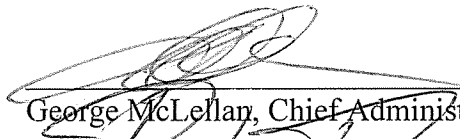
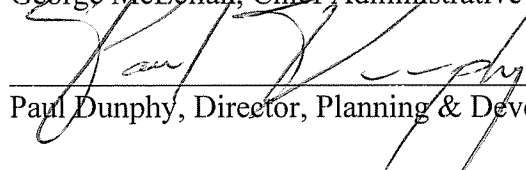

Halifax Regional Council
October 8, 2002

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:


George McLellan, Chief Administrative Officer


Paul Dunphy, Director, Planning & Development Services

DATE: October 3, 2002

SUBJECT: Plan and By-law Amendments: C&D Waste Disposal - Halifax Construction and Debris (C&D) Recycling Ltd. , near Antrim.

SUPPLEMENTARY REPORT

ORIGIN

- Staff Report dated September 20, 2002
- September 25, 2002 Regional Council held a public hearing on the Halifax C&D Recycling Ltd. proposal for a C&D disposal site near Antrim. Debate or decision was deferred to October 8, 2002.

RECOMMENDATION

It is recommended that Council approve the MPS and LUB amendments, as contained in Attachments 1 and 2, to permit Halifax Construction and Debris Recycling Ltd. to establish a C&D disposal facility off Old Guysborough Road as shown on Map 1 attached to this report.

PLEASE BRING THE SEPTEMBER 20TH REPORT TO THE OCTOBER 8th SESSION. THAT REPORT CONSOLIDATES INFORMATION RELEVANT TO THIS PUBLIC HEARING.

SUMMARY

General

- There are currently no C&D disposal operations within HRM and none were approved on September 10, 2002. The establishment of one or more C&D disposal sites is critical to the successful implementation of the Solid Waste Resource Management Strategy.
- Before C&D disposal operations can be established sites have to be rezoned to CD-3 (C&D Disposal Zone). This can be done in one of two ways:
 - ▶ If the site complies with the recently adopted MPS policies it can simply be rezoned. Such a decision can be appealed to the Utility Review Board; or
 - ▶ *Council may adopt a site specific amendment to its Municipal Planning Strategy to allow the rezoning. This approach allows Council to rezone sites which fully comply with its MPS, while avoiding the potential delays caused by appeals. It is also recognized that Council may not receive ideal proposals which fully comply with its MPS. This approach therefore also allows Council to rezone sites which do not entirely comply with its current MPS. Such a decision is not appealable.*

Halifax C&D site

- ▶ Staff have reviewed the Halifax C&D Recycling Ltd. proposal, near Antrim, for compliance with MPS policy, Land Use By-law, C&D License By-law and provincial requirements.
 - ▶ The Antrim site is consistent with MPS Policy to support C&D operations in areas designated "Mixed Use".
 - ▶ The proposal is capable of complying with the requirements of the CD-3 (C&D Disposal) Zone and no major deficiencies were identified that would preclude the proposal from consideration for Site Plan Approval.
 - ▶ HRM Solid Waste has indicated that the proposal meets the intent of the C&D License By-law, however, additional information is required before a license can be issued.
 - ▶ The Province has indicated there are no specific issues which would prohibit a recommendation on the proposal. The Province will not make a final decision until after the site is rezoned.
- Attached to the September 20, 2002 staff report are site-specific MPS and LUB amendments required to rezone the Halifax C&D site near Antrim to CD-3 (C&D Disposal) Zone. *These amendments were the subject of the September 25, 2002 public hearing.*
- During the course of the Public Hearing, a number of questions were raised for which clarification has been requested. This report responds to those matters and provides clarification on other issues raised in order to assist Council in its deliberations.

DISCUSSION

Questions Raised at the Public Hearing:

The questions raised at the public hearing, and corresponding staff responses are presented as follows:

1. What is the size of the Halifax C&D site near Antrim?

The site contains a total of 138 hectares (340 acres) of land. The staff report erroneously referenced acres as opposed to hectares.

2. Will the facility contain a transfer station?

The CD-3 (C&D Disposal) Zone allows for transfer stations, processing and stockpiling of material in addition to disposal activity. Halifax C&D intends to operate C&D processing and disposal facilities at the site. A C&D processing facility performs the same function as a transfer station.

3. Will the operator restrict use of the facility to only area residents?

It should be noted that the Municipality cannot restrict who is allowed to use the facility. The applicant intends to restrict the use of the facility to area residents by discouraging the use of the facility by commercial haulers through imposition of high tipping fees. Further, the operator wants commercial haulers to use Halifax C&D's current facilities in Goodwood and Cole Harbour. However, the operator has not expressly stated that non-residents would be prohibited from using the facility.

4. Why doesn't staff require confirmation of setback requirements now - instead of at the permitting & licensing stage?

It is the responsibility of an applicant to provide sufficient information upon which a staff evaluation and recommendation can be made. If the applicant does not, they run the risk of being rejected at the permitting and licensing stage. If rejected, the applicant can not proceed with the operation regardless of the zoning. Staff contend that a sufficient level of information was provided to make a recommendation on the proposal but anticipate additional information being required at the permitting and licensing stage.

5. Did the Musquodoboit Valley-Dutch Settlement plan envision a C&D disposal site in this area?

Prior to September 10, 2002, most MPS documents did not anticipate C&D disposal sites. However, the Municipal Planning Strategy for Musquodoboit Valley- Dutch Settlement did envision the establishment of C&D disposal sites within the area when it was adopted in 1996. The MPS was adopted during Halifax County's deliberations on the region's solid waste strategy and the local public participation committee assigned to establish the MPS was aware of the issues surrounding C&D waste, including disposal.

6. Why did staff propose a process that is unappealable?

The establishment of one or more disposal operations in the Region was viewed as critical to the implementation of HRM's regional solid waste strategy for two reasons:

- 1) The approach allows Council to rezone sites which fully comply with its MPS, while avoiding the potential delays caused by appeals due to the need to implement the final component of the C&D Strategy; and
- 2) It was also recognized however that Council may not receive ideal proposals which fully comply with the proposed Plan policies. Council therefore decided, that each proposal for a C&D disposal operation would be dealt with on its own merits as a site specific Plan amendment. The MPS amendment process is the best way of ensuring that the will of Council can be carried out.

7. Why isn't the site located near the source of generation?

Halifax C&D Ltd operates two distinct forms of C&D facilities: C&D processing facility in Goodwood and a C&D transfer station in Cole Harbour. The two facilities are the means by which Halifax C&D handle, process, and recycle C&D materials. Both of these facilities are close to the sources generating C&D material on both sides of the harbour. The proposed disposal facility near Antrim would primarily be used to landfill C&D materials that can not be recycled or reused from the other two facilities. Consequently, the proposed C&D disposal site does not need to be located near the source of generation as existing facilities are in place to service the generators of C&D materials.

8. Was the petition from areas residents previously circulated to Council?

The petition was not previously circulated to Council. The Clerks Office now has a copy of the petition and has circulated it to Council in the October 8, 2002 meeting package.

9. Did the Department of the Environment send a letter outlining areas of concerns?

The Department of the Environment and Labour sent HRM a letter indicating areas where additional information is required but these are not concerns. Rather, the letter states "there are no specific issues which I (DEL) am presently aware of which would prohibit an application from receiving recommendation for approval if the above issues are addressed". Attachment 3 contains a copy of the letter.

10. How will the disposal area be screened from Old Guysborough Road?

Depending on the final elevation of disposal cells, the disposal area could be visible from adjacent properties. Further, a portion of the disposal area could be seen from Old Guysborough Road from the north-east corner to the property. Additional information regarding the height of the disposal cells will be required to determine whether additional buffering will be required. Under the Site Plan Approval process, the applicant will be required to show how the facility will be buffered from the Old Guysborough Road and adjacent properties before permits can be issued. This may result in trees being planted, fencing erected, berms created or the provision of other measures.

11. What is the “Spring Weight Restriction”?

The Spring Weight Restriction is imposed by the Department of Transportation on certain provincial roads during the spring thaw to minimize the impact of heavy vehicles on the road and address safety issues. The Province determines when the restriction begins and ends for a road (depending on the road and location) as well as the maximum weight of a vehicle (ie. dependent on road construction & design).

12. What can be buried within a C&D disposal site?

Attachment 4 contains a list of materials generally permitted to be land filled in a C&D disposal site.

13. Will Kaulback Brook be used as a Holding Pond?

The proposal submitted by Halifax C&D does not include the use of Kaulback Brook as a holding pond. Instead, the proposal indicates a sedimentation control pond would be establish between the disposal area and Kaulback Brook. In general, the Department of the Environment and Labour prohibits any C&D disposal operator using a watercourse as a holding pond.

Other Issued Raised

1. Traffic Concerns

A number of residents expressed concerns with existing and proposed traffic (ie. speed, road condition, and volume) on Old Guysborough Road . The portion of Old Guysborough Road in Goff's/Antrim is owned and maintained by the Department of Transportation and Communication.

The proposed access road to the development meets the Department of Transportation and Communication sight stopping distances requirements, and the department has indicated that the proposed level of truck traffic would not negatively impact on the Old Guysborough Road.

2. C&D License By-law

C&D disposal operations are regulated under the Land use By-laws and C&D License By-law. Many of the concerns raised at the public hearing are addressed under the C&D License By-law. Those items raised have been addressed in previous reports as outlined in Attachment 5. Council has confirmed the adequacy of most requirements. Council has directed SWRAC to provide further evaluation of the requirements for liner systems and setback requirements from wilderness areas/parks. SWRAC are also evaluating setback requirements from a watercourse and an active quarry. These issues will be discussed at SWRAC's next meeting date on October 10, 2002, in Halifax City Hall.

3. Watershed

A concern has been expressed that the proposed facility is located within the same watershed as Dollar Lake Provincial Park. The site of the proposed processing and disposal facilities are located within the watershed of Porters Lake. Dollar Lake Provincial Park is located in the Musquodoboit Harbour watershed based upon Provincial mapping. A small portion of the site (north-east corner) is located in the Musquodoboit Harbour Watershed (Map 2).

4. Halifax C&D Slate Pit Operation

Halifax C&D is currently operating a slate pit rehabilitation project approximately 1 km from the proposed C&D disposal site. Staff acknowledge that problems have occurred at the pit rehabilitation project for two reasons. First, Halifax C&D was adding gyproc to the pit to reduce the water's acidity. However, gyproc was allowed to sit in water for extended periods of time which resulted in odor from the site. Secondly, the operation received compost material that was non-inert or stable which compounded the odor issue and raised concerns about effluent leaving the site. Since these incidents, Halifax C&D have work with the Department of the Environment and Labour to resolve issues at the site.

The issues associated with the pit rehabilitation project are not applicable to C&D disposal sites. Organic materials are not permitted to be buried at a C&D disposal site. In addition, the disposal area is regularly covered rather than exposed to water and air.

5. Provincial Requirements

A major concern of residents was the protection of the environment (ie wells, control of leachate, groundwater monitoring, and local park and wilderness area). These issues fall under the jurisdiction of the Department of the Environment and Labour which is responsible for final approval of C&D disposal sites and the protection of the environment. Provincial C&D guidelines contain provisions designed to protect water supplies and watercourses, address leachate control, and require ground water monitoring. Provincial agencies will comment on the impact of the proposal on local parks and wilderness areas. However, the Province has indicated that its interests in C&D disposal sites will be considered at the time of provincial approval are sought and that this will only occur after municipal approval is granted.

BUDGET IMPLICATIONS

The majority of the administration and enforcement of C&D operations will be conducted under the C&D License By-law. However, additional resources may be required for land use issues for these activities. The required resources will be determined based upon the number of private C&D facilities located in HRM.

The disposal of C&D materials at the Otter Lake facility will increase operating expenditures, particularly equipment maintenance and replacement and shorten the operating life of each cell and the entire facility, resulting in increased annual capital expenditures for new cell construction.

If no proposal for C&D disposal is approved, C&D wastes will be shipped outside HRM, and HRM would lose Resource Recovery Fund Board diversion credits at an approximate cost of \$15 per tonne.

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. Council may choose to approve the proposed MPS and By-law amendments attached to this report. This is the recommended course of action since the proposal is consistent with the MPS policies and C&D License By-law. Appendices 1 and 2 and Map 1 contain the required amendments to approve the site.
2. Council may choose not to approve the proposed MPS and Bylaw amendments as presented in this report. This is not the recommended course of action for the reasons stated above.
3. Any other alternatives which Council may wish to consider will require additional advice from staff on their implications. In particular the legal implications of public notice and due process will also have to be considered.

ATTACHMENTS

- Attachment 1:** Municipal Planning Strategy Amendments
Attachment 2: Land Use By-law Amendments
Attachment 3: Letter from the Department of the Environment & Labour
Attachment 4: List of Materials Permitted for Land filling at a C&D Disposal Site
Attachment 5: Excerpts from Previous Staff Reports regarding C&D License By-law

- Map 1:** Site Plan for Halifax C&D Recycling Limited - near Antrim/Goff's
Map 2: Watershed Boundaries

Additional copies of this report, and information on its status, can be obtained by contacting the office of the Municipal Clerk at 490-4210 or Fax 490-4208.

Report prepared by:

Kurt Pyle, Planner, 490-4428
Jim Bauld, Diversion Planning Coordinator Waste Resources, 490-7176
Jim Donovan, Manager of Planning Applications, 490-6782
Paul Dunphy, Director of Planning & Development Services

Attachment 1

Amendments to the Municipal Planning Strategy
For Musquodoboit Valley -Dutch Settlement

The Municipal Planning Strategy for Musquodoboit Valley -Dutch Settlement is hereby amended as follows:

1. Insert new preamble and policy immediately following Policy SW-12 as follows:

"Halifax Construction and Debris Recycling Ltd.

Halifax Construction and Debris Recycling Ltd. wants to establish a processing and disposal operation on an area of land located immediately south of the intersection of the Old Guysborough Road and Antrim Road . Due to the size of the site, amount of vegetation, number of dwellings, and that the property is designated and zoned Mixed Use, the site is consistent with the intent of the C&D Waste Management Strategy to locate C&D facilities in such areas . The facility will assist HRM in implementing it's C&D Waste Management Strategy which encourages operations to maximize the recycling of C&D materials while allowing for the proper disposal of those materials that can't be recycled. Thus, Council supports Halifax Construction and Debris Recycling's proposal for a C&D processing and disposal site off the Old Guysborough Road.

SW-13 Notwithstanding Policy SW-8, Council shall apply the CD-3 Zone to the area of land (PID# 40141210 and 40216293) immediately south of the intersection of Old Guysborough Road and Antrim Road to permit the processing and disposal of C&D materials."

THIS IS TO CERTIFY that the by-law of which this is a true copy was duly passed at a duly called meeting of the Halifax Regional Council of Halifax Regional Municipality held on the _____ day of _____, A.D. 2002.

Given under the hand of the Municipal Clerk and under the corporate seal of the said Municipality this _____ day of _____, A.D., 2002.

Vi Carmichael
Municipal Clerk

Attachment 2

**Amendments to the Land Use By-law
For Musquodoboit Valley -Dutch Settlement**

The Land Use By-law for Musquodoboit Valley -Dutch Settlement is hereby amended as follows:

1. Amending Schedule A (Zoning Map for Musquodoboit Valley-Dutch Settlement Area) of the By-law to rezone the area of land (PID# 40141210 and 40216293) highlighted on Map 2 as "Area to be Rezoned to CD-3" attached to this report from MU (Mixed Use) Zone to CD-3 (Materials Disposal Sites) Zone.

THIS IS TO CERTIFY that the by-law of which this is a true copy was duly passed at a duly called meeting of the Halifax Regional Council of Halifax Regional Municipality held on the _____ day of _____, A.D. 2002.

Given under the hand of the Municipal Clerk and under the corporate seal of the said Municipality this _____ day of _____, A.D., 2002.

Vi Carmichael
Municipal Clerk

Attachment 3

Letter from the Department of the Environment and Labour (dated May 15, 2002)



Department of the Environment
& Labour
Central Regional Office

Suite 224, Sunnyside Mall
1595 Bedford Highway

Tel: (902) 424-7773
Fax: (902) 424-0597

May 15, 2002

Kurt Pyle, Planner
Planning Services
P. O. Box 1749,
Halifax, N.S.
B3J 3A5

Dear Mr. Pyle:

Re: Project No. 0082 Construction and Demolition Debris Disposal
Development Proposal from Halifax C&D Recycling Ltd.

Further to your letter delivered by fax dated May 9, 2002 I would like to respond to the questions in the order which they have been asked.

Halifax C&D Recycling Proposal (Antrim Three Corners site)

1. The proposal contains general information on the proposed project and the site. The proposal would not be considered to contain sufficient information to permit a recommendation for the NSDEL to approve construction and operation of a landfill site based on the requirements of the Nova Scotia Department of Environment & Labour Construction and Demolition Debris Disposal Site Guidelines and the *Approvals Procedure Regulations*.

The following minimum supporting information would be required in an application for approval to construct, operate and reclaim a disposal site:

- surface water assessment,
- hydrogeological assessment,
- spill and fire contingency plans,
- detailed site plans indicating the location of all pertinent structures/features such as watercourses, drainage tributaries to watercourses, access roads, buildings, etc.
- erosion and sedimentation control plans,
- operations and maintenance manual,

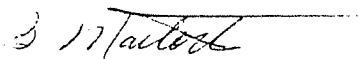
- operating protocol to ensure landfill has clay liner which meets guideline requirements for separation distance to bedrock and watertable,
 - detailed list and estimated quantity of C&D materials proposed for disposal,
 - details of leachate control,
 - updated groundwater monitoring proposal,
 - confirmation of environmental impairment liability insurance,
 - post a financial security with NSDEL,
 - contingency for odour control,
 - soil permeameter testing to confirm hydraulic conductivity,
 - confirmation of permission to operate on the property in question,
 - confirmation of legal standing of company with the NS Registry of Joint Stock Companies.
2. There are no specific issues which I am presently aware of which would prohibit an application from receiving recommendation for approval if the above issues are addressed.
3. Information presently provided is considered insufficient to determine an acceptable level of protection to the natural environment.
4. The Hazen method used to estimate hydraulic conductivity of soils is only applicable to sandy soils and not for the type of soils identified on the site.

Additional monitoring wells will be required to provide coverage for future development of the landfill.

The typical monitoring well design should be modified to include a continuous low permeability annular space seal.

Should you have any questions I can be contacted at 424-2560.

Yours truly,



Bernard J. Matlock, P.Eng.
Regional Engineer

cc: S. Cameron
S. Morash

Attachment 4

**C&D Materials
Permitted and Prohibited in a C&D Disposal Site**

Materials Permitted in C&D Disposal Sites

C&D materials normally used in construction of:

1. buildings;
2. structures;
3. roadways;
4. walls; and
5. other landscaping materials and includes, but not limited to:

brick	mortar
drywall	asphalt shingles
plaster	cellulose
gyproc	creosote treated lumber
laminated wood, particle board	pressure treated wood
creosote treated timbers	plastic/vinyl siding
fiberglass insulation and ceiling tile	

Materials Prohibited in C&D Disposal Sites

Materials banned under HRM Administrative Order 27:

asphalt paving	aggregate and soils	brush and leaves
concrete	milled wood(untreated)	porcelain, ceramic
root balls	scrap metal	window glass

Materials banned under the N.S. Solid Waste Management Regulations

food waste	deposit bearing beverage containers,
newspapers	metal and glass food and beverage containers,
corrugated cardboard	leaf and yard waste
carpet	furniture
clothing	derelict vehicles & tires
hazardous wastes ,including	
paints	oils
batteries	solvents
corrosives	PCB light ballasts,
mercury switches & thermostats	asbestos shingles
sulfide bearing rock.	

Attachment 5

Excerpts from Previous Staff Reports
(Issued Raised on C&D Operations)

1. How should water supply issues and fire fighting capabilities be addressed on C&D Sites?

As contained in the staff report (attachment #1) dated August 21, 2002 the HRM C&D License By-law requires every C&D facility operator to submit a fire/emergency plan for review and approval by Fire and Emergency Services. By Law L-201, Section 10. (2) (iv) specifies that;"An Operational Plan indicating... a fire safety plan which meets the requirements of the National Fire Code of Canada 1995, Section 3.3 Outdoor Storage as approved by the Chief Director Fire and Emergency Services...". Where an application has been received for a C&D facility in an un-serviced area, Fire and Emergency Services will determine if the existing water sources (ie lakes, ponds, rivers) are sufficient , or if a man-made water retention pond or cistern is required.

Fire and Emergency Services has advised that loose piles of mixed ,unsorted and unprocessed C&D materials are more of a fire safety concern than processed sorted stockpiled C&D materials. By Law L-200 requires the disposal of all C&D materials within 48 hours of receipt of same, at a C&D disposal facility with the removal of C&D materials that cannot be disposed within 30 days. Fire and emergency Services have advised that the limitations on stockpile size ,location of materials and separation distances in By Law L-200 are more restrictive than the National Fire Code and satisfy the concerns of the Fire Prevention Division.

2. How far should C&D stockpiles be setback from tree/forest lines to prevent forest fires?

A resident requested that a 250 metre set back requirement be established from the edge of a C&D stockpile to a tree or forest line. Under By-law L-200, a stockpile for a C&D disposal operation must be setback 60 metres from a property line. The C&D Strategy requires an applicant to provide buffering along the boundary of the development. Thus, the 60 metre setback would be increased approximately 4 times and would significantly reduce the number of potential C&D sites.

Under the National Fire Code of Canada requires 30 meters between stored products and brush or forested areas. As stated in the response to Question 11, HRM Fire and Emergency Services will evaluate such sites prior to a license being issued. The determination of an adequate setback requirement should be left to Fire and Emergency Services.

Recommendation: *That a setback requirement for a stockpile from a tree or forest line be determined at the C&D licensing stage.*

3. Should the amount of Liability Insurance be increased?

As noted in the staff report dated August 21, 2002 (see Attachment I) the C&D License By-law requires \$2,000,000 third party liability insurance. Initially, the License By-law required only \$1,000,000 in liability insurance. It has now been suggested that the insurance be increased to \$5,000,000 and include pollution and cleanup (ie., environmental) coverage. The increasing of the insurance to \$5,000,000 and environmental coverage will have major implications for existing licensed C&D operators. C&D

operators have requested that the existing coverage of \$2,000,000 continue until their license expires on December 31, 2002, and that if HRM were to enhance the insurance requirements that they be provided six months notice to enable them to determine if they can obtain the enhanced coverage.

Recommendation: *That no change be made in the amount of insurance until further study is conducted on the impact of the proposed increase on existing and future C&D operations.*

4. Can HRM supercede the Provincial requirements relative to additional liners?

HRM can establish standards or regulations that are more stringent than Provincial requirements. Under the Nova Scotia Department of the Environment Construction and Demolition Debris Disposal Site Guidelines minimum of 1 m of soil with a hydraulic conductivity of 1×10^{-5} cm/sec or less is required between the lowest elevation of any of the waste and the highest elevation of the ground water or bedrock. If the standard were to be increased to 1×10^{-6} cm/sec the percolation rate would increase by a factor of 10 to approximately 3 years (1,157 days) and 30 years (11,574 days) if the standard is set at 1×10^{-7} . Under the Provincial guidelines, if leachate is generated from a disposal site the operator would be required to install a leachate control system at that time.

Recommendation: *That the issue of higher liner standards be referred to the Solid Waste Resources Advisory Committee, to consider as part of further revisions to C&D License By-Law L-200.*

5. Impact of a 5 kilometer setback from Provincial parks and wilderness areas?

As is noted in the staff report dated August 21, 2002, and at the Public Hearing on August 25, 2002, a 5 km separation distance from a provincial park and a wilderness area, (and as well a federal and municipal parkland) could result in either:

1. eliminating the location of a C&D disposal facility in HRM; or
2. restricting C&D disposal sites to areas too far from sources of generation, thus increasing the potential for more illegal dumping.

Waste management facilities such as an open windrow composting or a mixed waste landfills, which are generally considered to be a greater potential risk (by nature of the materials they receive) than a C&D disposal facility, require a minimum separation distance of 1 km. If Council wishes to implement a 5 km setback from parks and wilderness areas, none of the three proposed C&D disposal facilities would be able to meet this separation distance. Furthermore, two of the three sites could not meet a 1 km separation distance.





Establishing a separation distance from parks and wilderness areas as part of the proposed planning strategy amendments would be a major change and require a separate public hearing. Staff does not feel a 5 kilometer setback from a park or wilderness area to be necessary.

Recommendation: *That no changes be made to the proposed amendments relative to separation distances from Park and Wilderness areas.*



Area to be rezoned
to CD-3 -----

Watershed Mapping

-  Watershed Boundary
-  Parcel
-  Water
-  Subject Property

