + 25565 x 0.2605 = 6659.68 m^3/yr
= 18.25 m^3/day
V total = 18.25 + 6 = 24.25 m^3/day

Then the Nitrate concentration is calculated as
C d = Mn/ Vt
= 240000 mg as NO_3 / (24.25 m^3/day x 1000 L/m^3)
= 9.896 mg/L < 10.0 mg/L

The site is adequate for the dilution ,with infiltration water only, to accept the effluent from 6 houses. Effluent migration is expected to be directly into the soil through more than 0.9 m of unsaturated soil prior to reaching the overburden groundwater and being directed in a northeasterly fashion towards the creek. In order to meet the nitrate criteria by dilution alone the minimum lot size would be 4525 m^2. The minimum lot size proposed is 4539 m^2 which is adequate for the nitrate dilution.

4.Site Hydrogeology:

Water quality and quantity issues at the site were determined from the well at the site as required in the Standard requirements for the preparation of an hydrogeological study to satisfy policy 2.5.8.4. Minimum Lot Size Requirements.

i) Water Supply Aquifer

The wells in the vicinity of the site are shown on the attached REIS website location map obtain their water from the bedrock aquifer at elevations 19 to 25 masl or 36 to 49 masl. Static water levels for the bedrock aquifer varies from 50 to53 masl. The proposed water supply aquifer for the subdivision is at depths of more than 20 metres below ground level at elevations of 36 masl. According to the water well records obtained from the web sites REIS and EOWRMS, from the MOE, and from the owners, the neighbouring wells are drilled in the bedrock to depths varying from 9 to 18 masl.

The receiving water for the subdivision is the overburden groundwater which flows to the creek north of the subdivision. The test holes at the site encountered a layer of grey clay at the bottom of the test pits at elevation 54.5 m. The creek elevation north of the site is at 51.5m. Based on the ground elevations of the test holes and the location of the clay layer, the overburden groundwater flow is towards the creek. During the soil testing, no overburden groundwater table was observed

at depth lower than 2.4 m from the ground level. The high groundwater table is estimated at elevation 55.8 m.

From the enclosed cross-section of the wells at the site and in the vicinity we can infer that there are no impacts expected on the water aquifer due to land use. The water supply aquifer is not interconnected with the overburden as shown on the profile cross-section drawing. The static head for the overburden is lower than the static head for the proposed supply aquifer. This implies an upward flow from the supply aquifer to the overburden receiving aquifer. Gradients are such that the flow of water of the receiving aquifer is towards the creek.

The groundwater flow direction, according to the water well data is towards the Ottawa river drainage basin. The water supply aquifer at the site is the bedrock aquifer consisting of the Lindsay formation. Based on the static elevations, the bedrock aquifer flow directions are in an easterly fashion.

A cross-section of the on-site geology and hydrogeological information is enclosed. This was based on the well owned by Mr. Lafrance and on the test pits performed at the site. The well logs and test pit data are enclosed with proper elevations for each layer and bedrock..

The water supply aquifer and the overburden have different static levels as shown from the well information obtained from table 1. The overburden groundwater flow is inferred from the wells which do not reach the bedrock and from the water level of the creek. We have shown this information on the cross-sections A-A and C-C. Test pits dug at the site do not reach the groundwater but estimates of the high groundwater were made while designing the septic system and were estimated at 1.5 m below ground level.

Flow directions for the receiving aquifer and the water supply aquifer were based on the information gathered from the test pits and the well logs and from the topographical information supplied. Static water levels are enclosed in Table 1.

ii) Water quality and quantity issues and neighbouring well owners interviews:

The land immediately to the west and immediately to the south is agricultural use. The site is bounded to the north by a creek and to the east by County Road 14. A strip development is located on the eastern side of the county road with a total of 11 residences immediately across from the proposed development. Data for the static water table elevation and flow directions are enclosed on the base map. Data was obtained from the water well records. All on-site and off-site wells included in sampling are referenced and GPS coordinates are provided along with their locations as shown on th attached plans.

Five neighbouring well owners were questioned about their wells. The questionnaires are enclosed and the location of their lots is shown on the site location plan. Their wells were drilled to depth varied from 37 to 135 feet. No problems with water quantity or quality was reported except for a sulphur odour at 4775 County Road 14 with a well depth of 75 feet.

The neighbouring wells owners were advised of the biological presence and their wells were also sampled. Results of the analysis showed no bacteriological presence in the drilled wells.

iii)Well water quality

One drilled well is located at the site, specifically at #4700 County Road 14. The well was drilled by D&R Water Well Drilling from St-Albert, Well Contractor's licence No. 6006 . The well which has well tag number A014095 was constructed in June of 2004 to a depth of 20 m and the water was found at a depth of 15.15 m. A pump test was performed and the recommended pump rate was 45.50 litres per minute at a depth of 16.66 m. The steel casing and cement grout extends to the bedrock formation at 9.39 m. Water samples were collected on October 24, 2004 and submitted to Accutest Laboratories for subdivision supply requirements analysis. The results are enclosed. The drilled well was identified as L04-120 W2 4700 Cty Rd 14 on the testing report of analysis.

Two neighbouring wells were also tested . They are the drilled wells located at 4660 County Road 14 identified as W1 and the drilled well from 4837 County Road 14 identified as W3. A questionnaire and the water well record #259477 is enclosed for the drilled well located at 4660 County Road 14, immediately north of the creek. The well was drilled for Carl Berlinguette on the 6 of August 2003 by Maurice Cayer, of Casselman, Well Contractor's licence No. 1517, to a depth of 40 feet extending into the limestone from 20 to 40 feet with cement grout to a depth of 20 feet. The soil is described as hardpan to a depth of 20 feet. The pump test recommended a pump rate of 10 gpm and a pump setting of 30 feet. The owner of 4660 County Road 14 reported no problem with his well.

A questionnaire is enclosed for the drilled well located at 4897 County Road 14, located east of the site. The well was drilled in 1973 for Yvon Berlinguette by Marc Belanger, of Chute-à-Blondeau to a depth of 43 feet extending into the limestone formation. The pump is a submersible ½ Hp. The owner has been at this address for 31 years and reports no problems with the well.

The analytical results for the drilled well located at the site at # 4700 County road 14 were found to be within the objectives. The heterotrophic plate count was more than 500/ml which may be due to the samples being received at the laboratory on the Tuesday while samples were collected on Sunday evening.

The analytical results for the drilled well located at # 4660 County road 14 were found to be within the objectives except for t he sodium which is 177mg and is above the 20 mg/L threshold where the medical officer of health has to be notified and the hardness is 524 mg/L which is slightly above the aesthetic objective of 500 mg/L. The faecal streptococcus count is 207 per 100 mL .

The analytical results for the drilled well located at the site at # 4837 County road 14 were found to be within the objectives except for the following parameters: the manganese is 0.06 mg/L while the aesthetic objective is 0.05mg/L and the treatability level is 1.0 mg/L, the iron is 1.11 mg/L while the aesthetic objective is 0.3 mg/L and the treatability level is 5 mg/L, the sodium is 28 mg/L which is below the aesthetic objective of 200 mg/L but higher than the 20 mg/L level at which the medical officer of health must be advised, the hardness is 503 mg/L as $CaCO_3$ which is near the operational

guideline of 500 mg/L, the turbidity is at 2.0 NTU which is higher than the aesthetic objective of 1.0 NTU but lower than the treatability level of 5 NTU, the hardness is also elevated at 741 mg/L while the aesthetic objective is 500 mg/L. The majority of these parameters can be treated with a water softener, but drinking water should be supplied through a separate tap which deoes not receive additional sodium. The heterotrophic plate count was more than 500/ml which may be due to the samples being received at the laboratory on the Tuesday while samples were collected on Sunday evening.

The bacterial contamination measured at the on site well may be due to the time delay between sampling and delivery to the laboratory. The owner disinfected his well with household bleach as per ministry procedures and the well was sampled and submitted to Accutest Laboratories for biological presence. Results were acceptable except for 1 total coliforms. Laboratory results are attached. The owner sampled his well and forwarded the bottle to the Eastern Ontario Health Unit for analysis. Results obtained were 0 total coliforms and 0 e-coli. A copy of the results is attached.

5. Well construction

i) Steel Casing

The proposed water supply aquifer for development should be at a depth of 20 metres, The water well construction must be at depth exceeding 20 m, the same as the drilled well aquifer for Lot 6, ten metres deep into the limestone bedrock formation, with a drilled well sealed for a minimum depth of 9m and drilled to meet the ministry of the environment's guidelines. Bedrock aquifer wells shall be constructed with proper construction techniques asper regulation 903 with capped casing extending 0.3 m above ground level, in this case the casing should extend to the bedrock formation, 9.4 m below ground level. The well shall be constructed in a manner as to prevent the accumulation of any runoff to the area surrounding the well. Drilled well shall be located at a minimum distance of 15 m from septic system installation and preferably upgradient from the septic system installations. New wells will be disinfected prior to use. We have shown possible development with proposed well location on the lots.

ii)Well Construction and Pumping Rate:

The pumping test performed by the driller at a pumping rate of 54 litres per minute resulted in a drawdown of 1.2 m which recovered after 10 minutes. The proposed pumping rate for the existing drilled well is 45.50 litres per minute. The pumping rates from water well records provided by the Ministry of the Environment varied from 2 to 20 gpm. Water is described as salty and mineral at depth of 148 to 200 feet and mineral at depth of 38 feet. Water is fresh for the remainder of the wells. A pumping rate of 45 litres per minute was recommended for Lot 6 which is more than adequate for a four-bedroom house which would require a rate of 18.75 l/min (4.2 gpm). The pumping rate of 54 l/minute for one hour pumped a total of 3240 litres and recovery was within 4% of the starting level in less than 15 minutes. Ample water supply for the additional 5 lots is shown in the pumping tests performed by the well drillers and the pump rate listed in the MOE waterwell records.

6. Impact from Agricultural Activities

No impact from the neighbouring activities were observed in the well at the site or at the two test wells. No water was found in the test holes. There is also a ditch at the rear of the property which redirects the agricultural runoff towards the creek. Impacts from the agricultural activities on the water supply has been documented in the nitrate tests performed on the water wells at the site and showed no impacts with nitrate levels of less than detectable limits. The base elevations of the creek are provided to show that it is actually intercepting the agricultural runoff. The elevation of the ditch west of the site is 55.0 m off site and drains towards the creek which was measured at elevation 51 at the county road crossing and 52.0 west of the culvert. The field located west of site are tile drained and infiltration of the agricultural field is carried to the creek. See the cross-section for inferred groundwater elevations and flows.

7. Conclusions:

From the hydrogeological study we provide the following conclusions and recommendations:

1. Sufficient water quantity is available on-site based on the test well information.

2. On-site water quality was found to be acceptable as per the Safe Drinking Water Guidelines with elevated parameters of organic nitrogen, iron, sodium, manganese, TDS and turbidity. No impacts to water supply aquifer from previous development were observed in the neighbouring wells water quality analysis.

3. The nature of the soil and the dimensions of the detached and retained lots can accommodate the proposed land use.

4. Development shall be made on the use of drilled well constructed to depth exceeding 20 m sealed for a minimum depth of 9m below ground level set well into bedrock and entire annular space filled with a suitable grout. The well shall be constructed in accordance with the Ministry of the Environment's amended Well Regulations 903. New wells will be disinfected prior to use.

5.Conventional sewage systems shall be constructed based on specific investigations to evaluate the suitability of local conditions on each lot. All sewage systems shall be constructed according to the Ontario Building Code with proper separation of 15 m from drilled wells. Minimum proposed lot size for proper nitrate dilution is 4539 m^2 .

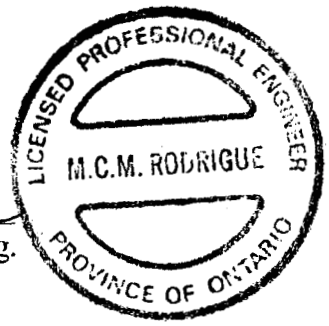
6. No impacts are expected on the water aquifer due to land use because the water supply aquifer is not interconnected with the overburden and has upward hydraulic gradient. Impacts from agricultural activities are also not expected as fields are tile drained and infiltration of the agricultural fields is carried to the creek.

We trust the enclosed is to your satisfaction and we remain,

Yours truly,

L'ingénierie
LASCELLES
engineering limited

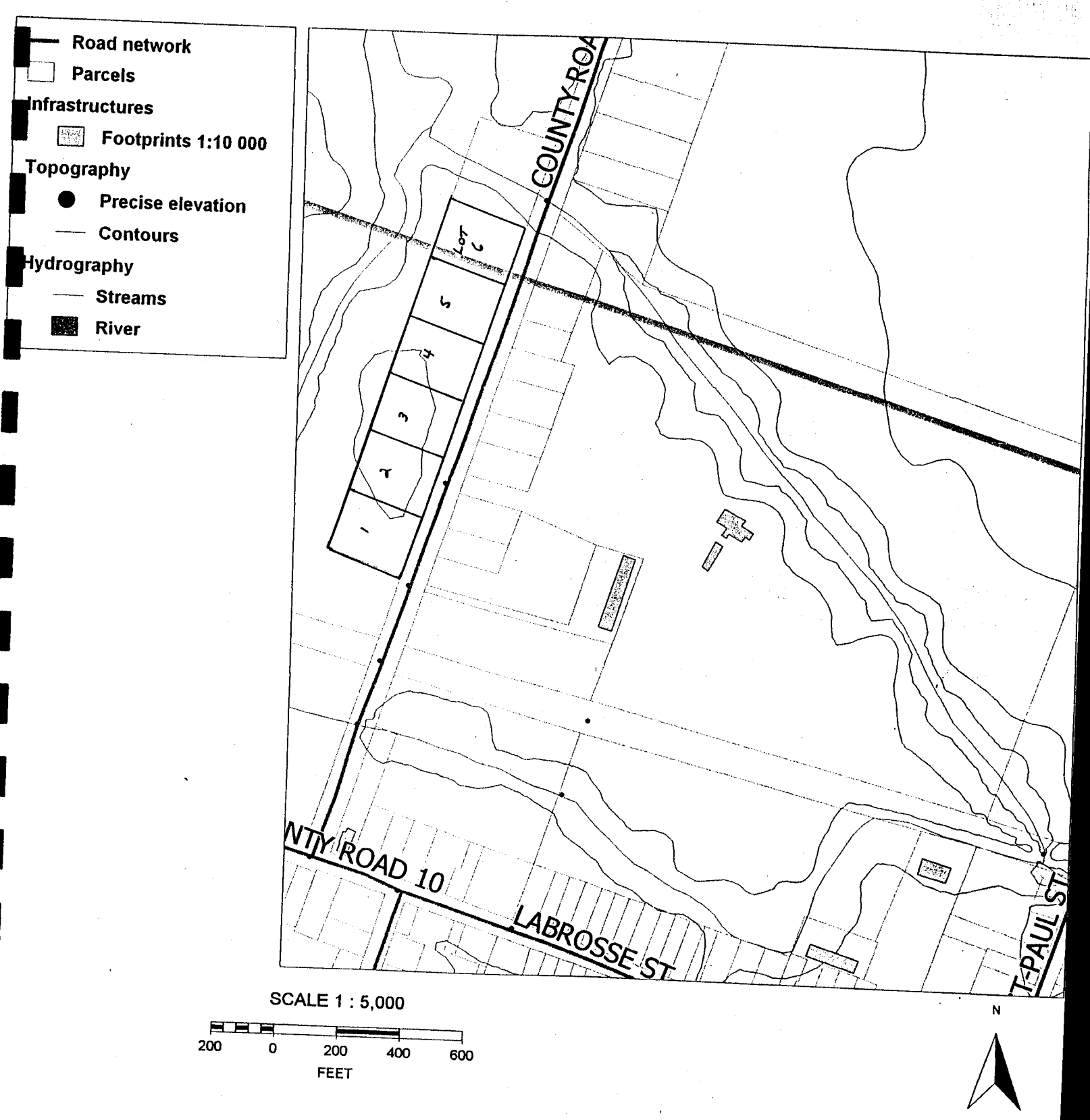
per: _____
Manon C. Rodrigue, P.Eng.



cc: Sandra Mancini, Hydrogeologist, South Nation Conservation
Robert Lafrance, owner
André Barette, Schultz Barrette Surveying
Louis Prévost, United Counties of Prescott & Russell

Site Location Plan

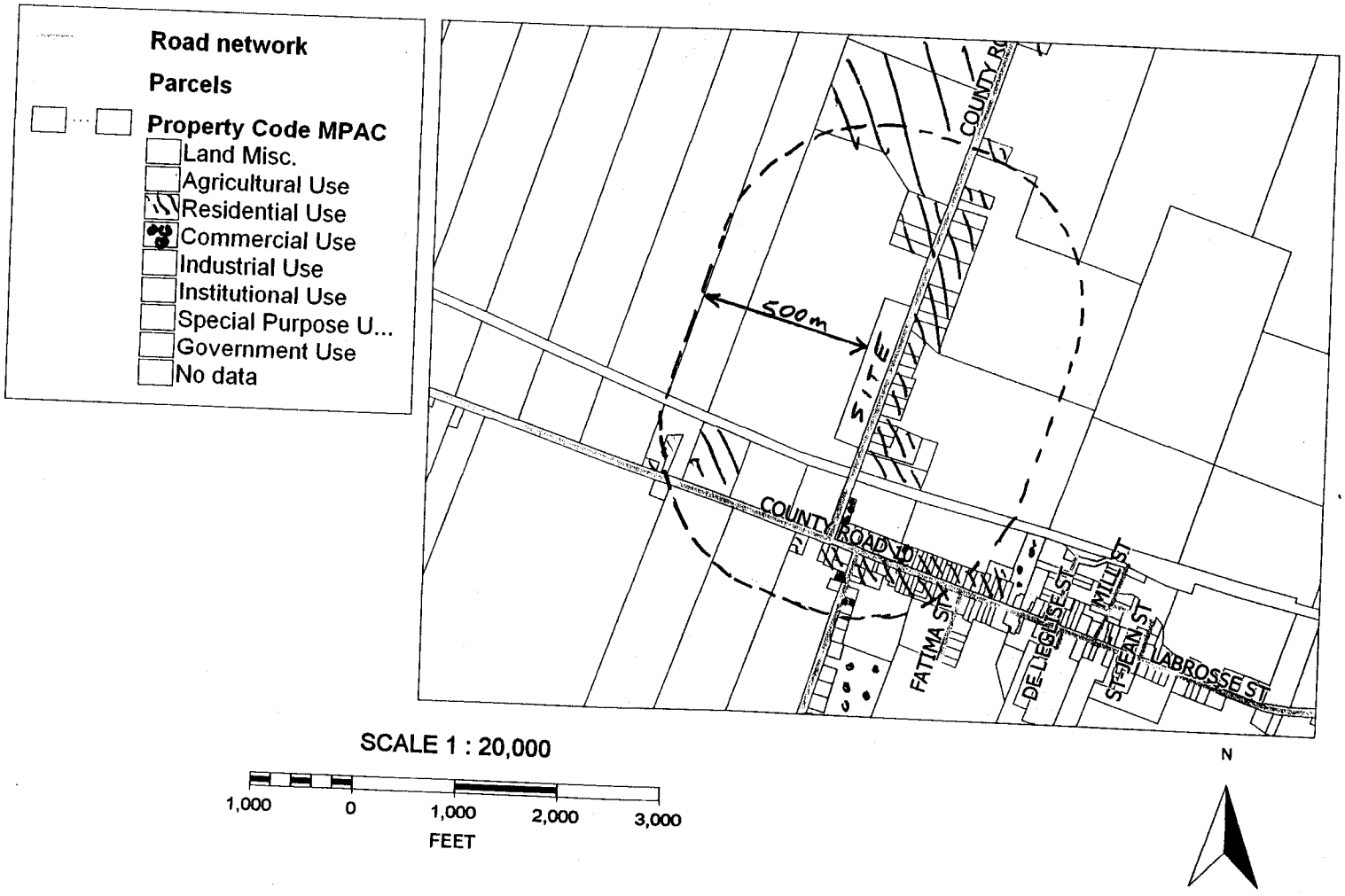
United Counties of Prescott & Russell



http://www.prescott-russell.on.ca/maps/parcel_en_pu_6.mwf

Thursday, October 14, 2004 11:03 AM

United Counties of Prescott & Russell

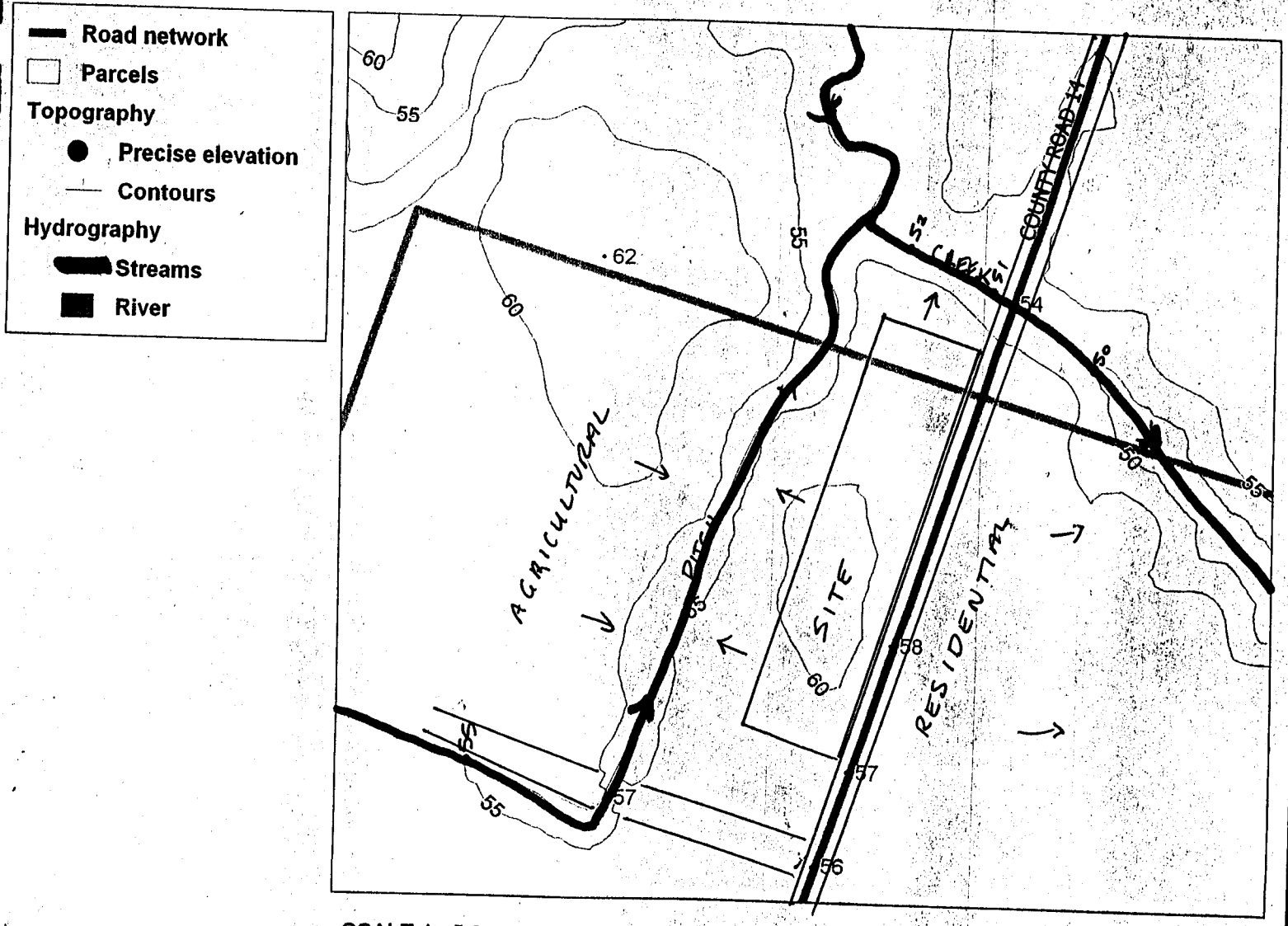


LAND USE WITHIN 500 m.

from.

http://www.prescott-russell.on.ca/maps/parcel_en_pu_6.mwf

United Counties of Prescott & Russell



SCALE 1 : 5,000

200 0 200 400 600

FEET

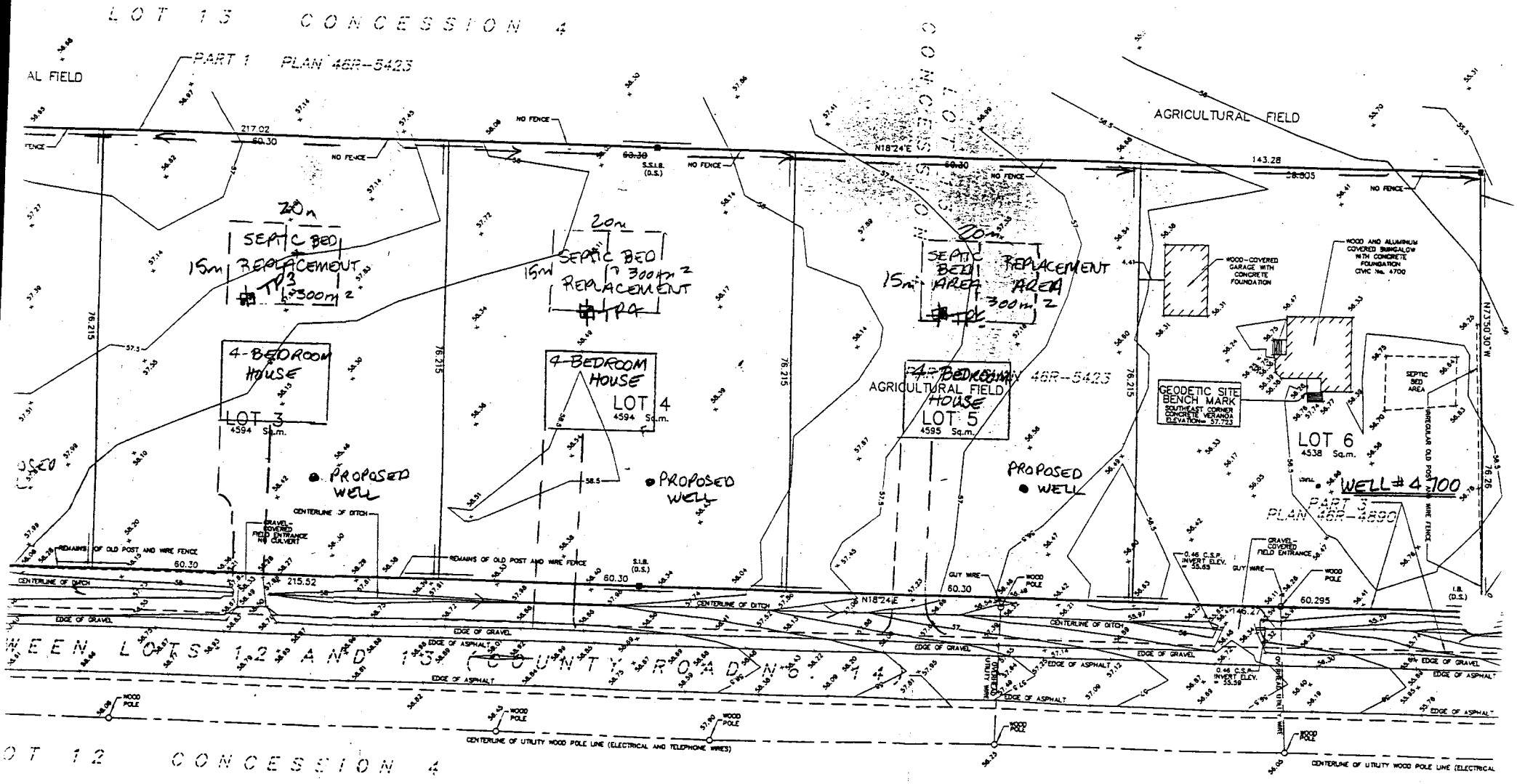
→ SURFACE RUNOFF

DITCH & CREEK LOCATION

N

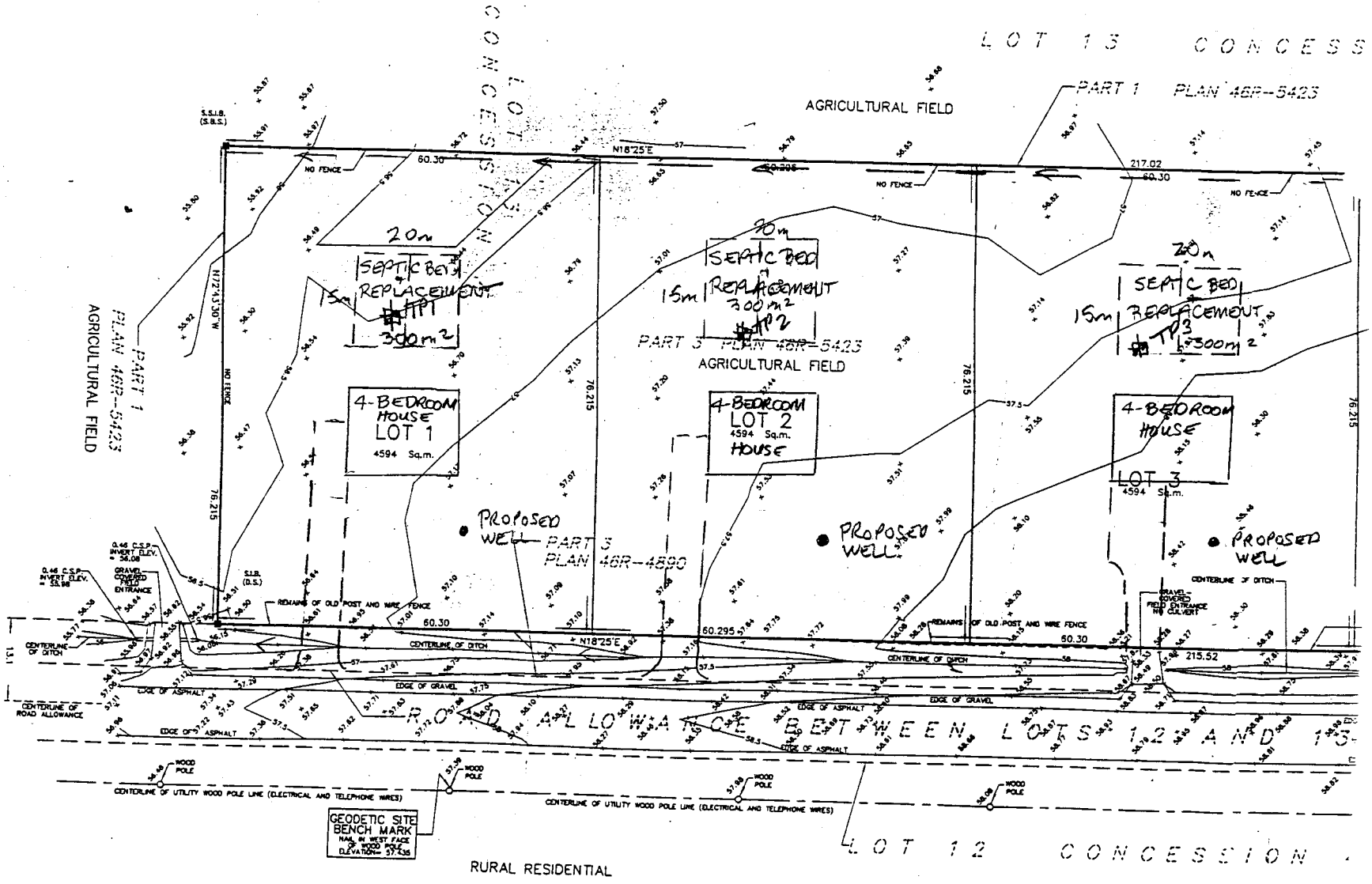
http://www.prescott-russell.on.ca/maps/parcel_en_pu_6.mwf

Friday, March 04, 2005 1:12 PM



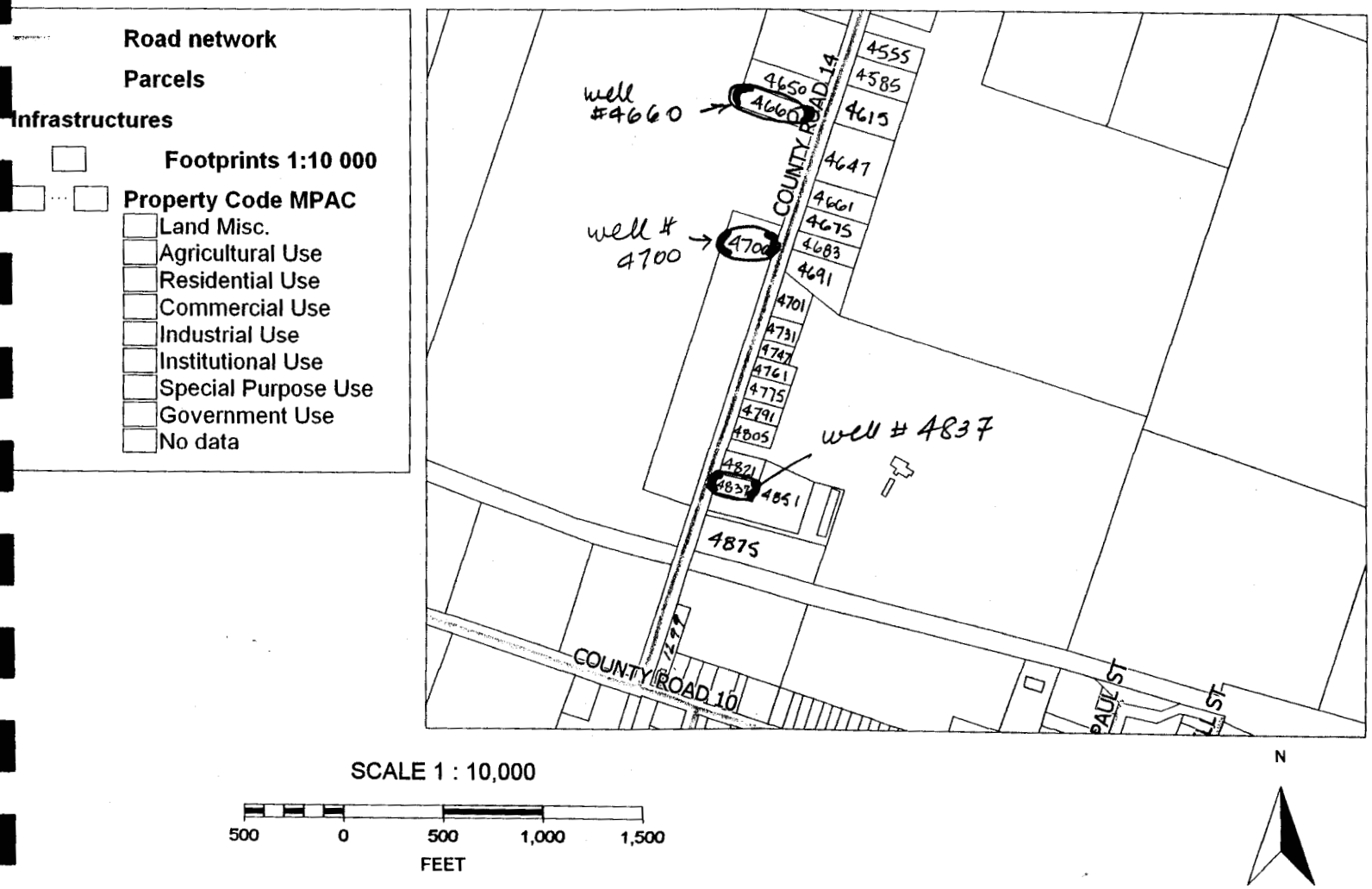
PLAN SHOWING SITE DEVELOPMENT

RURAL RESIDENTIAL


LOT 13 CONCESS
PART 1 PLAN 46R-5423
AGRICULTURAL FIELD
N18°25'E
60.30
NO FENCE
217.02
60.30
20m
SEPTIC BED
15m REPLACEMENT
300m²
TP1
TP2
TP3
PART 3 PLAN 46R-5423
AGRICULTURAL FIELD
4-BEDROOM HOUSE
LOT 1
4594 Sq.m.
4-BEDROOM
LOT 2
4594 Sq.m.
HOUSE
4-BEDROOM HOUSE
LOT 3
4594 Sq.m.
PROPOSED WELL
PART 3 PLAN 46R-4890
PROPOSED WELL
PROPOSED WELL
76.215
N18°25'30"W
PART 1 PLAN 46R-5423
AGRICULTURAL FIELD
0.46 C.S.P. INVERT ELEV. = 54.08
GRAVEL COVERED FIELD ENTRANCE
S.I.B. (D.S.)
REMAINS OF OLD POST AND WIRE FENCE
60.30
N18°25'E
60.295
REMAINS OF OLD POST AND WIRE FENCE
60.30
215.52
CENTERLINE OF DITCH
CENTERLINE OF ROAD ALLOWANCE
EDGE OF ASPHALT
EDGE OF GRAVEL
EDGE OF ASPHALT
EDGE OF ASPHALT
EDGE OF GRAVEL
EDGE OF ASPHALT
ROAD ALLOWANCE BETWEEN LOTS 12 AND 13
WOOD POLE
CENTERLINE OF UTILITY WOOD POLE LINE (ELECTRICAL AND TELEPHONE WIRES)
WOOD POLE
WOOD POLE
CENTERLINE OF UTILITY WOOD POLE LINE (ELECTRICAL AND TELEPHONE WIRES)
WOOD POLE
GEODETIC SITE BENCH MARK
NAIL IN WEST FACE OF WOOD POLE
ELEVATION= 57.235
LOT 12 CONCESSION
RURAL RESIDENTIAL

Reports of Analysis

United Counties of Prescott & Russell



well sampling locations

from
http://www.prescott-russell.on.ca/maps/parcel_en_pu_6.mwf

ACCUTEST LABORATORIES LTD

REPORT OF ANALYSIS

Client: **Lascelles Engineering Ltd.**
870 James St.
Hawkesbury, ON
K6A 2W8
Attention: **Ms. Manon C. Rodrigue**

INVOICE: Skotidakis Goat Farm

Report Number: 2501160
Date: 2005-01-26
Date Submitted: 2005-01-24

Project: L04-120

P.O. Number:
Matrix: Water

			LAB ID:	365524	365525	365526			GUIDELINE		
			Sample Date:	2005-01-23	2005-01-23	2005-01-23					
			Sample ID:	W4660	W4700	W4837			MOE REG. 170/03		
PARAMETER	UNITS	MDL							TYPE	LIMIT	UNITS
Total Coliforms	ct/100mL			0	1	0			MAC	0	ct/100mL
Escherichia Coli	ct/100mL			0	0	0			MAC	0	ct/100mL
Heterotrophic Plate Count	ct/1mL			11	34	46			MAC	500	ct/1mL
Faecal Coliforms	ct/100mL			0	0	0			MAC	0	ct/100mL
Faecal Streptococcus	ct/100mL			0	0	0					ct/100mL

MDL = Method Detection Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

RECEIVED FEB 0 7 2005

APPROVAL: Krista Quantrill
Microbiology Analyst

ACCUTEST LABORATORIES LTD

REPORT OF ANALYSIS

Client: **Lascelles Engineering Ltd.**
870 James St.
Hawkesbury, ON
K6A 2W8
Attention: **Ms. Manon C. Rodrigue**

Report Number: 2421271
Date: 2004-11-15
Date Submitted: 2004-11-04

Project: L04-120

P.O. Number:
Matrix: Surfacewater

			LAB ID:	352642	352643				GUIDELINE		
			Sample Date:	2004-11-03	2004-11-03						
			Sample ID:	SW1- Ditch South	SW2- Creek North						
PARAMETER	UNITS	MDL							TYPE	LIMIT	UNITS
N-NH3 (Ammonia)	mg/L	0.02		0.05	0.39						
N-NO3 (Nitrate)	mg/L	0.10		1.33	2.33						
Total Kjeldahl Nitrogen	mg/L	0.05		2.17	1.35						
Total Phosphorus	mg/L	0.01		0.60	0.15						
Sodium	mg/L	2		501	33						

MDL = Method Detection Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration
Comment:

APPROVAL:
Ewan McRobbie
Inorganic Lab Supervisor

ACCUTEST LABORATORIES LTD

REPORT OF ANALYSIS

Client: **Lascelles Engineering Ltd.**
870 James St.
Hawkesbury, ON
K6A 2W8
Attention: **Ms. Manon C. Rodrigue**

Report Number: 2420511
Date: 2004-10-28
Date Submitted: 2004-10-26

Project: L04-120

P.O. Number:
Matrix: Water

			LAB ID:	350433	350434	350435			GUIDELINE		
			Sample Date:	2004-10-26	2004-10-26	2004-10-26			MOE REG 170/03		
			Sample ID:	W1 4660 Cty Rd 14	W2 4700 Cty Rd 14	W3 4837 Cty Rd 14					
PARAMETER	UNITS	MDL							TYPE	LIMIT	UNITS
Total Coliforms	ct/100mL			0	0	10			MAC	0	ct/100mL
Escherichia Coli	ct/100mL			0	0	0			MAC	0	ct/100mL
Heterotrophic Plate Count	ct/1mL			95	>500	>500			MAC	500	ct/1mL
Faecal Coliforms	ct/100mL			0	0	0			MAC	0	ct/100mL
Faecal Streptococcus	ct/100mL			207	0	0					ct/100mL

MDL = Method Detection Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

APPROVAL: Krista Quantrill
Krista Quantrill
Microbiology Analyst

ACCUTEST LABORATORIES LTD

REPORT OF ANALYSIS

Client: **Lascelles Engineering Ltd.**
870 James St.
Hawkesbury, ON
K6A 2W8
Attention: **Ms. Manon C. Rodrigue**

Report Number: 2421261
Date: 2004-11-08
Date Submitted: 2004-11-04

Project: L04-120

P.O. Number:
Matrix: Surfacewater

			LAB ID:	352614	352615				GUIDELINE		
			Sample Date:	2004-11-03	2004-11-03						
			Sample ID:	SW1-Ditch South	SW2-Creek North						
PARAMETER	UNITS	MDL							TYPE	LIMIT	UNITS
Total Coliforms	ct/100mL			2500	57000						
Escherichia Coli	ct/100mL			35	2090						
Heterotrophic Plate Count	ct/1mL			>500	>500						
Faecal Coliforms	ct/100mL			35	2400						
Faecal Streptococcus	ct/100mL			62	2500						

MDL = Method Detection Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

APPROVAL: _____
Peter Haulena
Analytical Services Manager

ACCUTEST LABORATORIES LTD

REPORT OF ANALYSIS

Client: **Lascelles Engineering Ltd.**
870 James St.
Hawkesbury, ON
K6A 2W8
Attention: **Ms. Manon C. Rodrigue**

Report Number: 2420523
Date: 2004-11-08
Date Submitted: 2004-10-26

Project: L04-120

P.O. Number:
Matrix: Water

			LAB ID:	350461	350462	350463			GUIDELINE		
			Sample Date:	2004-10-24	2004-10-24	2004-10-24					
			Sample ID:	W1 4660 Cty Rd 14	W2 4700 Cty Rd 14	W3 4837 Cty Rd 14					
PARAMETER	**UNITS**	**MDL**							**TYPE**	**LIMIT**	**UNITS**
Alkalinity as CaCO3	mg/L	5	276	210	281						
Chloride	mg/L	1	66	16	184						
Colour	TCU	2	3	<2	<2						
Conductivity	uS/cm	5	806	507	1140						
Dissolved Organic Carbon	mg/L	0.5	2.5	0.5	0.6						
Fluoride	mg/L	0.10	0.17	0.20	0.18						
Hydrogen Sulphide	mg/L	0.01	<0.01	<0.01	<0.01						
N-NH3 (Ammonia)	mg/L	0.02	0.04	0.07	0.06						
N-NO2 (Nitrite)	mg/L	0.10	<0.10	<0.10	<0.10						
N-NO3 (Nitrate)	mg/L	0.10	<0.10	<0.10	<0.10						
pH			7.67	7.65	7.51						
Phenols	mg/L	0.001	<0.001	<0.001	<0.001						
Sulphate	mg/L	1	35	38	39						
Tannin & Lignin	mg/L	0.1	<0.1	<0.1	<0.1						
TDS (COND - CALC)	mg/L	5	524	330	741						
Total Kjeldahl Nitrogen	mg/L	0.05	<0.05	0.06	0.18						
Turbidity	NTU	0.1	0.3	0.9	2.0						
Hardness as CaCO3	mg/L	1	<1	230	503						
Ion Balance		0.01	1.00	0.93	0.98						
Calcium	mg/L	1	<1	51	99						
Magnesium	mg/L	1	<1	25	62						
Potassium	mg/L	1	18	2	4						
Sodium	mg/L	1	177	10	28						
Iron	mg/L	0.01	0.05	0.17	1.11						
Manganese	mg/L	0.01	<0.01	0.04	0.06						

MDL = Method Detection Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration
Comment:

APPROVAL: _____
Ewan McRobbie
Inorganic Lab Supervisor

Ontario Ministry of Health and Long-Term Care
Ministère de la Santé et des Soins de longue durée
Laboratories Branch/Direction des laboratoires

Date Received/R[illegible]e

Laboratory No./N° du laboratoire
028659 AUG26'04 10:05

Bacteriological Analysis of Drinking Water for Private Citizen, SINGLE HOUSEHOLD ONLY
Analyse bactériologiq[illegible]rticuliers, MÉNAGES UNIFAMILIAUX SEULEMENT

001265902

[redacted]

Emergency Locator #/ N° du localisateur d'urgence *	4700
County/Comté *	Prescott ON
Postal Code/Code postal *	K0B 1P0

[redacted]

Health Unit #/N° du bureau de santé *			
2	2	5	8

[redacted]

For Laboratory Use Only/Réservé à l'usage du laboratoire

Interpretation for this water sample/Interprétation de cet échantillon d'eau

The water sample was tested for the presence of both Total Coliform and *E.coli* bacterial indicators of contamination.
L'analyse de l' échantillon d'eau visait à déceler la présence de coliformes totaux et de colibacilles (*E.coli*), indicateurs de contamination.

- [x] **NO SIGNIFICANT EVIDENCE OF BACTERIAL CONTAMINATION** (3 consecutive samples, taken 1 to 3 weeks apart, with this designation are needed to determine the stability of the water supply).
AUCUNE PREUVE DE CONTAMINATION BACTÉRIENNE SIGNIFICATIVE (cette désignation doit être affectée à 3 échantillons consécutifs, dont le prélèvement aura été espacé de 1 à 3 semaines, pour que la source d'approvisionnement en eau soit jugée stable).

- [ ] **SIGNIFICANT EVIDENCE OF BACTERIAL CONTAMINATION May be unsafe to drink.** ***(Consult local health unit for information as soon as possible).***
PREUVE DE CONTAMINATION BACTÉRIENNE SIGNIFICATIVE Peut être non potable. ***(Consultez le bureau de santé local le plus tôt possible pour plus de détails).***

- [ ] **UNSAFE TO DRINK Evidence of sewage contamination.** ***Consult local health unit for appropriate action as soon as possible***
EAU NON POTABLE Preuve de contamination par les égouts. ***Consultez le bureau de santé local le plus tôt possible pour de plus amples renseignements sur les mesures à prendre.***

Date Reported Stamp/
Date du rapport

AUG 27 2004
OTTAWA PHL
2380 ST LAURENT BLVD
OTTAWA, ONTARIO K1G [illegible]
TEL: (613) 736-6[illegible]

Total Coliform per 100 ml/Coliformes totaux par 100 ml	*E.coli* per/par 100 ml
0	0
Date Read/Analyse effectuée le	Checked by/Vérifié par

Ontario

n Care
s de longue durée
es laboratoires

Laboratory No./N° du laboratoire
001868 FEB 3'05 9:39

001506601

Bacteriological ater for Private Citizen, SINGLE HOUSEHOLD ONLY

Analyse bactériologique de l'eau potable – Particuliers, MÉNAGES UNIFAMILIAUX SEULEMENT

Your name and return address/Votre nom et adresse de retour

Name/Nom: ROBERT LAFRANCE

Street, R.R. Box No./Rue, R.R. ou case postale: 4700 CTY ROAD 14

City/Town/Ville: ST-EUGENE

Province: ONTARIO Postal Code/Code postal: K0B 1P0

Location of Water Source/Emplacement de la source d'eau

Street/Rue: CTY ROAD 14

Township/Municipality/Canton/municipalité: ALFRED-PLANTAGENET EAST

Emergency Locator #/N° du localisateur d'urgence *

County/Comté *: PRESCOTT-RUSSELL ON

Postal Code/Code postal *: K0B 1P0

Date collected/Date du prélèvement: 2005 02 02 (yyyy mm dd)

Health Unit #/N° du bureau de santé *: 2258

Your Daytime Telephone #/Votre n° de téléphone le jour: (613) 674-2650

☐ I will pick up report at this laboratory/Je viendrai chercher le rapport à ce laboratoire

☒ Please mail to my mailing address above/Veuillez le faire parvenir à l'adresse postale indiquée ci-dessus

Instructions – Please read instructions on page carefully before sampling.
Directives – Veuillez lire attentivement les directives au dos des avant de prélever votre échantillon.

WATER WILL NOT BE TESTED IF THE SHADED AREAS OF THIS FORM ARE NOT COMPLETELY AND ACCURATELY FILLED IN/
NOUS N'ANALYSERONS PAS L'ÉCHANTILLON D'EAU SI LES PARTIES OMBRÉES DE CE FORMULAIRE NE SONT PAS DÛMENT REMPLIES EN ENTIER ET DE FAÇON EXACTE

* Please assist the laboratory if possible by also providing this information (see the 7-digit Health Unit numbers on the previous page)/
Ces renseignements faciliteront le travail du laboratoire. Veuillez les indiquer si possible (voir les numéros des bureaux de santé à 7 chiffres à la page précédente).

For Laboratory Use Only/Réservé à l'usage du laboratoire

Interpretation for this water sample/Interprétation de cet échantillon d'eau

The water sample was tested for the presence of both Total Coliform and *E.coli* bacterial indicators of contamination.
L'analyse de l' échantillon d'eau visait à déceler la présence de coliformes totaux et de colibacilles (*E.coli*), indicateurs de contamination.

☑ **NO SIGNIFICANT EVIDENCE OF BACTERIAL CONTAMINATION**
(3 consecutive samples, taken 1 to 3 weeks apart, with this designation are needed to determine the stability of the water supply).
AUCUNE PREUVE DE CONTAMINATION BACTÉRIENNE SIGNIFICATIVE
(cette désignation doit être affectée à 3 échantillons consécutifs, dont le prélèvement aura été espacé de 1 à 3 semaines, pour que la source d'approvisionnement en eau soit jugée stable).

☐ **SIGNIFICANT EVIDENCE OF BACTERIAL CONTAMINATION May be unsafe to drink.** ***(Consult local health unit for information as soon as possible).***
PREUVE DE CONTAMINATION BACTÉRIENNE SIGNIFICATIVE Peut être non potable. ***(Consultez le bureau de santé local le plus tôt possible pour plus de détails).***

Date Reported Stamp/
Date du rapport

OTTAWA PHL
2380 ST LAURENT BLVD
OTTAWA, ONTARIO K1G 4J8
TEL (613) 736-6836

FEB - 4 2005

☐ **UNSAFE TO DRINK Evidence of sewage contamination.** ***Consult local health unit for appropriate action as soon as possible***
EAU NON POTABLE Preuve de contamination par les égouts. ***Consultez le bureau de santé local le plus tôt possible pour de plus amples renseignements sur les mesures à prendre.***

Total Coliform per 100 ml/Coliformes totaux par 100 ml	*E.coli* per/par 100 ml
0	0
Date Read/Analyse effectuée le	**Checked by/Vérifié par**
FEB 04 2005	✓

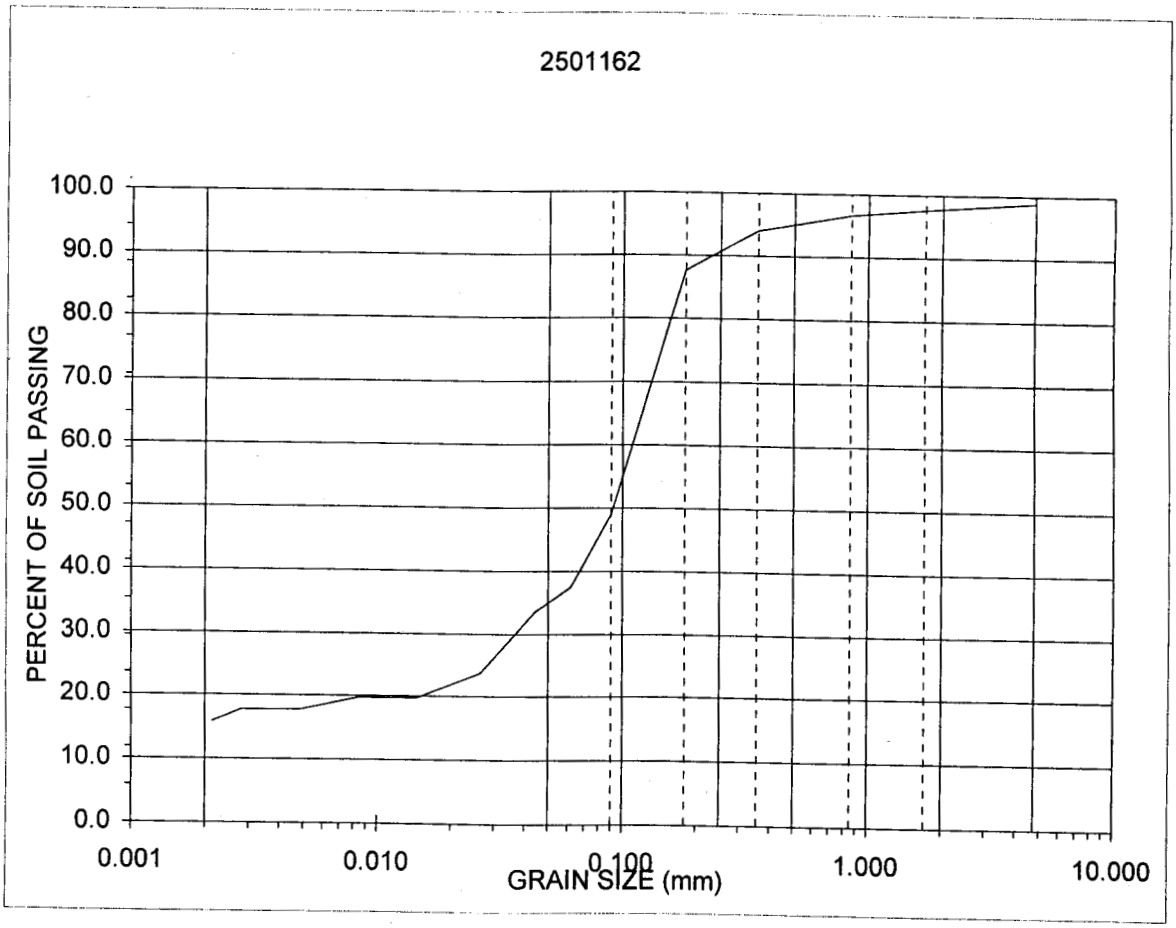
3743-44 (01/11)

ACCUTEST LABORATORIES LTD.

REPORT OF ANALYSIS

Client: Lascelles Enginering Ltd
Attn: Ms. Manon C. Rodrigue

Lab Report No: 2501162
Sample No: 365528
Date: 25-Jan-05
Project: L04-120
Sample: TP 1



Particle Type	size mm	% sample
Coarse Gravel	>4.750	1.2
Fine Gravel	>2.000-4.750	1.1
Very Coarse Sand	>1.000-2.000	0.9
Coarse Sand	>0.500-1.000	2.1
Medium Sand	>0.250-0.500	4.6
Fine Sand	>0.100-0.250	36.9
Very Fine Sand	>0.050-0.100	18.4
Silt	>0.002-0.050	19.1
Clay	<=0.002	15.8

Comments:

Analyst:

Lorna Wilson
Agriculture Lab Supervisor

RECEIVED FEB 0 7 2005

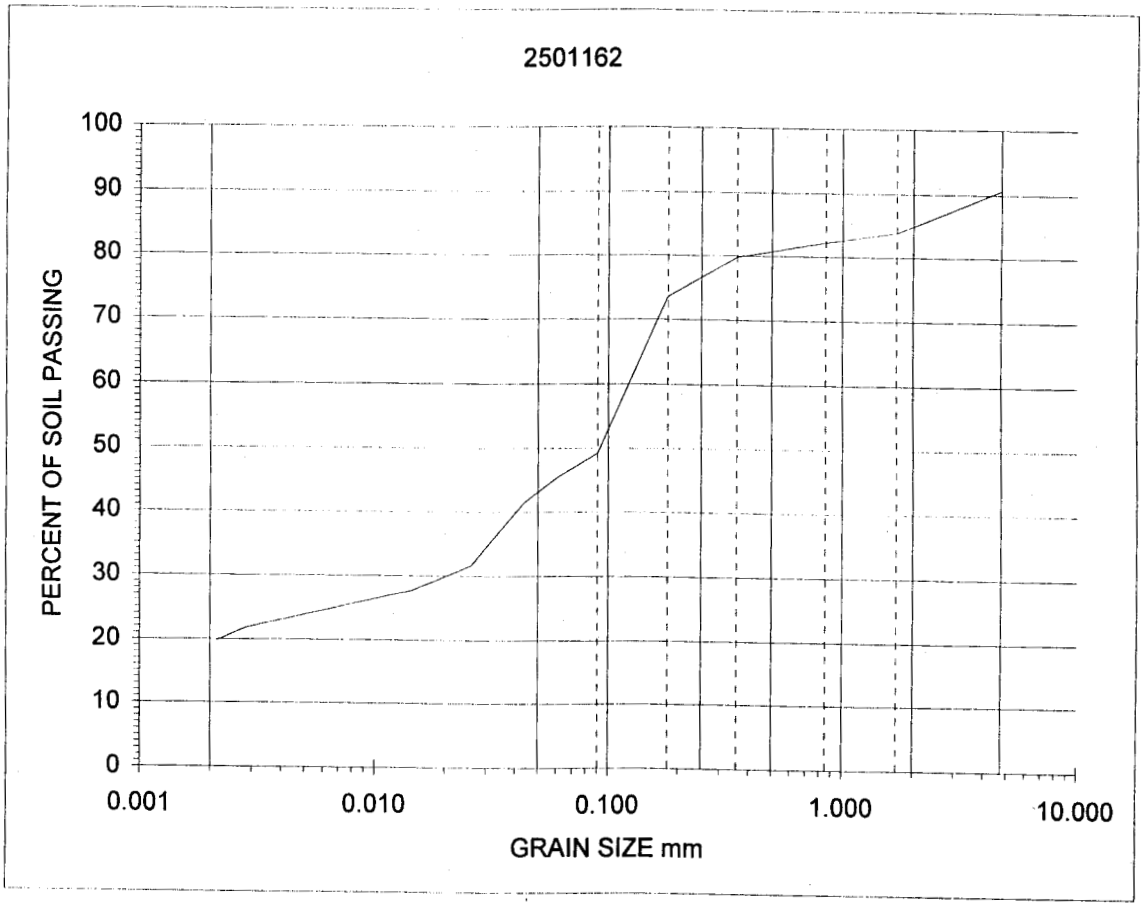
146 Colonnade Road, Unit 8, Nepean, Ontario K2E 7Y1 Tel:(613)727-5692 Fax:(613)727-5222

ACCUTEST LABORATORIES LTD.

REPORT OF ANALYSIS

Client: Lascelles Engineering Ltd.
Attn: Ms. Manon Rodrigue

Lab Report No: 2501162
Sample No: 365529
Date: Jan 25, 2005
Project: L04-120
Sample: TP 2



Particle Type	size mm	% sample
Coarse Gravel	>4.750	9.4
Fine Gravel	>2.000-4.750	6.1
Very Coarse Sand	>1.000-2.000	2.0
Coarse Sand	>0.500-1.000	2.0
Medium Sand	>0.250-0.500	4.4
Fine Sand	>0.100-0.250	24.1
Very Fine Sand	>0.050-0.100	9.0
Silt	>0.002-0.050	23.2
Clay	<=0.002	19.7

Comments: The coarse gravel portion was not on the preceding copy of this report.

RECEIVED FEB 07 2005

Analyst:

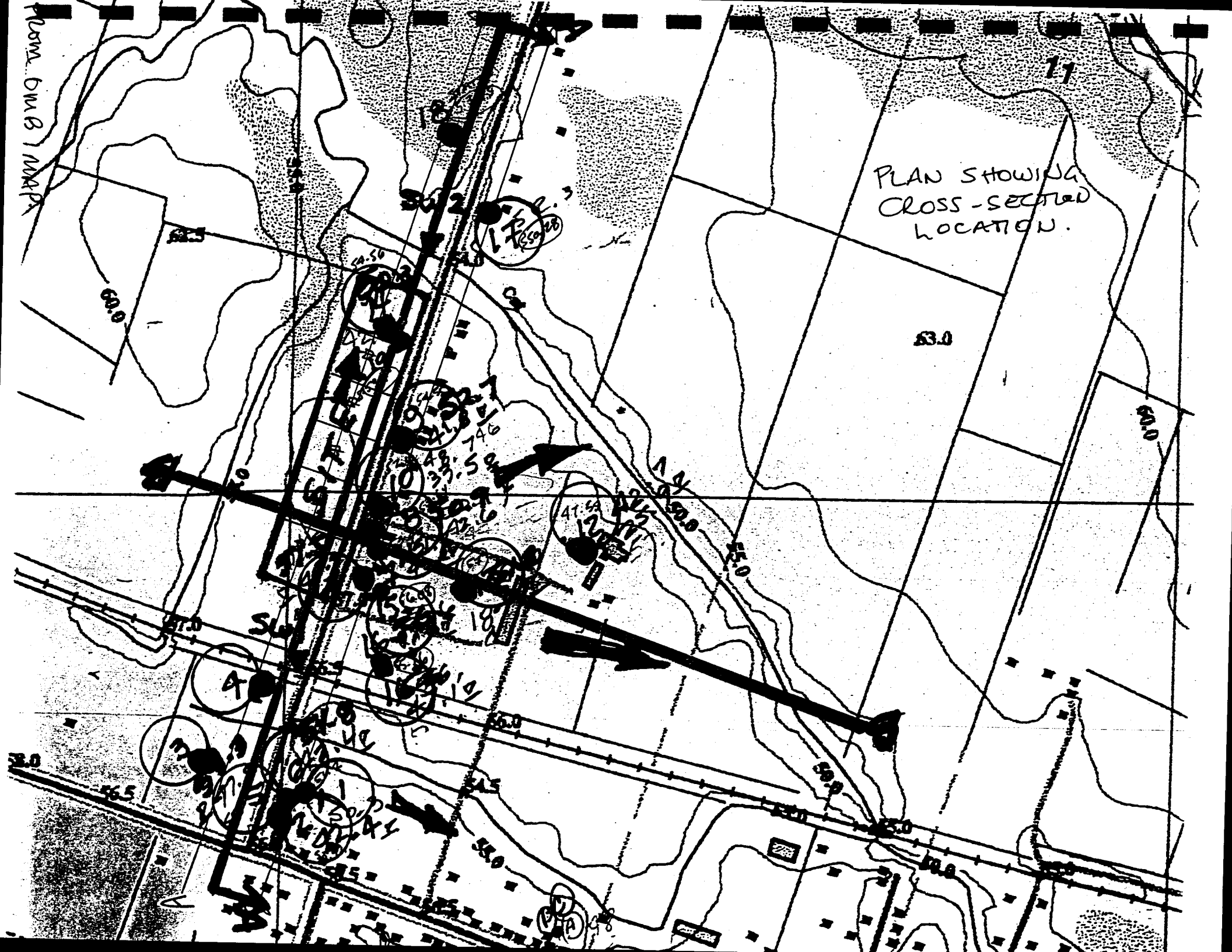
146 Colonnade Road, Unit 8, Nepean, Ontario K2E 7Y1 Tel:(613)727-5692 Fax:(613)727-5222

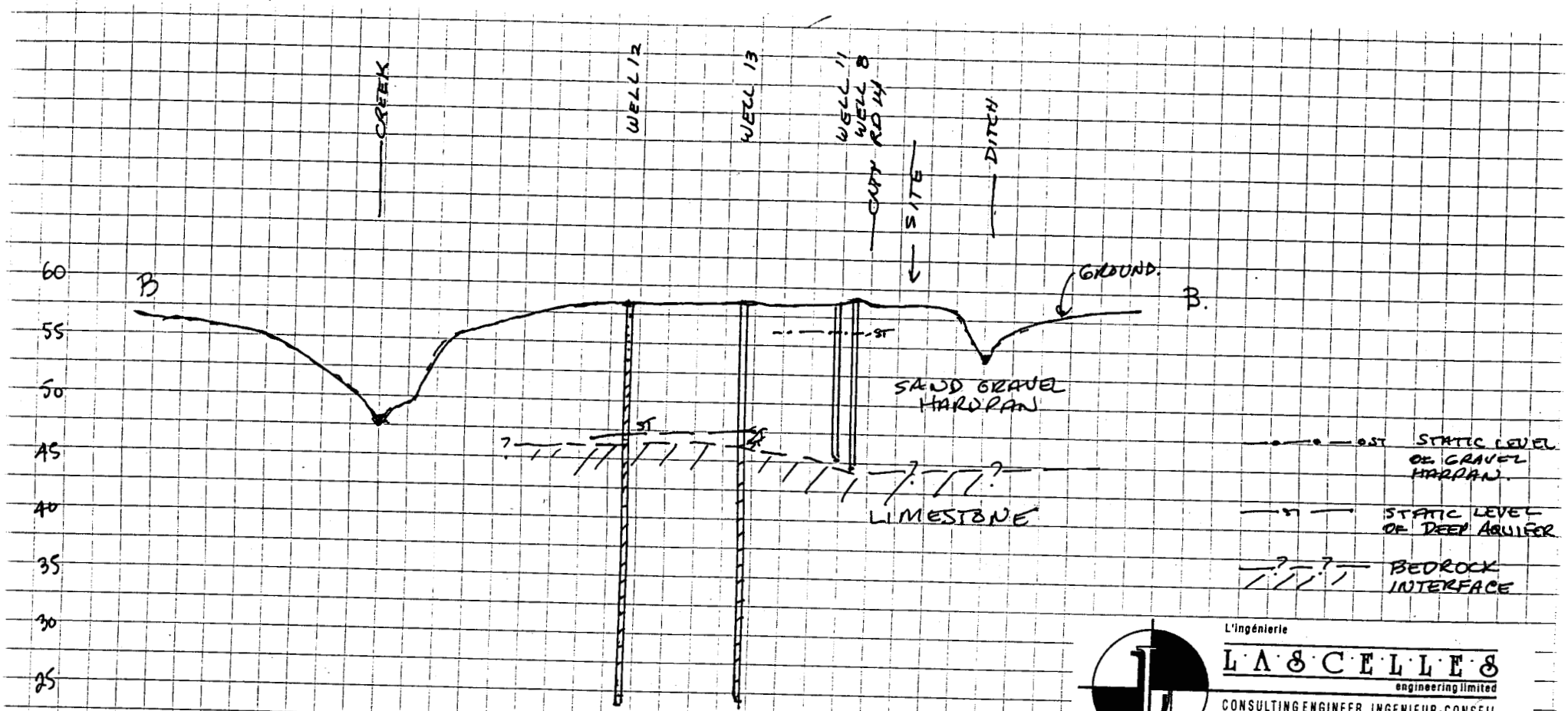
Water Well Questionnaires
And Cross-Sections

TABLE 5: WELL INFORMATION

WELL #	ID	NORT.	EAST	GROUND ELEV	BOREHOLE BOTTOM EL	WATER FOUND ELEV.	STATIC ELEV.	LIMESTONE
1	5200166	5038660	541025	58.62	41.15	41.25	56.20	44.6
2	5200168	5038625	541000	56.99	45.42	46.09	53.94	
3	5200169	5038700	540900	55.47	25.29			
4	5200170	5038800	540975	56.08	42.36			
5	5200673	5038693	540999	57.30	49.37	49.40	55.17	
6	5200779	5038650	541010	57.30	40.53	41.80	51.20	47.5
7	5200989	5038900	541080	5883	48.15	48.13	49.38	
8	5201111	5038976	541089	59.13	45.41	45.43	53.64	
9	5201114	5039059	541126	58.21	42.97	43.61	54.55	48.5
10	5201115	5038985	541082	58.21	36.27	36.91	52.11	48.1
11	5201196	5038950	541100	58.52	45.41	45.42	53.95	
12	5201365	5039350	541350	58.22	23.16	25.32	47.55	57.0
13	5201367	5038900	541200	58.52	24.68	31.12	57.00	46.93
14	5201617	5039199	541099	59.13	34.32		54.56	46.93
15	5201629	5038900	541100	60.35	19.20	22.25	56.08	48.76
16	5201842	5038799	541099	56.99	45.41	46.29	56.16	49.97
17	5202000	5039299	541199	53.94	-8.5	-7.1	50.28	30.1
18	#4660	5039400	541170	57.00	44.80	46.6	53.95	50.9
19	#4700	5039160	541120	56.90	39.90	46.7	53.70	47.51

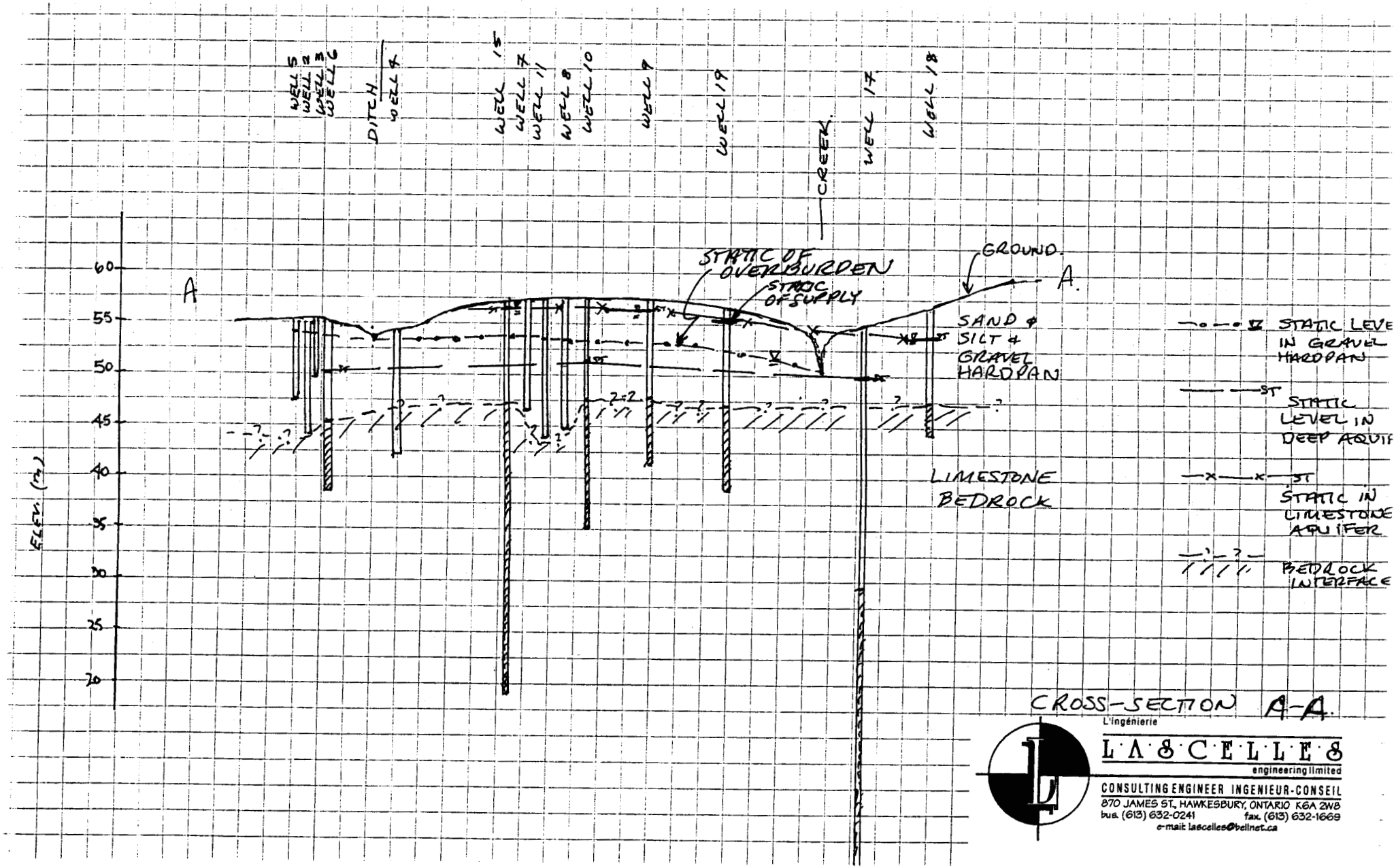
L'Ingénierie
L·A·S·C·E·L·L·E·S
engineering limited
CONSULTING ENGINEER INGENIEUR-CONSEIL
870 JAMES ST., HAWKESBURY, ONTARIO K6A 2W8
bus. (613) 632-0241 fax. (613) 632-1669
e-mail: lascelles@bellnet.ca


11
PLAN SHOWING CROSS-SECTION LOCATION.
63.0
60.0
55.0
56.5



L'ingénierie
LASCELLES
engineering limited
CONSULTING ENGINEER INGENIEUR-CONSEIL
870 JAMES ST., HAWKESBURY, ONTARIO K6A 2W8
bus. (613) 632-0241 fax. (613) 632-1669
e-mail: lascelles@bellnet.ca

GROUND - BEDROCK CROSS-SECTION B-B



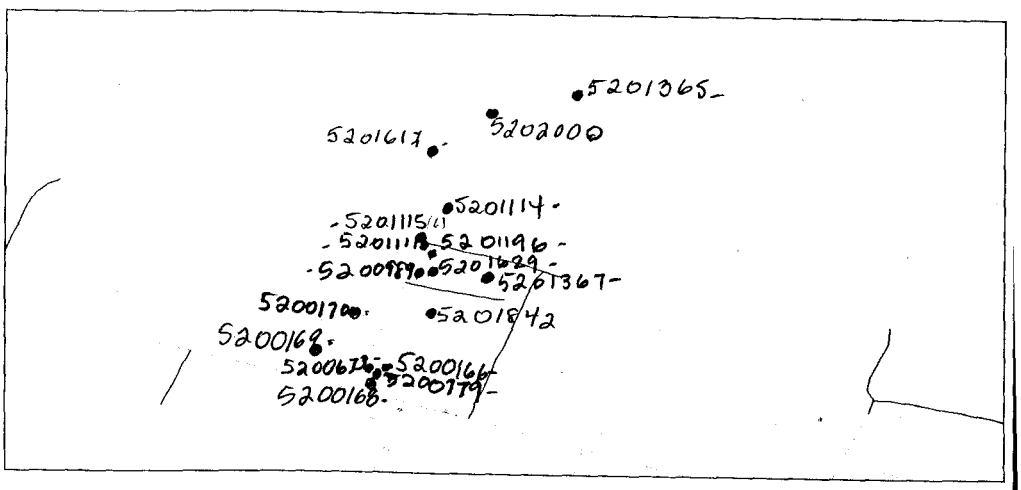
CROSS-SECTION A-A.

L'ingénierie
L·A·S·C·E·L·L·E·S
engineering limited
CONSULTING ENGINEER INGENIEUR-CONSEIL
870 JAMES ST., HAWKESBURY, ONTARIO K6A 2W8
bus. (613) 632-0241 fax. (613) 632-1669
e-mail: lascelles@bellnet.ca

Township of East Hawkesbury

MOE WELL LOCATION & INFO.

Twp. of East Hawkesbury
- Primary Roads
- Secondary Roads
- Access Rds - Trails - Driveways
- Rivers and Streams
- Well Water Locations
- Townships



SCALE 1 : 18,732

1,000 0 1,000 2,000 3,000

FEET

N

	Well ID.	NORTHING	EASTING	GROUND ELEV.	BOREHOLE BOTTOM	REC. PUMP RATE	SPEC. CAP.	TRANS. EST
①	5200166	5038660	541025	58.52	41.15	—	4.3	36.2
②	5200168	5038625	541000	56.99	45.42	32.6	34.3	145.0
③	5200169	5038700	540900	55.47	25.29	—	2.1	22.8
④	5200170	5038800	540975	56.08	42.36	-	4.3	36.2
⑤	5200673	5038653	540999	57.30	49.37	—	10.7	66.7
⑥	5200779	5038650	541010	57.30	40.53	-	4.3	36.2
⑦	5200989	5038900	541080	58.83	48.15	—	23.6	112.9
⑧	5201111	5038976	541089	59.13	45.41	65.3	161.0	406.1
⑨	5201114	5039059	541126	58.21	42.97	—	27.9	126.2
⑩	5201115	5038985	541082	58.21	36.27	-	55.8	200.4
⑪	5201196	5038950	541100	58.52	45.41	26.1	2.14	22.8
⑫	5201365	5039350	541350	58.22	23.16	6.5	—	—
⑬	5201367	5038900	541200	58.52	24.68	39.2	2.14	22.8
⑭	5201617	5039199	541099	59.13	39.32	78.4	17.1	91.3
⑮	5201629	5038900	541100	60.35	19.20	13.0		
⑯	5201842	5038799	541099	56.99	45.41	196.1	32.2	138.8
⑰	5202000	5039299	541199	53.94	-8.5	32.6	2.14	22.8
⑱	#4660	5039400	541170	57.0	94.8			
⑲	#11700	5039160	541120	51.90	21.00			

REIS and EOWRMS

- Major Highways
- Well Data
- Rivers & Streams
- Lot and Concession
- Prescott & Russell Parcels
- Townships
- Prescott Air Photos
- East Hawkesbury

SCALE 1 : 6,011

500 0 500 1,000 1,500

FEET

N

MUNICIPALITY CONCESSION ETC	LOT	WELL NO	UTM EASTING NORTHING	ELEV FEET	DATE	DRILLER	CSG DIA INS	KIND OF WATER	WATER FOUND FEET	STAT LVL FEET	PUMP LVL FEET	TEST RATE GPM	TEST TIME HR:MN	WATER USE	SCREEN DEPTH FEET	SCREEN LENGTH FEET	OWNER DEPTHS IN FEET TO WHICH FORMATIONS EXTEND
CONTINUING... EAST HAWKESBURY TOWNSHIP																	
CON	04	012	52-02450	541478-5039536		1989/11	1517	06	FR	0040	3	30	30	:	DO		--- BRWN LOAM 0002 GREY HPAN STNS 0008 GREY GRVL SAND STNS 0015 GREY LMSN 0042
CON	04	012	52-02401	541478-5039536		1989/06	1517	06	FR	0035	11	12	20	1 :0	DO		--- BRWN SAND 0002 GREY HPAN 0029 GREY LMSN 0040
CON	04	012	52-02000	541199 5039299	200	1984/07	2307	06	SA	0200	12	65	5	18:30	DO	0080 05	--- BRWN SAND STNS LOOS 0023 GREY CLAY BLDR PCKD 0047 GREY HPAN STNS HARD 0078 GRVL SILT LOOS 0086 GREY LMSN SHLE SOFT 0205
CON	04	012	52-01990	541099 5038499	200	1984/08	2307	07	FR	0044	8	39	6	8 :30	DO	0040 05	--- BRWN SAND BLDR PCKD 0040 GREY CLAY GRVL PCKD 0045
CON	04	012	52-01629	541100 5038900	200	1980/06	1310	06	FR	0125	14		2	3 :0	DO		--- HPAN 0038 LMSN 0135
CON	04	012	52-01957	541199 5038499	200	1984/07	2307	06	FR	0074	6	19	5	3 :30	DO	0045 05	--- BRWN SAND LOAM BLDR 0009 GREY CLAY BLDR PCKD 0029 BLUE CLAY STNS CMTD 0042 GREY CLAY GRVL LOOS 0047 GREY LMSN SHLE SOFT 0085
CON	04	012	52-00366	541025 5038660	175	1956/03	1629	03	FR	0057	8	17	2	0 :30	DO		--- MSND 0039 MSND BLDR 0046 BLUE LMSN 0057
CON	04	012	52-01903	541099 5038499	200	1983/06	2307	06	FR	0043	8	30	4	2 :0	DO		--- GREY CLAY STNS DNSE 0036 GREY CLAY STNS BLDR 0042 GREY STNS LMSN 0105
CON	04	012	52-01845	541199 5038499	200	1981/05	2307	06	FR	0083	5	48	20	2 :0	DO		--- GREY CLAY STNS DNSE 0013 GREY STNS LMSN 0085
CON	04	012	52-01842	541099 5038799	190	1983/05	1310	06	FR	0035	6	25	30	2 :0	DO		--- HPAN 0023 SHLE 0038
CON	04	012	52-01822	541299 5038499	200	1983/04	4006	06	FR	0038	7	17	10	1 :0	DO	0034 04	--- BRWN SAND CLAY 0005 GREY CLAY SAND BLDR 0016 GREY BLDR CLAY STNS 0034 GREY CGVL SAND 0037 GREY LMSN SHLE 0042
CON	04	012	52-01811	541299 5038499	200	1982/11	4006	06	MN	0038	9	37	2	1 :0	DO	0037 04	--- BRWN SAND 0008 GREY GRVL CLAY BLDR 0040 GREY LMSN 0041
CON	04	012	52-01713	541799 5040499	189	1981/05	1310	06	FR	0028	17	22	25	2 :0	DO		--- HPAN SHLE 0028
CON	04	012	52-01959	541299 5038499	200	1984/07	2307	06	FR	0074	7	25	10	2 :30	DO	0041 05	--- BRWN SAND STNS LOOS 0010 GREY CLAY BLDR PCKD 0031 GREY HPAN BLDR STNS 0042 GRVL STNS CONG 0046 GREY LMSN SHLE HARD 0085

TABLE

WATER WELL RECORDS

TOTAL WELLS DRILLED	WELLS ENDING IN: OVER-BURDEN	WELLS ENDING IN: BED-ROCK	KIND OF WATER: FRESH	KIND OF WATER: SALT	KIND OF WATER: SULPH	KIND OF WATER: MIN-ERAL	KIND OF WATER: DRY HOLE	WATER USE, ETC.: DOM. OR STOCK	WATER USE, ETC.: IRRIG-ATION	WATER USE, ETC.: INDUS-TRIAL	WATER USE, ETC.: COMM-ERCIAL	WATER USE, ETC.: MUNI-CIPAL	WATER USE, ETC.: PUBLIC SUPPLY	WATER USE, ETC.: COOL/ AIR COND	WATER USE, ETC.: NOT USED	WATER USE, ETC.: TEST HOLE	WATER USE, ETC.: ABAN-DONED
38	6	32	34	1	0	2	0	37	0	0	0	0	0	0	0	0	0

- The location of these wells are either estimated from the centroid of the lot or they are uncertain

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below)
A014095
A 014095

Well Record
Regulation 903 Ontario Water Resources Act

Instructions for Completing Form

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

MUN	CON	LOT

Well Owner's Information and Location of Well Information

First Name	Last Name	Mailing Address (Street Number/Name, RR, Lot Concession)
Robert	Latrawce	590 - County # 10

County/District/Municipality	Township/City/Town/Village	Province	Postal Code	Telephone Number (include area code)
Precont-Russell	Hawsbury-Est	Ontario	K0B-1P0	613 674-3371

Address of Well Location (County/District/Municipality)	Township	Lot	Concession
4900 - County Rd 14	Hawkesbury Est	13	Conc 14

RR#/Street Number/Name	City/Town/Village	Site/Compartment/Block/Tract etc.
Precont-Russell	St. Eugene	4CR-5423

GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation
	83	18	541261	5039436	Magellan	GTM; ☐ Undifferentiated ☑ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth Metres From	Depth Metres To
Brown	Clay	Sand	Soft	0	0.60
Yellow	Sand		Soft	0.60	1.51
Grey	Gravel	Boulder-Sand	Loose	1.51	9.39
Black	Limestone		Hard	9.39	20.00

Hole Diameter

Depth Metres From	Depth Metres To	Diameter Centimetres
0	9.39	22.23

Water Record

Water found at Metres	Kind of Water
15.45	☑ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
___ m	☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
___ m	☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was ☑ Clear and sediment free ☐ Other, specify

Chlorinated ☑ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth Metres From	Depth Metres To
Casing				
15.55	☑ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	0.48	0	9.39
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
15.23	☑ Open hole		9.39	20.00

Test of Well Yield

Pumping test method: Submersible

Pump intake set at (metres): 16.66

Pumping rate (litres/min): 54.00

Duration of pumping: 1 hrs + 00 min

Final water level end of pumping: 4.42 metres

Recommended pump type: ☐ Shallow ☑ Deep

Recommended pump depth: 16.66 metres

Recommended pump rate (litres/min): 45.50

If flowing give rate (litres/min):

If pumping discontinued, give reason:

Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level	3.20		4.42
1	3.90	1	3.62
2	4.03	2	3.53
3	4.07	3	3.49
4	4.10	4	3.45
5	4.13	5	3.43
10	[illegible]	10	3.39
15	4.25	15	3.30
20	4.28	20	3.30
25	4.30	25	3.30
30	4.34	30	3.30
40	4.38	40	3.30
50	4.40	50	3.30
60	4.42	60	3.30

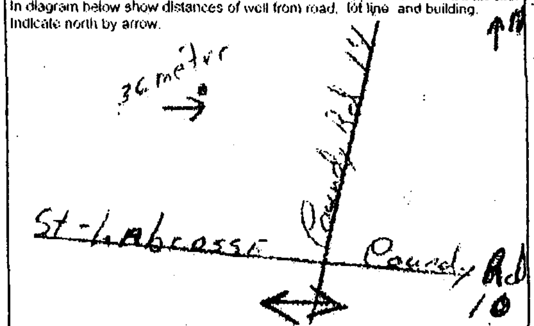
Plugging and Sealing Record

☑ Annular space ☐ Abandonment

Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
0	9.39	Cement Grouts	160 Kg

Location of Well

In diagram below show distances of well from road, lot line and building. Indicate north by arrow.



Method of Construction

☐ Cable Tool ☑ Rotary (air) ☐ Diamond ☐ Digging
☐ Rotary (conventional) ☐ Air percussion ☐ Jetting ☐ Other
☐ Rotary (reverse) ☐ Boring ☐ Driving

Water Use

☑ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

☑ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☐ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Audit No. Z 14115

Date Well Completed (YYYY MM DD): 2004 06 11

Was the well owner's information package delivered? ☐ Yes ☑ No

Date Delivered: YYYY MM DD

Well Contractor/Technician Information

Name of Well Contractor: NXR-Water-Well-Drilling

Well Contractor's Licence No.: 6006

Business Address (street name, number, city etc.): St-Albert-ON

Name of Well Technician (last name, first name): Louis Desnoyers

Well Technician's Licence No.: T-625

Signature of Technician/Contractor:

Date Submitted: YYYY MM DD

Ministry Use Only

Data Source	Contractor
Date Received YYYY MM DD	Date of Inspection YYYY MM DD
Remarks	Well Record Number

Water Well Records

Ontario Ministry of Env ant and Energy

The O[illegible] Water Resources Act

WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

County or District	Township/Borough/City/Town/Village	Con Block tract survey, etc.	Lot
[redacted] Russell	EAST Hawkesbury	CON 14	13
First Name [redacted]	Address of Well Location: ST Eugene Ont 46160	Date completed: 06 day 08 month 03 year	

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
Brown	Top Soil			0	2
Brown	Clay	Some Stone Sand		2	8
[redacted]	Hardpan	Some Clay Sand gravel		8	30
GRAY	Limestone			30	410

WATER RECORD

Water found at - feet	Kind of water		
35	☑ Fresh ☐ Salty	☐ Sulphur ☐ Minerals ☐ Gas	
	☐ Fresh ☐ Salty	☐ Sulphur ☐ Minerals ☐ Gas	
	☐ Fresh ☐ Salty	☐ Sulphur ☐ Minerals ☐ Gas	
	☐ Fresh ☐ Salty	☐ Sulphur ☐ Minerals ☐ Gas	
	☐ Fresh ☐ Salty	☐ Sulphur ☐ Minerals ☐ Gas	

CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6	☐ Steel ☐ Galvanized ☐ Concrete ☐ Open hole ☐ Plastic	188	0	33
	☐ Steel ☐ Galvanized ☐ Concrete ☐ Open hole ☐ Plastic			
	☐ Steel ☐ Galvanized ☐ Concrete ☐ Open hole ☐ Plastic			

SCREEN

Size of opening (Slot No.)	Diameter inches	Length feet
Material and type	Depth at top of screen feet	

PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at - feet From	To	Material and type (Cement grout, bentonite, etc.)
0	10	Cement grout

PUMPING TEST

Pumping test method	Pumping rate	Duration of pumping
☐ Pump ☐ Bailer	20 GPM	1 Hours Mins

Static water level	Water level during pumping	Water levels during ☑ Pumping ☐ Recovery			
		15 minutes	30 minutes	45 minutes	60 minutes
10 FT	18 FT	15 feet	18 feet	18 feet	18 feet

Pump intake set at	Water at end of test
40 feet	☐ Clear ☑ Cloudy

Recommended pump type	Recommended pump setting	Recommended pump rate
☑ Deep	30 feet	10 GPM

FINAL STATUS OF WELL

☐ Water supply ☑ Abandoned, insufficient supply ☐ Undisturbed
☐ Observation well ☐ Abandoned, poor quality ☐ Replacement well
☐ Test hole ☐ Abandoned (Other)
☐ Recharge well ☐ Dewatering

WATER USE

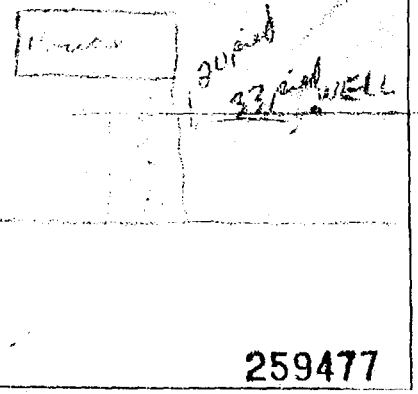
☑ Domestic ☐ Commercial ☐ Not use
☐ Stock ☐ Municipal ☐ Other
☐ Irrigation ☐ Public supply
☐ Industrial ☐ Cooling & air conditioning

METHOD OF CONSTRUCTION

☑ Cable tool ☐ Air percussion ☐ Driving
☐ Rotary (conventional) ☐ Boring ☐ Digging
☐ Rotary (reverse) ☐ Diamond ☐ Other
☐ Rotary (air) ☐ Jetting

LOCATION OF WELL

In diagram below show distances of well from road and lot line. Indicate north by arrow.



259477

Name of Well Contractor	Well Contractor's Licence No.
Maurice Cooper	1517
Address: [redacted] Hawkesbury ON	
Name of Well Technician: [redacted] Cooper	Well Technician's Licence No. 0717
Signature of Technician/Contractor: [redacted] Cooper	Submission date: 06 mo 08 day 03 yr

MINISTRY USE ONLY

3 - OWNER'S COPY

0506 (06/02) Front Form

EXHIBIT I

Ministry of the Environment

Ontario

WELL COMPLAINT INVESTIGATION SHEET

OWNER:

Name: PIERRE SEGUIN ..... Telephone No. (business) 674-1533

Address: 4775 CTY RD 14 ..... (home) .....

Former Owner WALTER .....

OCCUPANT (If other than owner):

Name: SAME AS ABOVE ..... Telephone No. (business) .....

Address: ..... (home) .....

WELL LOCATION: Lot 12 ... Concession 4 ... Township HAWKESBURY EAST

WELL CONSTRUCTION DETAILS:

Date constructed 1975 ? ..... Contractor Marc Belanger

Type DRILL ..... Diameter ..... Well Depth: Original 75 FT Present .....

Owner When constructed NO .....

Well completed into: Bedrock ..... Overburden .....

Screen: Yes .... No .... If yes, length .....ft. Depth to top of screen .....

WELL WATER LEVELS:

(Indicate whether measured from ground level ☐ from top of casing ☐)

Original water level depth .....ft.

Subsequent water level measurements (give depths in feet and dates) .....

.....

PUMPING EQUIPMENT:

Pump Type SUBMERSIBLE ..... Make ..... Model No. .....HP..... Age .....

Depth of intake setting .....feet (original) Pumping Rate .....gpm

.....feet (present)

Storage tank: Type .....

Capacity .....

PREVIOUS PROBLEMS:

How long have you owned, operated or lived on this property? 2 YR .....

Have you ever experienced any previous problems with your well? NO .....

If so, when? .....

What was the cause of the previous problem? Drought ☐ Pump Failure ☐ Plugging ☐

Increased Usage ☐ Interference ☐ Other (Please Specify) .....

How was the problem overcome? .....

PREVIOUS PROBLEMS: - Continued

Did you ever have your well deepened or cleaned, or a new well constructed? .....

If so, why? .....

Outline briefly any previous repairs or changes in pumping equipment, and dates.

.....

.....

.....

PRESENT PROBLEM:

Date of first occurrence .....

Water level after problem began .....

Suspected cause of problem .....

Have you contacted the party you feel is causing this problem? .....

WATER:

Use: Domestic No ..... Yes ..... No. of persons using water from well 4

Livestock No ..... Yes ..... No. of livestock watered from well .....

Lawn Watering No ..... Yes .....

Other ..... Amount .....

Equipment: Indoor plumbing (e.g. shower, automatic washer, etc.) .....

.....

Quality: Appearance (clear, cloudy) CLEAR

Taste NO

Odour SULFUR

Sample Taken: No ..... Yes ..... Amount .....oz

At what outlet in the system was the sample obtained? .....

.....

PUMPING TEST:

Water level in well immediately prior to pump operation: .....feet below measuring point

Pumping rate ..... gallons per minute
(Pumping rate may be estimated by recording the time needed to fill a pail of known volume)

Water level in well after ..... minutes of pumping: .....
below measuring point

PIERRE SEGUIN

I hereby certify that the above statements are correct to the best of my knowledge.

EXHIBIT C

Ministry of the Environment
Ontario

WELL COMPLAINT INVESTIGATION SHEET

OWNER:

Name: Claude Normand ..... Telephone No. (business) .....

Address: 4761 Ch. comte #14 (home) 674-5529

Former Owner .....

OCCUPANT (If other than owner):

Name: ..... Telephone No. (business) .....

Address: ..... (home) .....

WELL LOCATION: Lot 12 Concession 4 Township Hawkesbury East

WELL CONSTRUCTION DETAILS:

Date constructed 1980 Contractor Marc Belanger

Type DRILL Diameter ..... Well Depth: Original 135' FT Present .....

Owner when constructed Yes

Well completed into: Bedrock 70' Overburden .....

Screen: Yes .... No X If yes, length .....ft. Depth to top of screen .....

WELL WATER LEVELS:

(Indicate whether measured from ground level [X] from top of casing [ ])

Original water level depth 125' ft.

Subsequent water level measurements (give depths in feet and dates) .....

.....

PUMPING EQUIPMENT:

Pump Type SUMERSIBLE Make ..... Model No. .....HP..... Age .....

Depth of intake setting .....feet (original) Pumping Rate .....gpm

.....feet (present)

Storage tank: Type .....

Capacity .....

PREVIOUS PROBLEMS:

How long have you owned, operated or lived on this property? 1980

Have you ever experienced any previous problems with your well? NO

If so, when? .....

What was the cause of the previous problem? Drought [ ] Pump Failure [ ] Plugging [ ]

Increased Usage [ ] Interferance [ ] Other (Please Specify) .....

How was the problem overcome? .....

PREVIOUS PROBLEMS: - Continued

Did you ever have your well deepened or cleaned, or a new well constructed? .....

If so, why? .....

Outline briefly any previous repairs or changes in pumping equipment, and dates.

.....

.....

.....

PRESENT PROBLEM:

Date of first occurrence .....

Water level after problem began .....

Suspected cause of problem .....

Have you contacted the party you feel is causing this problem? .....

WATER:

Use: Domestic No ..... Yes ...✓..... No. of persons using water from well ...4.

Livestock No ..... Yes ..... No. of livestock watered from well .....

Lawn Watering No ..... Yes .....

Other ..... Amount .....

Equipment: Indoor plumbing (e.g. shower, automatic washer, etc.) .....

.....

Quality: Appearance (clear, cloudy) .....clear.....

Taste .....good.....

Odour .....NO.....

Sample Taken: No ...← Yes ..... Amount .....oz

At what outlet in the system was the sample obtained? .....

.....

PUMPING TEST:

Water level in well immediately prior to pump operation: .....feet below measuring point

Pumping rate ..... gallons per minute
(Pumping rate may be estimated by recording the time needed to fill a pail of known volume)

Water level in well after ..... minutes of pumping: .....
below measuring point

CLAUDE NORMAND

Claude Normand

I hereby certify that the above statements are correct to the best of my knowledge.

EXHIBIT E

Ministry of the Environment

Ontario

WELL COMPLAINT INVESTIGATION SHEET

OWNER:

Name: DENIS PERIARD. Telephone No. (business) .....

Address: 4731 COUNTY Rd. 14 (home) 613-674-2894.

Former Owner .....

OCCUPANT (If other than owner):

Name: SAME. Telephone No. (business) .....

Address: ..... (home) .....

WELL LOCATION: Lot 12 Concession 4 Township HAWKESBURY EAST

WELL CONSTRUCTION DETAILS:

Date constructed 1978 Contractor MARC BÉLANGER

Type DRILL Diameter ..... Well Depth: Original 80' Present .....

Owner when constructed YES

Well completed into: Bedrock 35' Overburden .....

Screen: Yes .... No X. If yes, length .....ft. Depth to top of screen .....

WELL WATER LEVELS:

(Indicate whether measured from ground level ☒ from top of casing ☐

Original water level depth 78' FT.....ft.

Subsequent water level measurements (give depths in feet and dates) .....

.....

PUMPING EQUIPMENT:

Pump Type JET Make ..... Model No. .....HP..... Age .....

Depth of intake setting .....feet (original) Pumping Rate .....gpm

.....feet (present)

Storage tank: Type .....

Capacity .....

PREVIOUS PROBLEMS:

How long have you owned, operated or lived on this property? 1978-

Have you ever experienced any previous problems with your well? NO

If so, when? .....

What was the cause of the previous problem? Drought ☐ Pump Failure ☐ Plugging ☐

Increased Usage ☐ Interference ☐ Other (Please Specify) .....

How was the problem overcome? .....

PREVIOUS PROBLEMS: - Continued

Did you ever have your well deepened or cleaned, or a new well constructed? .....

If so, why? .....

Outline briefly any previous repairs or changes in pumping equipment, and dates.

.....

.....

.....

PRESENT PROBLEM:

Date of first occurrence .....

Water level after problem began .....

Suspected cause of problem .....

Have you contacted the party you feel is causing this problem? .....

WATER:

Use: Domestic No ..... Yes ..X..... No. of persons using water from well 4.

Livestock No ..... Yes ..... No. of livestock watered from well .....

Lawn Watering No ..... Yes .....

Other ..... Amount .....

Equipment: Indoor plumbing (e.g. shower, automatic washer, etc.) .....

C.....

Quality: Appearance (clear, cloudy) CLEAR.....

Taste ....Good.....

Odour ....NON.....

Sample Taken: No ..X..., Yes ..... Amount .....oz

At what outlet in the system was the sample

obtained? .....

.....

PUMPING TEST:

Water level in well immediately prior to pump operation: .....feet
below measuring point

Pumping rate 500 gals P/H: gallons per minute
(Pumping rate may be estimated by recording the time needed to fill a pail of known volume)

Water level in well after ..... minutes of pumping: .....
below measuring point

DENIS PERIARD Denis Periard

I hereby certify that the above statements are correct to the best of my knowledge.

EXHIBIT I

Ministry of the Environment

Ontario

WELL COMPLAINT INVESTIGATION SHEET

OWNER:

Name: CARL BERLINGUETTE Telephone No. (business) .....

Address: 4660 ATV ROAD 14 (home) 613-674-1681

Former Owner .....

OCCUPANT (If other than owner):

Name: SAME Telephone No. (business) .....

Address: ..... (home) .....

WELL LOCATION: Lot ..... Concession ..... Township .....

WELL CONSTRUCTION DETAILS:

Date constructed 06 AUGUST 2003 Contractor MAURICE COYER

Type DRILL Diameter ..... Well Depth: Original 37 Present .....

Owner when constructed YES

Well completed into: Bedrock ← Overburden .....

Screen: Yes .... No .... If yes, length .....ft. Depth to top of screen .....

WELL WATER LEVELS:

(Indicate whether measured from ground level ☒ from top of casing ☐)

Original water level depth 30 ft.

Subsequent water level measurements (give depths in feet and dates) .....

.....

PUMPING EQUIPMENT:

Pump Type SUBMERSIBLE Make ..... Model No. .....HP..... Age .....

Depth of intake setting 30 feet (original) Pumping Rate 10 gpm

.....feet (present)

Storage tank: Type .....

Capacity .....

PREVIOUS PROBLEMS:

How long have you owned, operated or lived on this property? 1 YR

Have you ever experienced any previous problems with your well? NO

If so, when? .....

What was the cause of the previous problem? Drought ☐ Pump Failure ☐ Plugging ☐

Increased Usage ☐ Interference ☐ Other (Please Specify) .....

How was the problem overcome? .....

PREVIOUS PROBLEMS: - Continued

Did you ever have your well deepened or cleaned, or a new well constructed? .....

If so, why? .....

Outline briefly any previous repairs or changes in pumping equipment, and dates.

.....

.....

.....

PRESENT PROBLEM:

Date of first occurrence .....

Water level after problem began .....

Suspected cause of problem .....

Have you contacted the party you feel is causing this problem? .....

WATER:

Use: Domestic No ..... Yes ✓ No. of persons using water from well 5

Livestock No ..... Yes ..... No. of livestock watered from well .....

Lawn Watering No ..... Yes .....

Other ..... Amount .....

Equipment: Indoor plumbing (e.g. shower, automatic washer, etc.) .....

.....

Quality: Appearance (clear, cloudy) .....

Taste .....

Odour .....

Sample Taken: No ..... Yes ✓ Amount .....ox

At what outlet in the system was the sample obtained? near exterior

.....

PUMPING TEST:

Water level in well immediately prior to pump operation: .....feet
below measuring point

Pumping rate ..... gallons per minute
(Pumping rate may be estimated by recording the time needed to fill a pail of known volume)

Water level in well after ..... minutes of pumping: .....
below measuring point

by phone with Carl Berlinguette

I hereby certify that the above statements are correct to the best of my knowledge.

EXHIBIT 1

Ministry of the Environment

Ontario

WELL COMPLAINT INVESTIGATION SHEET

OWNER:

Name: YVON BERLINGUETTE Telephone No. (business) .....

Address: 4837 ST.Y. RD. 14 (home) 674-2805

Former Owner .....

OCCUPANT (If other than owner):

Name: SAME Telephone No. (business) .....

Address: ..... (home) .....

WELL LOCATION: Lot ..... Concession ..... Township .....

WELL CONSTRUCTION DETAILS:

Date constructed ~~1973~~ 1973 Contractor MARC BELANGER

Type ..... Diameter ..... Well Depth: Original 43 FT. Present .....

Owner When constructed YES

Well completed into: Bedrock ..... Overburden .....

Screen: Yes .... No .... If yes, length .....ft. Depth to top of screen .....

WELL WATER LEVELS:

(Indicate whether measured from ground level ☐ from top of casing ☐)

Original water level depth .....ft.

Subsequent water level measurements (give depths in feet and dates) .....

.....

PUMPING EQUIPMENT:

Pump Type SUBMERSIBLE Make ..... Model No. .....HP. 1/2 Age .....

Depth of intake setting .....feet (original) Pumping Rate .....gpm

.....feet (present)

Storage tank: Type .....

Capacity .....

PREVIOUS PROBLEMS:

How long have you owned, operated or lived on this property? 31 years

Have you ever experienced any previous problems with your well? NO

If so, when? .....

What was the cause of the previous problem? Drought ☐ Pump Failure ☐ Plugging ☐

Increased Usage ☐ Interference ☐ Other (Please Specify) .....

How was the problem overcome? .....

PREVIOUS PROBLEMS: - Continued

Did you ever have your well deepened or cleaned, or a new well constructed? ....

If so, why? ....

Outline briefly any previous repairs or changes in pumping equipment, and dates..

....

....

....

PRESENT PROBLEM:

Date of first occurrence ....

Water level after problem began ....

Suspected cause of problem ....

Have you contacted the party you feel is causing this problem? ....

WATER:

Use: Domestic No .... Yes ✓......... No. of persons using water from well 4

Livestock No .... Yes .... No. of livestock watered from well ......

Lawn Watering No .... Yes ....

Other .... Amount ....

Equipment: Indoor plumbing (e.g. shower, automatic washer, etc.) ....

....

Quality: Appearance (clear, cloudy) ...CLEAR...

Taste ...NONE...

Odour ...NONE...

Sample Taken: No .... Yes ✓...... Amount ....oz

At what outlet in the system was the sample obtained? ...rear exterior outlet at end of garden hose...

PUMPING TEST:

Water level in well immediately prior to pump operation: ....feet below measuring point

Pumping rate .... gallons per minute
(Pumping rate may be estimated by recording the time needed to fill a pail of known volume)

Water level in well after .... minutes of pumping: .... below measuring point

by phone with Yvon Berlinguette

I hereby certify that the above statements are correct to the best of my knowledge.

Septic System Permit Lot 6

Eastern Ontario Health Unit
Bureau de santé de l'est de l'Ontario

Lot 4 - 165

PAGE 1 DE 5

FORMULAIRE POUR DEMANDE D'UN PERMIS POUR UN SYSTÈME D'ÉGOUT DE CATÉGORIES 1 À 4

(S.V.P. lire et remplir en lettres moulées et à l'encre l'information requise aux numéros 1 à 18)

N° de la demande :	EH-04-06
N° du reçu :	1168
Date reçue :	May 26/04

1. Nom du propriétaire :	N° de tél. du propriétaire :	2. Nom de l'entrepreneur :	N° de tél. de l'entrepreneur :
Robert Lafrance	(613) 674-3371		

Adresse postale complète du propriétaire (pour fin de correspondance) : 590, chemin #10 St-Eugène

N° de licence de l'entrepreneur :

Directives pour se rendre au terrain (adresse civique, n° du chemin, routes secondaires, enseignes à suivre, etc.) :
DE ST-EUGENE, AU NORD SUR CHEMIN DE COMTÉ #14, TERRAIN FACE À LA PROPRIÉTÉ # 4731 (CÔTÉ EST).

3. Proposition de CONSTRUIRE un système d'égout de catégorie n° IV pour HABITATION
(Construire/Installer/Agrandir/Modifier) (ex. : habitation, établissement commercial, etc.)

4. N° du cadastre :	Canton :	Cité, village, ville :	N° du lot :	N° de la concession	N° du sous-lot :	N° du plan :
02901000004 04220	HAWKESBURY EST		13	4	3	46R-5423

Superficie du terrain :	5. Nombre de :		Nombre d'unités d'appareils ménagers (voir l'annexe A) :
4645 m²	Chambres à coucher	3	16.5
	Personnes	4	

6. Approvisionnement d'eau :
Puits de surface ☐ Puits foré ☒ Municipal ☐
Autre .....
Proposé ☒ ou Existant ☐

7. Habitation ou bâtisse :
Nouvelle ☒ Existante ☐

8. Superficie :
200 m² et plus ☐ Moins de 200 m² ☒

9. Le système d'égout existant est-il défectueux ? Oui ☐ Non ☐

10. Rapport avec le détachement du terrain (si applicable) :
En attente d'approbation ☐
Approbation accordée ☐
N° de la demande d'approbation : .....

11. Frais de demande :
a. Petits systèmes d'égouts desservant les résidences unifamiliales ayant jusqu'à six (6) chambres à coucher ou autres établissements ayant un débit quotidien jusqu'à 3 000 litres : TROIS CENTS DOLLARS (300$).
b. Gros systèmes d'égouts ayant un débit quotidien de plus de 3 000 litres jusqu'à 10 000 litres : TROIS CENTS DOLLARS (300$).
c. Systèmes ayant un débit quotidien de plus de 10 000 litres : se référer au ministère de l'Environnement de l'Ontario.

12. Aucune demande ne sera traitée si une copie de l'Acte de session (« Deed ») de la propriété en question n'est pas annexée.

13. Le Bureau de santé de l'est de l'Ontario recommande fortement qu'une clôture ou autre barricade adéquate protège tout trou d'essai ou excavation d'une fosse septique ou de rétention jusqu'au moment du remblayage. De plus, il recommande de toujours maintenir en place les couverts des fosses. Le Bureau de santé et son agent n'assument aucune responsabilité pour toute négligence imputable à ces règles de sécurité.

14. Je déclare que tous les renseignements fournis dans cette demande sont précis, complets et véridiques. Je m'engage à ce que l'installation du système d'égout se conforme à toutes les exigences provinciales et locales. J'ai lu, je comprends, j'ai complété et signé cette demande et j'y ai attaché les pages 2 et 3, tous les annexes (A,B,C,D...) et tous les dessins types (A,B,C,D,E...) nécessaires, ainsi qu'une copie de l'Acte de session de la propriété.

15. Selon les articles 24 et 25 de la Loi de 1992 sur le code du bâtiment, L.O. 1992, c. 23, un demandeur peut faire appel de la décision de l'inspecteur ou du chef des permis de construction dans les vingt (20) jours suivant la réception d'une décision concernant cette demande de permis.

16. Le système d'égout devra être construit en entier dans les douze (12) mois suivant la délivrance du permis ci-demandé, sinon la demande sera annulée. Tout demandeur désirant alors reprendre les travaux devra formuler une nouvelle demande et acquitter les frais afférents.

17. Robert Lafrance — Signature du propriétaire — 14 mai 2004 — Date

18. [signature] — Signature de l'agent.e (si applicable) — 20-05-2004 — Date

PERMIS POUR SYSTÈME D'ÉGOUT

Le présent permis est donc délivré pour le projet d'installation du système d'égout présenté dans cette demande aux pages 1, 2, et 3, dans les appendices et dans le(s) dessin(s) type annexé(s), sujet aux exigences et conditions telles qu'approuvées et ci-jointes.

Révisé par :	Accordé par :	Date :
	Directeur	June 1/2004

Head Office / Siège social
1000 rue Pitt Street
CORNWALL, ON K6J 5T1
Tel/tél.: (613) 933-1375 or/ou
1 800 267-7120
Fax/téléc.: (613) 933-7930

60 rue Anik Street
Unit/unité #2
ALEXANDRIA, ON K0C 1A0
Tel/tél.: (613) 525-1112
Fax/téléc.: (613) 525-2803

787 rue Principale Street
P.O. Box/C.P. 336
CASSELMAN, ON K0A 1M0
Tel/tél.: (613) 764-2841 or/ou
1 800 267-8280
Fax/téléc.: (613) 764-0264

134 Main Street East/
rue Main est, Suite/bureau 301
HAWKESBURY, ON K6A 1A3
Tel/tél.: (613) 632-4355 or/ou
1 800 565-2314
Fax/téléc.: (613) 632-4171

2884 rue Chamberland Street
Unit/unité #2, 2nd floor/à l'étage
ROCKLAND, ON K4K 1M8
Tel/tél.: (613) 446-1400
Fax/téléc.: (613) 446-1454

457 Main Street East/
rue Main est
P.O. Box/C.P. 616
WINCHESTER, ON K0C 2K0
Tel/tél.: (613) 774-2739

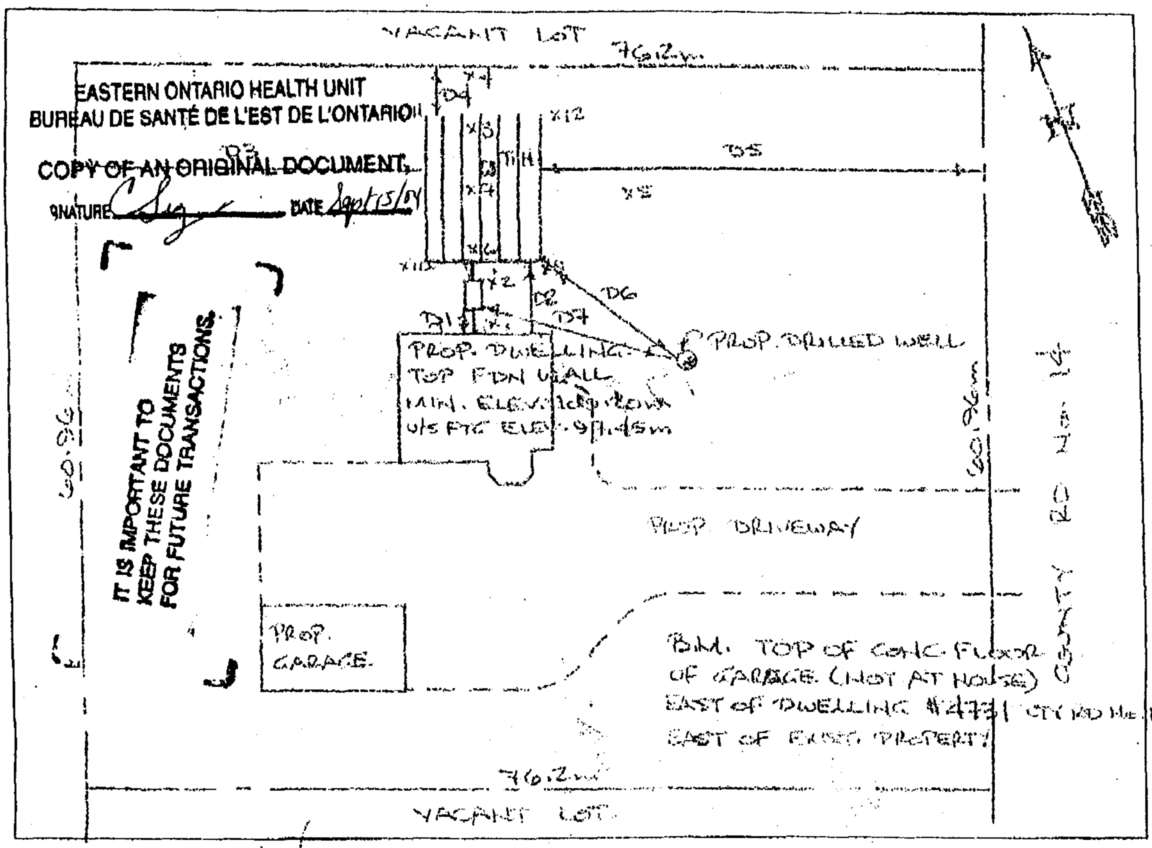
Ille & ulBoudrias

Part Lot - 165

EH 04-06
Permit number

LAYOUT SECTION (Plan view)

PLEASE COMPLETE IN INK ROBERT LAFRANCE



TOTAL LENGTH: 85.4 (metres)

Proposed 7 runs of 12.2 metres

Revised ______ runs of ______ metres

As-built 7 runs of 12.2 metres

Septic tank volume (litres) 3600L

Septic tank manufacturer Charron Farming

Estimated "T" time of imported fill 10 min./cm

* NATIVE

A) ELEVATION (metres)

	Existing	Revised	As-built
BM	100.00		
X1	99.17		99.17
X2	99.00		99.00
X3	98.86		98.86
X4	99.28		99.28
X5	99.59		99.59
X6	99.05		99.05
X7	99.07		99.07
X8	99.10		99.10

B) BOTTOM OF PIPES (metres)

	Proposed	Revised	As-built
X9	98.83	99.37	99.37
X10	98.83	99.37	99.37
X11	98.78	99.32	99.32
X12	98.78	99.32	99.32

C) SEPARATION DISTANCES (metres)

	Proposed	Revised	As-built
D1	2m		2.83
D2	≥6m		6.10m
D3	≥20m		220m
D4	≥3m		23m
D5	≥25m		>24m
D6	≥16m		16.90m
D7	≥16m		20.60m
D8			
D9			
D10			
D11			
D12			
D13			
D14			
D15			
D16			
D17			

I certify that all the information provided on this form is complete and accurate and I understand that this application will be refused if the information is incomplete and/or inaccurate.

[signature] 20-05-2004

Signature of owner or agent Date

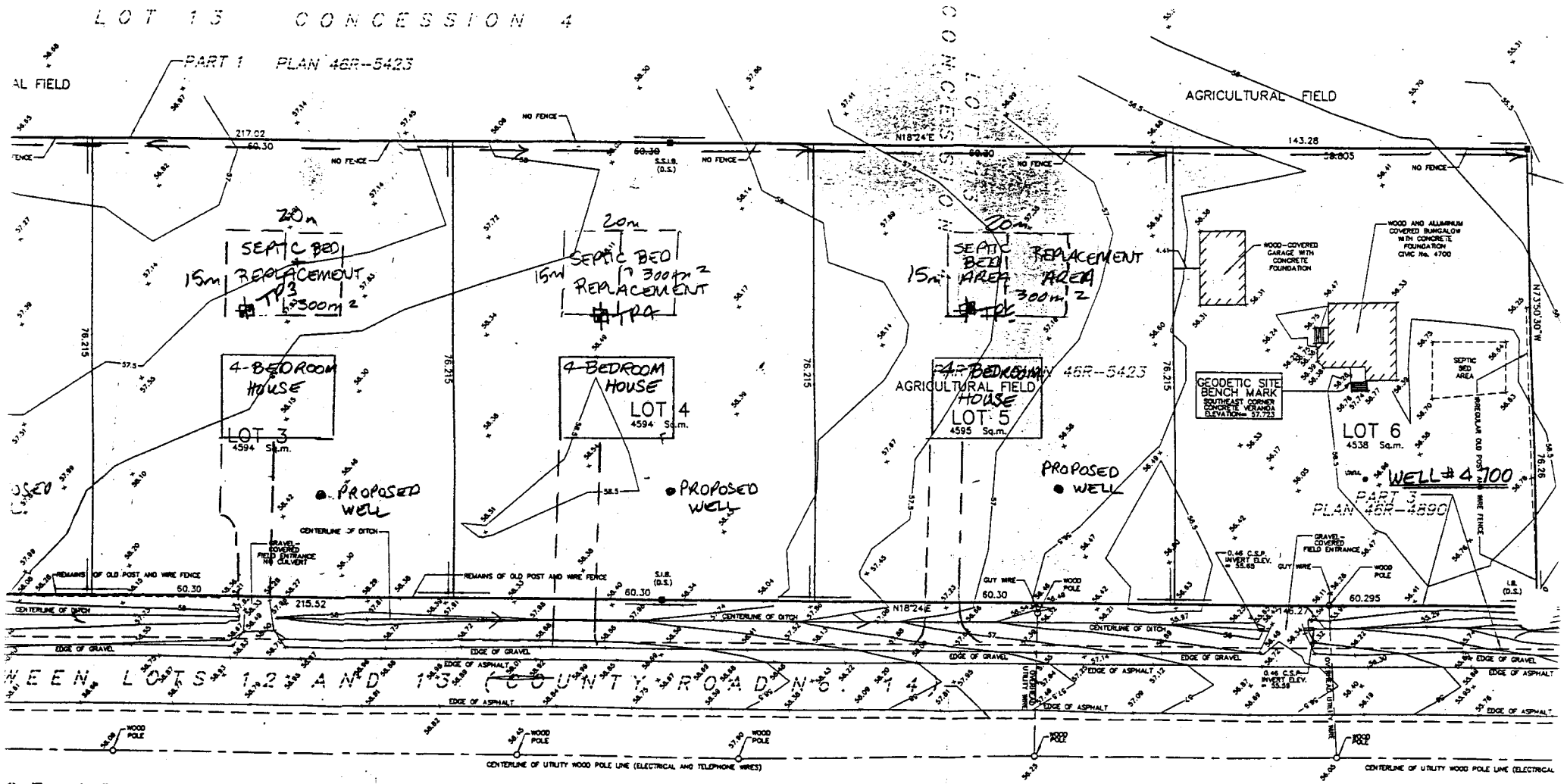
OFFICE USE ONLY

COMPLIANCE CERTIFICATE

I hereby certify that the sewage system described in this application was installed in accordance with all the requirements of the Building Code Act 1992, the Ontario Building Code 1997, local municipal bylaws, and the requirements and conditions outlined in Permit No. EH-04-06

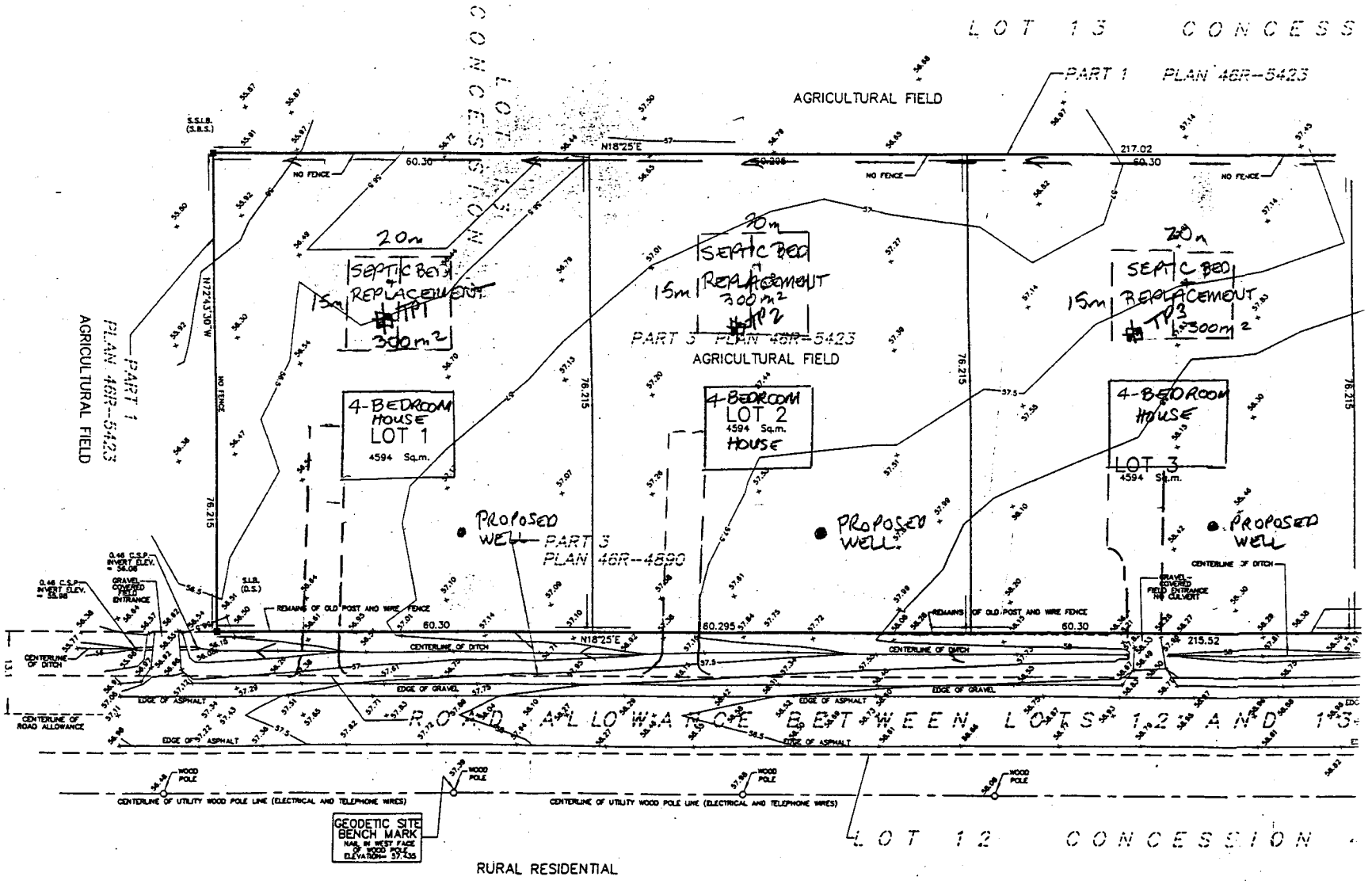
Daniel Boudrias	Jacques [signature]	Sylvain [signature]
Signature of installer	Signature of inspector	Signature of Chief Building Official
20 juillet 04	September 14, 2004	September 15 2004
Date	Date	Date

COMPLIANCE CERTIFICATE VALID ONLY WHEN ALL THREE REQUIRED SIGNATURES ARE PROVIDED



PLAN SHOWING SITE DEVELOPMENT

RURAL RESIDENTIAL


LOT 13 CONCESS
PART 1 PLAN 46R-5423
AGRICULTURAL FIELD
N18°25'E
60.30
NO FENCE
217.02
20m
SEPTIC BED
REPLACEMENT
15m
TP1
300m²
30m
SEPTIC BED
REPLACEMENT
15m
TP2
300m²
PART 3 PLAN 46R-5423
AGRICULTURAL FIELD
20m
SEPTIC BED
REPLACEMENT
15m
TP3
300m²
4-BEDROOM HOUSE
LOT 1
4594 Sq.m.
4-BEDROOM
LOT 2
4594 Sq.m.
HOUSE
4-BEDROOM HOUSE
LOT 3
4594 Sq.m.
PROPOSED WELL
PART 3
PLAN 46R-4890
PROPOSED WELL
PROPOSED WELL
N72°43'30"W
PART 1
PLAN 46R-5423
AGRICULTURAL FIELD
76.215
REMAINS OF OLD POST AND WIRE FENCE
60.295
215.52
CENTERLINE OF DITCH
EDGE OF GRAVEL
EDGE OF ASPHALT
CENTERLINE OF ROAD ALLOWANCE
ROAD ALLOWANCE BETWEEN LOTS 12 AND 13
WOOD POLE
CENTERLINE OF UTILITY WOOD POLE LINE (ELECTRICAL AND TELEPHONE WIRES)
GEODETIC SITE BENCH MARK
NAIL IN WEST FACE OF WOOD POLE
ELEVATION= 57.435
LOT 12 CONCESSION
RURAL RESIDENTIAL