




PO Box 1749  
Halifax, Nova Scotia  
B3J 3A5, Canada

**Item No. 9.1**  
**Halifax Regional Council**  
**March 30, 2010**  
**April 27, 2010**

**TO:** Mayor and Members of Halifax Regional Council

**SUBMITTED BY:**   
Wayne Anstey, Acting Chief Administrative Officer

**DATE:** March 1, 2010

**SUBJECT:** **Case 15791 - Regional Subdivision By-law Amendment**

---

### **ORIGIN**

Application by Terrain Group Inc., for lands of 500 Ventures Limited (Dexter Construction), to amend the Regional Subdivision By-law by extending the Water Service Area to 927 Rocky Lake Road, Bedford.

### **RECOMMENDATION**

It is recommended that Halifax Regional Council:

1. Give First Reading and schedule a public hearing to consider amendments to the Regional Subdivision By-law as set out in Attachment A of this report; and
2. Approve the proposed amendments to the Regional Subdivision By-law to expand the Water Service Area to include 927 Rocky Lake Road, Bedford as set out in Attachment A.

## **BACKGROUND**

Terrain Group Inc. has applied to amend the Regional Subdivision By-law (Schedule B) to extend the Water Service Area. The proposed amendment would enable the extension of the existing water main on Rocky Lake Drive to nearby Rocky Lake quarry in Bedford (Map 1). Municipal water services can not be extended to a property unless it is included within a Water Service Area. Halifax Water cannot take ownership of water distribution systems or allow a property to connect to systems unless it is within a Water Service Area.

Currently, there is no potable water source for Dexter Construction employees at the offices and facilities at the active quarry site. A water quality study has been prepared verifying that the matter cannot be rectified by rehabilitation of the existing well water supply or pursuing alternative means of on-site water service (Attachment C). Extension of the water main will provide safe drinking water to approximately 100 employees.

### **Location, Designation, Zoning and Surrounding Land Uses**

- The lands (PID 00315622) at 927 Rocky Lake Drive are located just north of the intersection of Duke Street and Rocky Lake Drive on the southeast side of Rocky Lake Drive (Map 1);
- The lands are 6.82 hectares (approximately 16.85 acres) in area;
- The lands are zoned Rural Commuter under the Regional Plan;
- The lands are designated Light Industrial and zoned I-3(Light Industrial) under the Planning Districts 14 and 17 Municipal Planning Strategy and Land Use By-law (Maps 1 and 2); and
- The surrounding lands are zoned I-3 southeast of Rocky Lake Drive as shown on Map 2.

### **Regional Plan Policy**

The establishment of new Water Service Areas is important in supporting the settlement form envisioned in the Regional Municipal Planning Strategy (RMPS) and boundaries were established to limit where water services would be permitted. However, the Regional Municipal Planning Strategy (RMPS) does enable Council to consider the extension or creation of Water Service Areas through Policy SU-14. This policy enables extension of water distribution services subject to certain considerations such as lands be in close proximity to a water main planned or constructed by Halifax Water and that a study be prepared verifying that there is a water quality problem that cannot be rectified by an alternative means (Attachment B). In addition, Policy P8(a) of the Planning Districts 14 and 17 Municipal Planning Strategy identifies Council's intent to extend water services only to designated Water Service Districts (Attachment B).

## **DISCUSSION**

In most circumstances service boundary changes are contemplated as part of more complex and larger scope exercises that are subject to considerations regarding engineering, costs, timing, and the size and location of the expanded service area.

However, this application is for a single site extension of the Water Service Area and has been requested for several reasons:

- there is currently no potable water supply for approximately 100 persons employed by Dexter Construction at the quarry site;
- the number of employees at the quarry site is to be expanded to approximately 130 (or more) persons;
- the rehabilitation of existing well water supply or pursuing alternative means of on-site water service would not eliminate water quality issues because of on-going quarry activities; and
- a water quality study has been prepared verifying that the matter cannot be rectified by an alternative means.

#### Extension of Water Service Areas

Policy P-8(a) of the Planning Districts 14 and 17 Municipal Planning Strategy (MPS) (Attachment B) establishes Water Service Districts that are recognised in the Regional MPS under Policy SU-12 (Attachment B) by establishing Water Service Areas through the Regional Subdivision By-law. This policy reiterates the intent of the Water Service Districts in that no water distribution system shall be permitted to extend outside of a Water Service Area. These policies compel the property owner to apply for an extension of a Water Service Area subject to certain criteria. This criteria is:

- (a) lands be in close proximity to a water main planned or constructed by Halifax Water; and
- (b) that a study be prepared verifying that there is a water quality problem that cannot be rectified by an alternative means.

Following evaluation under this criteria, staff is of the opinion that the application has been made based on health concerns arising from an irreparable non-potable water supply as shown in a study prepared by SLR Consulting (Canada) in 2009 (see Attachment C) that concluded that surface/near surface sources of coliform bacteria and sodium chloride may not be eliminated by well rehabilitation. A new well drilled in 2003 had an inadequate amount of water as quarry activity has compromised the bedrock aquifer. Treatment of current water supplies has proven ineffective and investigation of additional treatment has been deemed to be cost prohibitive. Council may consider extending the existing Water Service Area on that basis of the water quality problem. In addition, the subject lands are in very close proximity to an existing trunk water main.

#### Halifax Water

Halifax Water requires the property owner to enter into a Water Services Agreement in order to extend the water distribution system. Also, the applicant has confirmed with Halifax Water that the water will be used for domestic purposes only and not for quarry related processing. The

property owner will design and construct the water main extension in accordance with Halifax Water specifications and pay the total cost of the extension.

#### On-Site Wastewater Treatment

Often areas with water distribution services, but not piped sewer services, face an increased risk of on-site sewage disposal system failure as a result of the unlimited supply of water and hydraulic overloading. The property owner received Nova Scotia Environment approval in October 2009 to install a new 9100 litre septic tank that, in addition to the two existing tanks, will handle 1940 litres of wastewater per day from the expanded main office. As a component of the permitting process, written certification must be provided to HRM from Nova Scotia Environment attesting the septic system as installed can handle anticipated increased flows.

#### Public Participation

A Public Information Meeting (PIM) was held on February 1, 2010. The main concerns brought forward by the public was that the quarry site wastewater treatment facilities should be able to manage the higher volume of water use associated with use of municipal water service and that water use be limited to “office” use only. The minutes are included as Attachment D.

If Council decides to hold a Public Hearing on the proposed amendments, notices of the Hearing will be published in the newspaper in accordance with the *Halifax Regional Municipality Charter*. In addition, all property owners within the notification area indicated on Map 1 and who attended the public meeting will be sent written notification.

#### Conclusion

Staff are of the opinion that the proposed amendment is consistent with the Regional Municipal Planning Strategy (MPS). The amendment would enable Halifax Water to provide a water distribution system, to lands in proximity to an existing trunk water main, that was designed and constructed to its standards in accordance with Regional MPS Policy SU-14. Under that same policy, the amendment also provides an effective solution to the health issue of non-potable water where there is no alternative resolution.

#### **BUDGET IMPLICATIONS**

The HRM costs associated with processing this planning application can be accommodated within the approved operating budget for C310.

#### **FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN**

This report complies with the Municipality’s Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

### ALTERNATIVES

1. Regional Council may approve the proposed amendments to the Regional Subdivision By-Law as contained in Attachment A in order to extend the Water Service Area to include 927 Rocky Lake Road. This is the recommended course of action.
2. Regional Council may refuse the requested amendments. A request to amend the Regional Subdivision By-Law is at the discretion of Council. This alternative is not recommended as staff believe that there is merit in proceeding with amendments to the Regional Subdivision By-Law.

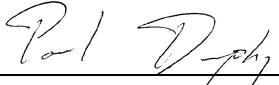
### ATTACHMENTS

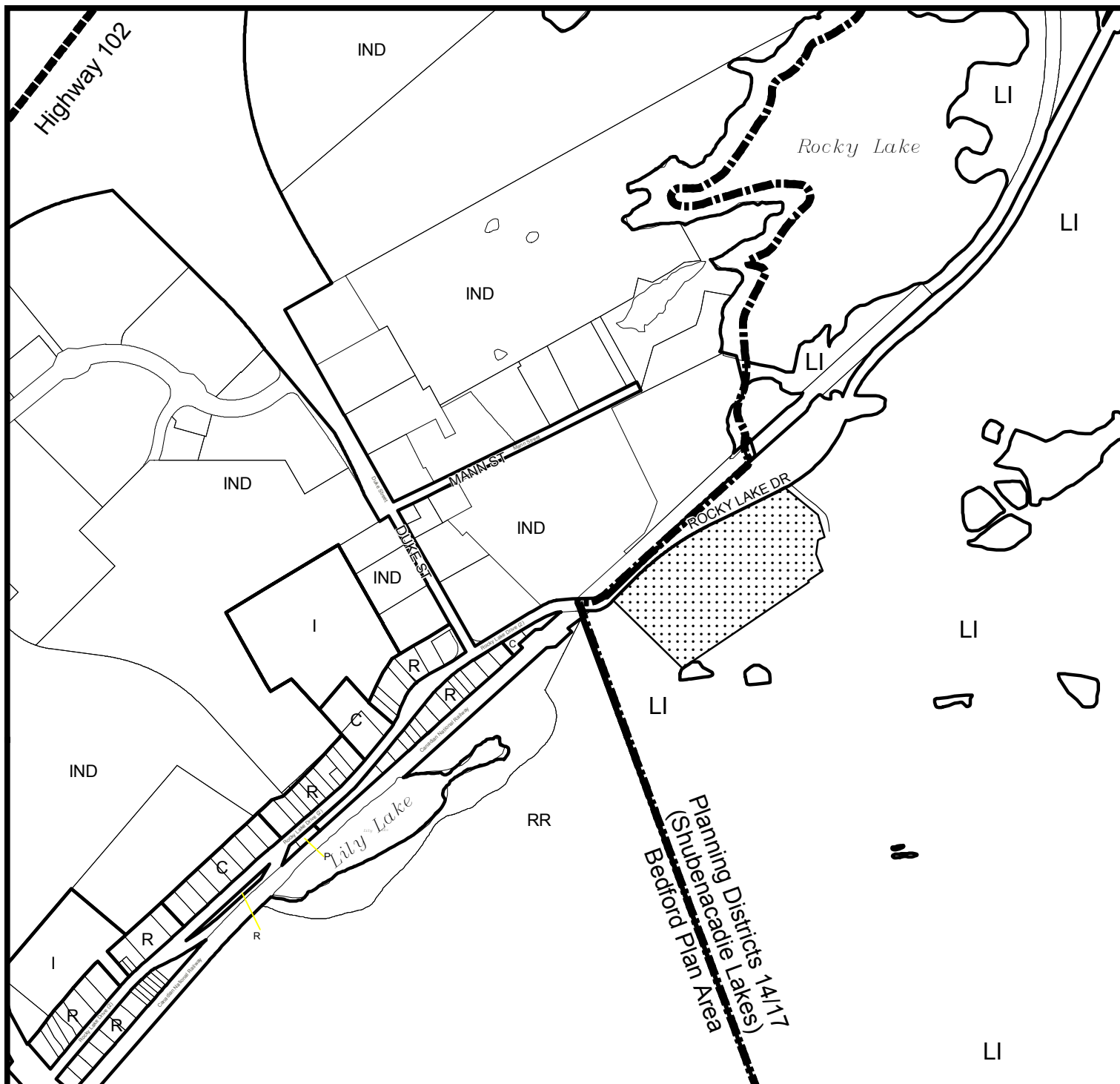
Map 1	Generalized Future Land Use Map
Map 2	Zoning and Notification Map
Attachment A	Proposed Amendment to the Regional Subdivision By-law
Attachment B	Excerpts from Regional Municipal Planning Strategy and Planning Districts 14 & 17 Municipal Planning Strategy
Attachment C	Domestic Well Water Quality Report
Attachment D	Minutes from Public Information Meeting

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Darrell Joudrey, Planner 1, 490-4181

Report Approved by:   
Austin French, Manager, Planning Services, 490-6717

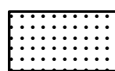
Report Approved by:   
Paul Dunphy, Director, Community Development



# Map 1 Generalized Future Land Use

## Bedford Plan Area

- R Residential Designation
- C Commercial Designation
- I Institutional Designation
- IND Industrial Designation
- RR Residential Reserve Designation



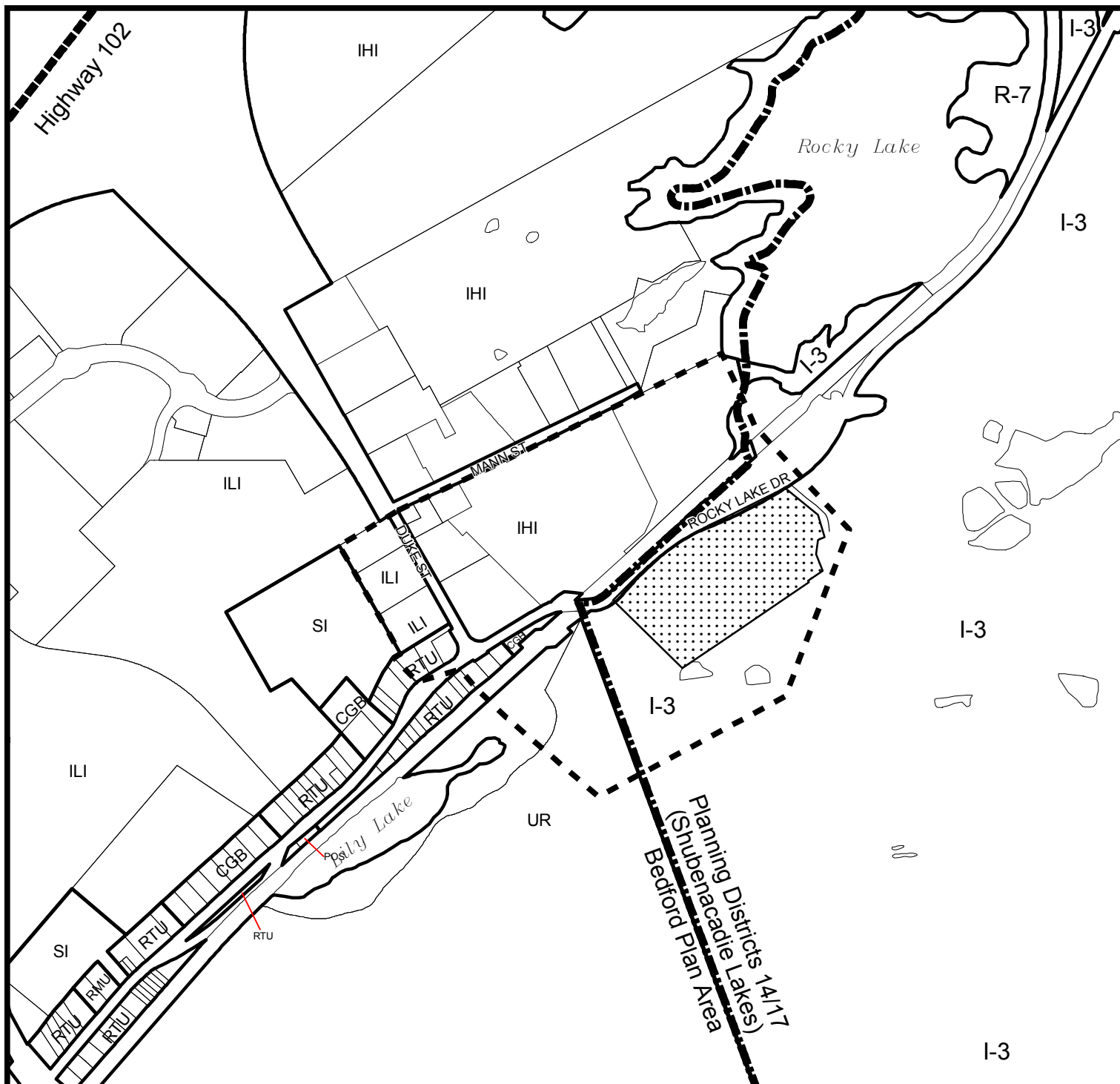
Subject Property

## Planning Districts 14/17 (Shubenacadie Lakes)

- LI Light Industrial Designation

**HALIFAX**  
REGIONAL MUNICIPALITY  
Community Development  
Planning Services

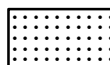




Map 2  
Zoning and Notification



Notification Area



Subject Property

**HALIFAX**  
REGIONAL MUNICIPALITY  
Community Development  
Planning Services

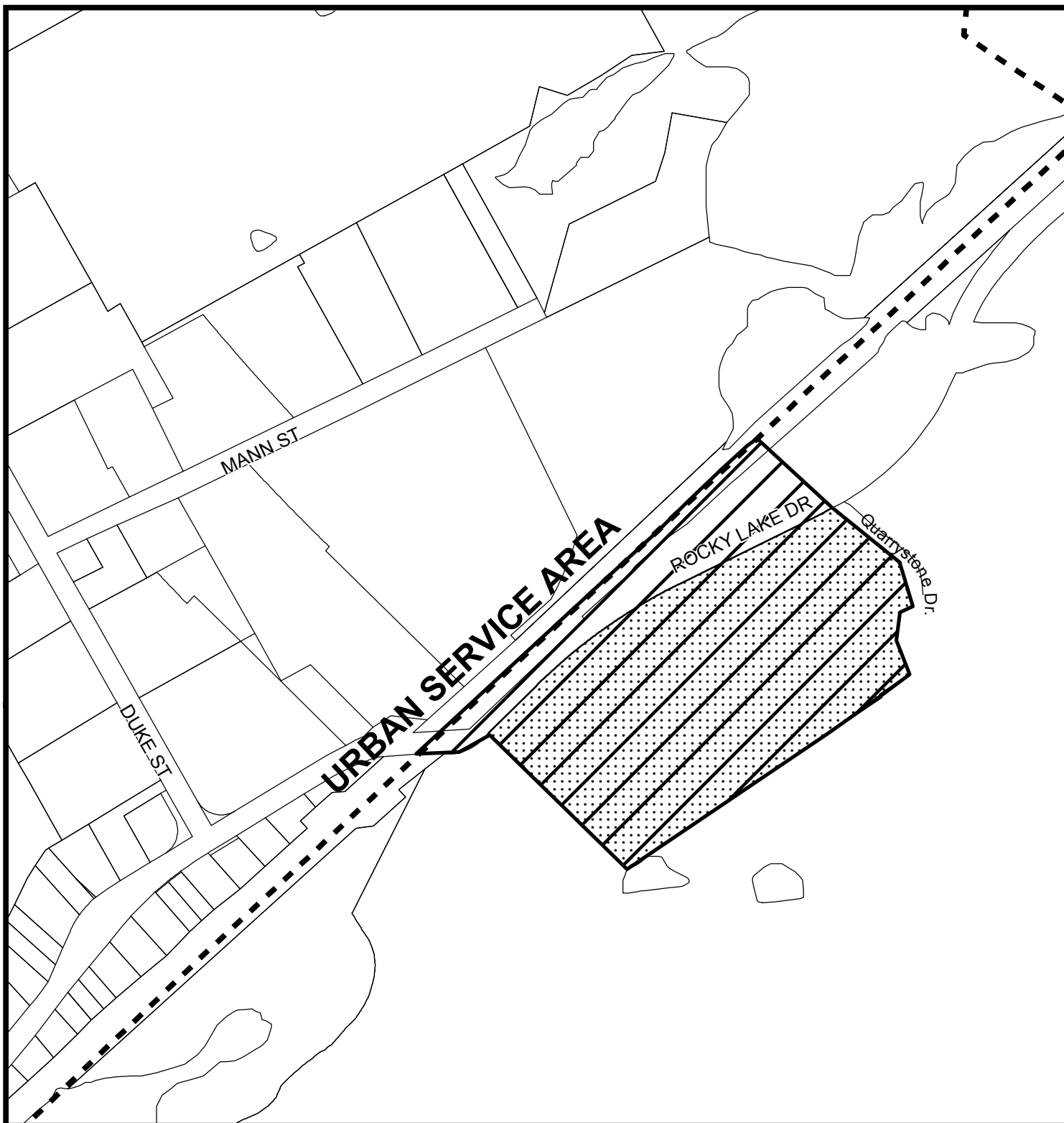
### Bedford Plan Area

RTU	Two Dwelling Unit Zone
RMU	Multiple Dwelling Unit Zone
CGB	General Business District Zone
POS	Park Open Space Zone
ILI	Light Industrial Zone
IHI	Heavy Industrial Zone
UR	Urban Reserve Zone
SI	Institutional Zone


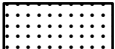
### Planning Districts 14/17 (Shubenacadie Lakes)

I-3	Light Industrial Zone
R-7	Rural Estate Zone





**Schedule A - Proposed Amendment to the Regional Subdivision By-law  
(Schedule B - Service Requirement Map)**

- Urban Service Area Boundary
-  Area to be added to the Urban Service Area
-  Subject Property

**HALIFAX**  
REGIONAL MUNICIPALITY  
Planning Services



**Attachment A:**  
**Proposed Amendment to the Regional Subdivision By-law**

BE IT ENACTED by the Halifax Regional Council of the Halifax Regional Municipality that the Regional Subdivision By-law as enacted by the Halifax Regional Council on the 27<sup>th</sup> day of June 2006 and approved by the Minister of Service Nova Scotia and Municipal relations on the 26<sup>th</sup> day of August 2006 as amended, is hereby further amended as follows:

1. Schedule "B", Service Requirement Map, shall be amended by creating a new Water Service Area along a portion of Rocky Lake Drive in Bedford as illustrated on the attached Schedule A.

I HEREBY CERTIFY that the amendments to the Regional Subdivision By-law as set out above, were passed by a majority vote of the Halifax Regional Council held on the \_\_\_\_ day of \_\_\_\_\_, 2010.

GIVEN under the hand of the Municipal Clerk and under the Corporate Seal of the Halifax Regional Municipality this \_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
Cathy Mellet  
Acting Municipal Clerk

**Attachment B:**  
**Relevant Excerpts from Regional Municipal Planning Strategy**  
**and Planning Districts 14 & 17 MPS**

SU-12 In recognition of the existing Water Service Districts under the Halifax County Municipality Subdivision By-law, HRM shall, through the Subdivision By-law, establish Water Service Areas within which development shall be permitted which is serviced by a public water distribution system but without a municipal wastewater system. Within these areas, a water distribution system shall be required to service all new subdivisions located adjacent to an existing water distribution system where a new or extended public street or highway is proposed. Further, no water distribution system shall be permitted to extend outside of a Water Service Area.

SU-14 HRM may consider expanding existing Water Service Areas to existing communities, subject to the financial ability of HRM to absorb any costs related to the expansion, if:

- (a) the lands are in proximity to a trunk water main planned or constructed by the Water Commission to improve the performance of the water distribution system;
- (b) a study has been prepared by a qualified person verifying that there is a water quality or quantity problem that cannot reasonably be rectified by an alternative means; or
- (c) there are environmental concerns related to the long-term integrity of on-site sewage disposal systems and a wastewater management plan is also considered in accordance with Policy SU-20.

P-8(a) It shall be the intention of Council to establish Water Service Districts for those areas to which central municipal water services only have or may be extended in the future, as shown on the Water Service District Map (Map 5). It shall be the policy of Council that the extension of central municipal water services shall not be permitted outside of designated Water Service Districts. It shall further be the policy of Council that within the Water Service Districts, central municipal water services shall be provided to all subdivisions adjacent to existing municipal water services and which propose to provide a new or extended public street or highway.

P-8(b) Notwithstanding Policy P-8(a), Council may consider amending this planning strategy and the Municipal Subdivision By-law to permit the expansion of existing or the establishment of new Water Service Districts. When considering new or expanded Water Service Districts, priority shall be given to:

- (1) areas identified as experiencing problems related to insufficient quality and/or poor quality of existing sources of water supply;
- (2) existing communities within a reasonable distance of the central water supply system where there is a demonstrated need and conditional upon the availability of water supply capacity; and
- (3) areas which would provide looping of existing infrastructure thereby enhancing reliability of the water system in the local area.

# Attachment C



November 23, 2009

Terrain Group  
1 Spectacle Lake drive  
Dartmouth, Nova Scotia  
B3B 1X7

Attention: Ms. Lindsay MacDonald, P. Eng.

**Re: Domestic Well Water Quality Analysis, Dexter Construction Company Limited,  
Rocky Lake Drive, Bedford, Nova Scotia.**

Dear Ms. MacDonald:

SLR Consulting (Canada) Limited was requested to provide an interpretation of the water quality results obtained from a domestic well located at the Dexter Construction Company Limited (DCCL) property, located on Rocky Lake Drive in Bedford, Nova Scotia. Our analysis also involves the provision of a professional opinion as to the future suitability of the existing well and bedrock aquifer for the supply of potable water. SLR did not perform a site visit to the property, however we did conduct a review of information including the well setting and recently collected water quality analysis provided by Mr. Wayne MacRae (WMR) and information on a well inspection video prepared by Mr. Mike Rushton of Aquaterra Resources Services Limited (ARSL).

## Introduction

Municipal Dexter quarry site is currently serviced by well water that is not of a quality to be consumed by staff at the site. There is currently around 100 staff working on site with the intentions to increase this up to 130 staff members. At present, the site has signs up everywhere advising staff and guests not to drink or clean with the well water. This has resulted in potable water being imported to the site. This quality issue has been occurring since 2003. The original well (no well log available), according to WMR, may have been constructed in 1970 and has an approximate depth of 400 feet. The well yield is also unknown, but is considered to be marginal, based on the local hydrogeology. The area is underlain by bedrock of the Goldenville Formation, consisting of quartzite or greywacke. This hydrostratigraphic unit, based on well log data compiled by Nova Scotia Environment, yields an average of 3.0 imperial gallons/minute (igpm).

A second domestic supply well was constructed on-site circa 2003 due to existing water quality issues related to the existing well, however, this second well was subsequently abandoned because the water production was less than 0.5 gallons per minute (WMR). The required production for the site is approximately 4.5 igpm, based on a staff compliment of 130 persons and an average consumption of 50 gallons/day/person. This has resulted in the original well being the only domestic well on the active quarry property and services the office, shop and helicopter hangar buildings for general use (i.e. washrooms, cleaning machinery etc), however, it is noted that the well water is not used for human consumption as a series of bacteriological samples (coliform bacteria) collected circa 2004 reported unsatisfactory results resulting in potable water being required to be brought onto the site.

Municipal Dexter have over the years looked into other ways to address the water quality issue, including the construction of a second well, noted above, as well as investigations into other forms of well water treatment, which proved impractical. The analysis carried out identified that because of the nature of the active quarry, which continually results in a change to the hydro-geological conditions on site, the risk vs the cost of carrying out remediation were too high when compared to the option of bringing the nearby Municipal water supply to the site. This problem has only been exacerbated by the needs of Municipal Dexter to increase staff numbers on the quarry site.

The following provides additional information regarding the status of the existing well and quality of the water that elaborates on the points raised above.

#### **Well Details**

The well water currently undergoes treatment for iron and manganese removal using a water softener. However, it is noted, that this treatment method has not been successful in reducing these parameters to below their respective guidelines due to low pH concentrations and the initial high concentrations of the contaminants.

A video inspection of the well was carried out by ARSL on August 25, 2009 to view the bottom of the casing string and any shallow fractures that may be creating water quality issues. The video report noted that "The drilled well was located inside a well crock about 9 meters (m) behind the garage. The well casing with an approved cap extended well up inside the crock which should prevent any contaminants from entering the well". The video log noted that the bottom of the casing was located 5 m below ground and was equipped with a drive shoe. In addition, a fracture was noted at 5.2 m, with no evidence of inflow, competent bedrock was observed from 5.2 to 18.3 m below ground, at which the inspection was terminated.

The video log and associated report indicate that the current well is constructed in a proper manner and therefore it is the fracturing caused by the quarry activities (i.e. blasting) that is causing a direct route of surface water ingress into the well and hence the coliform and chemical contamination.

#### **Groundwater Quality**

The well water quality has been affected by the ingress of coliform bacteria, which indicates a direct link with contaminated surface water and therefore is not suitable for human consumption. The well has also been historically adversely affected by chemical water quality issues including sodium and chloride (derived from on-site de-icing activities) as well as iron and manganese, which are generally naturally elevated in Meguma Group bedrock in Nova Scotia, however

considering the elevated concentrations of these parameters, are also, in all probability, being adversely affected by the elevated concentrations of sodium and chloride, which at elevated concentrations will strip metals from soil and bedrock and increase their associated concentrations in groundwater.

A water sample was obtained from the well on May 21, 2009 and subsequently analyzed for general chemistry and metals (See Table 1, attached). This sample was collected from a tap in a washroom sink at the Helicopter Hangar after 20 minutes run time and represents a raw, untreated sample. The water sample was submitted to Maxxam Analytics in Bedford, Nova Scotia for analysis. The results of this analysis indicate that sodium (400 mg/L), chloride (1200 mg/L), manganese (11.0 mg/L) and Total Dissolved Solids (TDS) (2180 mg/L) exceed the aesthetic criteria of the Guidelines for Canadian Drinking Water Quality of <200, <250, <0.05 and < 500 mg/L, respectively. In addition, the results for four (4) additional parameters, including antimony (<0.020 mg/L), arsenic (< 0.020 mg/L), iron (< 0.050 mg/L) and selenium (<0.020 mg/L), exceeded their respective Reportable Detection Limit (RDL) of 0.020, 0.020, 0.050 and 0.020 mg/L, respectively. Therefore it is unknown, but highly likely, that these parameters also exceed their respective Guideline. It is noted that the Guidelines for antimony, arsenic and selenium are based on health related concerns, whereas iron is based on an aesthetic objective.

### **Conclusions**

Based on the construction specifics of the well and the related water quality issues, it is concluded that this well is being affected by the influence of surface/near surface sources of contamination including bacteria and road salt, due to its location in a quarry environment which has been subject to nearby blasting activities, with little or no overburden cover.

It is also concluded that the historic activities related to quarrying have compromised the bedrock aquifer in terms of the blasting related near surface fracture development and the associated ingress of surface water impacted by coliform bacteria and sodium chloride related to on-site deicing activities. In addition, it is also concluded that this existing situation will continue to deteriorate given the on-going nature of quarrying activities.

Based on the factors noted immediately above, it is concluded that well rehabilitation will not eliminate these local water quality issues.

Attempts to secure additional water from the bedrock aquifer via the construction of a new well in circa 2003 indicated that the aquifer is incapable of providing an adequate water supply. Existing treatment of the well water has proven ineffective due to the high concentrations of iron, manganese, sodium and chloride. Additional treatment options such as reverse osmosis have been investigated, but are deemed to be cost prohibitive and would require clean water for filter backwashing, which would negatively impact the water quantity supply capability of the existing well and perhaps render it incapable of supplying the required water quantity for on-site use.

Municipal Dexter has examined both the cost benefit and human health and safety aspects of the continuation of attempting to secure an on-site well water supply versus the potential option of securing a clean reliable water supply from Halifax Water, and has determined that tapping the locally available central water supply system, is their only option to secure a long term reliable water supply and protect the health of their on-site employees as well as the general public who may consume water while visiting the property.

In this regard, it is also concluded that the derivation of an on-site water supply from beneath and active rock quarry is a mutually exclusive land use and therefore an off-site water supply is required.

### **Recommendations**

- Given the local conditions and well water quality issues as noted above, it is recommended that an application be made to the Halifax Regional Municipality to allow Dexter Construction to connect to the nearby existing municipal supply system.

In conclusion, we trust that this information is sufficient for your reference at this time. However, if you have any questions or comments, please contact the undersigned at your convenience.

Sincerely;  
**SLR Consulting (Canada) Limited**

A handwritten signature in blue ink, appearing to read "J. H. Fraser".

J. H. Fraser, M. A. Sc., P. Geo.  
Senior Technical Advisor (Hydrogeology)

cc: Dick Tiller, Dexter Construction  
Wayne MacRae, WMR

attachment

Table 1. RESULTS OF ANALYSES OF WATER, HELICOPTER HANGAR

Maxxam Job # and Report Date		A959318; 01/06/2009			
Maxxam ID		CN8114			
Sampling Date		21/05/2009			
	Units	HELICOPTER HANGAR	RDL	Metamorphic Groundwater Region	Guideline
					Potable water
Inorganics					Value Type
Total Sodium (Na)	mg/L	490	0.1	21.3	<=200 AO
Total Potassium (K)	mg/L	5.6	0.1	1.3	
Total Calcium (Ca)	mg/L	300	0.1	19.8	
Total Magnesium (Mg)	mg/L	23	0.1	3.1	
Total Alkalinity (Total as CaCO <sub>3</sub> )	mg/L	170	30	58.0	
Dissolved Sulphate (SO <sub>4</sub> )	mg/L	73	2	11.0	<=500 AO
Dissolved Chloride (Cl)	mg/L	1200	20	21.0	<=250 AO
Reactive Silica (SiO <sub>2</sub> )	mg/L	0.9	0.5		
Nitrate + Nitrite	mg/L	1.6	0.05	0.03	10 MAC
Nitrate (N) (calculated)	mg/L	1.6	0.05		10 MAC
Nitrite (N)	mg/L	0.01	0.01		1 MAC
Nitrogen (Ammonia Nitrogen)	mg/L	0.12	0.05		
Orthophosphate (P)	mg/L	<0.01	0.01		
Total Phosphorus (P)	mg/L	<0.1	0.1		
Colour	TCU	<5	5		
Turbidity	NTU	0.6	0.1		1.5 MAC, AO
Conductivity	uS/cm	4100	1		
pH		6.88	N/A	7.3	6.5-8.5 AO
Total Organic Carbon (C)	mg/L	2.0	0.5		
Tannins & Lignins	mg/L	0.2	0.2		
Calculated Parameters					
Hardness (CaCO <sub>3</sub> )	mg/L	840	1	63.7	
Bicarb. Alkalinity (calc. as CaCO <sub>3</sub> )	mg/L	185	1		
Carb. Alkalinity (calc. as CaCO <sub>3</sub> )	mg/L	41	1		
Calculated TDS	mg/L	2180	1	146.0	<=500 AO
Cation Sum	me/L	39.2	N/A		
Anion Sum	me/L	37.8	N/A		
Ion Balance (% Difference)	%	0.530	N/A		
Langelier Index (@ 20C)	N/A	-0.085			
Langelier Index (@ 4C)	N/A	-0.328			
Saturation pH (@ 20C)	N/A	6.97			
Saturation pH (@ 4C)	N/A	7.21			
Metals (ICP-MS)		total			
Total Aluminum (Al)	ug/L	<100	100		100/200 (operational value)
Total Antimony (Sb)	ug/L	<20	20		5 IMAC
Total Arsenic (As)	ug/L	<20	20	1.9	10 MAC
Total Barium (Ba)	ug/L	220	50		1000 MAC
Total Beryllium (Be)	ug/L	<20	20		
Total Bismuth (Bi)	ug/L	<20	20		
Total Boron (B)	ug/L	61	50		5000 MAC
Total Cadmium (Cd)	ug/L	<3	3		5 MAC
Total Chromium (Cr)	ug/L	<20	20		50 MAC
Total Cobalt (Co)	ug/L	<10	10		
Total Copper (Cu)	ug/L	550	20		<=1000 AO
Total Iron (Fe)	ug/L	<500	500	143.2	<=300 AO
Total Lead (Pb)	ug/L	<5	5		10 MAC
Total Manganese (Mn)	ug/L	11000	20	37.4	<=50 AO
Total Molybdenum (Mo)	ug/L	<20	20		
Total Nickel (Ni)	ug/L	23	20		
Total Selenium (Se)	ug/L	<20	20		10 MAC
Total Silver (Ag)	ug/L	<5	5		
Total Strontium (Sr)	ug/L	1800	50		
Total Thallium (Tl)	ug/L	<1	1		
Total Tin (Sn)	ug/L	<20	20		
Total Titanium (Ti)	ug/L	<20	20		
Total Uranium (U)	ug/L	2	1	0.3	20 IMAC
Total Vanadium (V)	ug/L	<20	20		
Total Zinc (Zn)	ug/L	720	50		<=5000 AO
Comments		Elevated reporting limits for trace metals due to a high calcium and chloride content.		Data from Kennedy and Drage (2009) referenced in letter report.	

## GENERAL COMMENTS

Results relate only to the items tested.

ND = Not detected (changed to &lt;RDL)

RDL = Reportable Detection Limit

Shaded values exceed one or more of guidelines

MAC = maximum acceptable concentration

IMAC = interim maximum acceptable concentration

AO = aesthetic objective

RDL exceeds guideline so unknown if sample exceeds or not

**Attachment D:  
Minutes from Public Information Meeting**

**HALIFAX REGIONAL MUNICIPALITY  
PUBLIC MEETING  
CASE NO. 15791 - Rocky Lake Quarry**

---

**Monday, February 1, 2010**

**7:00 p.m.**

**Royal Canadian Legion (Waverley Branch)  
2234 Rocky Lake Drive, Waverley**

**STAFF IN**

**ATTENDANCE:** Darrell Joudrey, Planner, HRM Planning Services  
Alden Thurston, Planning Technician, HRM Planning Services  
Cara McFarlane, Planning Controller, HRM Planning Services

**ALSO IN**

**ATTENDANCE:** Nick Pryce, Terrain Group Inc.  
Linday MacDonald, Terrain Group Inc.  
Councillor Barry Dalrymple, District 2  
Councillor Tim Outhit, District 21

**PUBLIC IN**

**ATTENDANCE:** 3

---

The meeting commenced at approximately 7:05 p.m.

**1. Opening Remarks/Introductions/Purpose of Meeting - Darrell Joudrey**

Mr. Joudrey introduced himself as the planner guiding the application through the planning process; Councillor Barry Dalrymple, District 2; Councillor Tim Outhit, District 21; Nick Pryce and Lindsay MacDonald, Terrain Group Inc.; and Alden Thurston and Cara McFarlane, HRM Planning Services.

The agenda was reviewed.

The purpose of the meeting is to identify that HRM has received an application, to explain what the applicant is requesting and give them an opportunity to present the proposal to the community, and to gain public feedback before the staff report is prepared.

**2. Presentation of Proposal - Darrell Joudrey**

Terrain Group has submitted an application for the lands of Dexter Construction's Rocky Lake Quarry on Rocky Lake Drive to amend the Regional Subdivision By-law, Schedule B (Water Service Area). This amendment would extend the Water Service Area to the quarry lands where the offices are located. This would allow potable water on-site for office staff. The applicant has prepared a study confirming that.

Amending the boundary of the Water Service Area on the Regional Subdivision By-law Schedule B map to the quarry lands enables the existing water distribution of service on Rocky Lake Drive to be extended.

The subject property was shown on the screen. The designation is currently Light Industrial and the zone is also Light Industrial. The current land use is Active Quarry and the regional designation is Rural Commuter.

The Regional Plan establishes provisions for new water service areas or extending existing areas. These provisions are made under the policies that allow HRM to consider these applications. Under Policy SU-12, water distribution services may not be extended unless within the boundaries of a water service area. Policy SU-14 permits an existing water service area to be extended, subject to the financial ability of HRM to absorb any cost related to the extension, if the lands are in proximity to an existing trunk water main, or if the study has been prepared by a qualified person verifying that there is a water quality or quantity problem that can't be rectified by alternative means.

Halifax Regional Water Commission (HRWC) may not take over or assume any water distribution service unless it is within a water service area. In this case, Dexter will install and pay for the extension according to HRWC specifications and then HRWC will take over the system through a service agreement as no private systems may be located in the HRM right of way.

### **Presentation - Nick Pryce, Terrain Group Inc.**

This proposal was originally looked at in 2004, but there were some quality and quantity issues with the water at the time. Other options were looked at in terms of another well but with an active quarry in the area that would cause some challenges in terms of the water quality and quantity. Extending the water service boundary would resolve this issue. He showed where the boundary is currently located. The applicant is looking at extending the service through to the buildings which requires an amendment to the Regional Subdivision By-law Schedule B.

### **3. Questions/Comments**

Councillor Outhit asked how the sewage water would be handled especially if water usage is increased. Mr. Pryce said there is a service charge on the usage of the water with HRWC. He understands that they have reviewed this application and have no issues with the proposal. Mr. Joudrey said Kenda MacKenzie, Development Engineer, HRWC, has reviewed the proposal and had no issues at this time. Lindsay MacDonald mentioned that there is an on-site septic system.

Councillor Dalrymple asked if this application would go through Halifax Watershed Advisory Board (HWAB). Mr. Pryce understands that it does. Mr. Joudrey was told it did not have to go through HWAB. Since it is an amendment to the Regional Subdivision By-law, Regional Council will make the decision on the application.

Jack Howell, Rocky Lake Drive, was concerned about enlarging the existing watermain and where the new line would start. Lindsay MacDonald explained that the size of the existing main is large enough, it is just being extended.

Mr. Howell asked what the increase of water would be used for. Lindsay MacDonald mentioned that it is for potable use in the office building.

**4.     Closing Comments**

Mr. Joudrey went through the next steps: HRM staff review, prepare staff report, go to Regional Council for first reading then public hearing, decision of Regional Council, and a 14 day appeal period.

Mr. Joudrey thanked everyone one for coming and expressing their comments and concerns.

**5.     Adjournment**

The meeting adjourned at approximately 7:20 p.m.