Watershed(1) on one side of a road require a minimum of 80,000 square feet, with no ability to rezone for smaller lot residential development, while lands directly across the road are eligible for development at 20,000 square feet. The inconsistency which this situation presents to private landowners is obvious.

The Department of the Environment has expressed concerns with "unchecked rapid urban sprawl" within the watershed and the resulting potential for pollution of the water supply. The Department of Health has also indicated that, although there is room for some development, it should be carefully In light of these concerns, it is recommended that the 80,000 controlled. square foot minimum be retained in the Cole Harbour/Westphal Watershed However, given the location of a Designation, as a general requirement. portion of the watershed lands at the periphery of the watershed and adjacent to the public road system, it appears reasonable to allow consideration of smaller lot development on a parcel by parcel basis. The review provided through the rezoning process, with input from the Departments of Health and the Environment, should enable any potential negative effects to be addressed and prevented, while allowing some room for development. It should further be noted that a substantial portion of the watershed is under public ownership, thereby limiting the potential for development.

The amendment to the land use by-law will add a clause to Part 4.19: Setback From Watercourses, to require that no building or structure within the designated watershed shall be located closer than 250 feet of Lake Major itself or 100 feet of any any other watercourse. This is consistent with the requirement of the P-4 (Conservation) Zone, which encompasses most of the watershed lands within the Cole Harbour/Westphal plan area. It is also consistent with the requirements of the Lake Major plan area.

The Lake Major plan does exempt certain properties from these distance separation requirements where their stringent application would, in effect, make these lots undevelopable. There is a watercourse in the northern part of Mr. Riley's property which will somewhat reduce the development potential of his land by virtue of the proposed separation requirements. Given the size of this parcel, however, there is little justification to exempt it.

In addition to the watercourse flowing through his property, it should also be noted that a proposed Department of Transportation right-of-way for the 107 By-pass also passes through Mr. Riley's property. Although not related to the plan amendment, the existence of this right-of-way may ultimately affect the actual subdivision of this property.

<sup>(1)</sup> The Lake Major Watershed was designated under the Water Act as a Protected Water Area by the Minister of the Environment on April 8, 1986 (Map 4, p.9). However, no regulations have yet been established for this watershed, pursuant to the Water Act.

<sup>(2)</sup> Montreal Engineering Company Limited, February, 1980.

#### CONCLUSION

In the short term, the recommended amendments will address the specific request with regard to Mr. Riley's property, as well as permit consideration of similar requests by other private landowners within the watershed. In the long term, it is suggested that an approach to the problem is required which is not constrained by Plan Area boundaries, but can address the watershed in its entirety.

The issue of land use within the Lake Major Watershed has been the focus of much discussion in the past. The Lake Major Watershed Management Study (2) recommended the establishment of a Lake Major Watershed Advisory Committee, comprised of representatives from the Departments of Health and Environment, the Department of Lands and Forests, Halifax County Municipality and the City of Dartmouth, with a mandate to oversee the use of lands within the watershed. However, this committee was never established. The above noted subdivision application brings this issue and the need for such a committee to the fore once again.

### APPENDIX "A"

## A BY-LAW TO AMEND THE

## MUNICIPAL DEVELOPMENT PLAN FOR COLE HARBOUR/WESTPHAL

The Municipal Development Plan for Cole Harbour/Westphal is hereby amended by:

(a) adding the following text immediately following the third paragraph of the Watershed Designation:

It is recognized that the protection of a high quality public water supply is of paramount importance within the Watershed Designation. However, it is also recognized that there is potential for residential development especially where there is access to the public road system. It is also acknowledged that controlled residential development may proceed within the watershed without jeopardizing the Lake Major Water Supply. Therefore, new residential development will be permitted, subject to increased lot size requirements. Residential development on smaller lots shall only be considered after a thorough review of all potential effects has been considered.

- (b) adding the following immediately after Policy P-74:
- P-74(A)Notwithstanding Policy P-74, Council may consider permitting residential development within the Watershed Designation on lots which have an area of less than 80,000 sq. ft., by amendment to the land use by-law and with regard to the following:
  - (a) an assessment of the potential effects which the proposed development may have on the Lake Major water supply, including comments from the Departments of Health and Environment;
  - (b) that adequate separation is maintained from tributaries within the watershed in order to maintain general water quality;
  - (c) provisions with regard to storm water management to ensure that no stormwater runoff is diverted directly to the water supply, as shown on a tentative plan of subdivision;
  - (d) any additional information which may help to determine potential effects on the Lake Major Water Supply, as shown on a tentative plan of subdivision;
  - (e) the provisions of Policy P-42; and
  - (f) the provisions of Policy P-93.
  - (c) adding the following immediately after Policy P-92 (iii)(c):
  - (iv) within the Watershed Designation:
    - (a) dwellings on lots having less than eighty thousand (80,000) square feet according to Policy P-74(a).

#### APPENDIX "B"

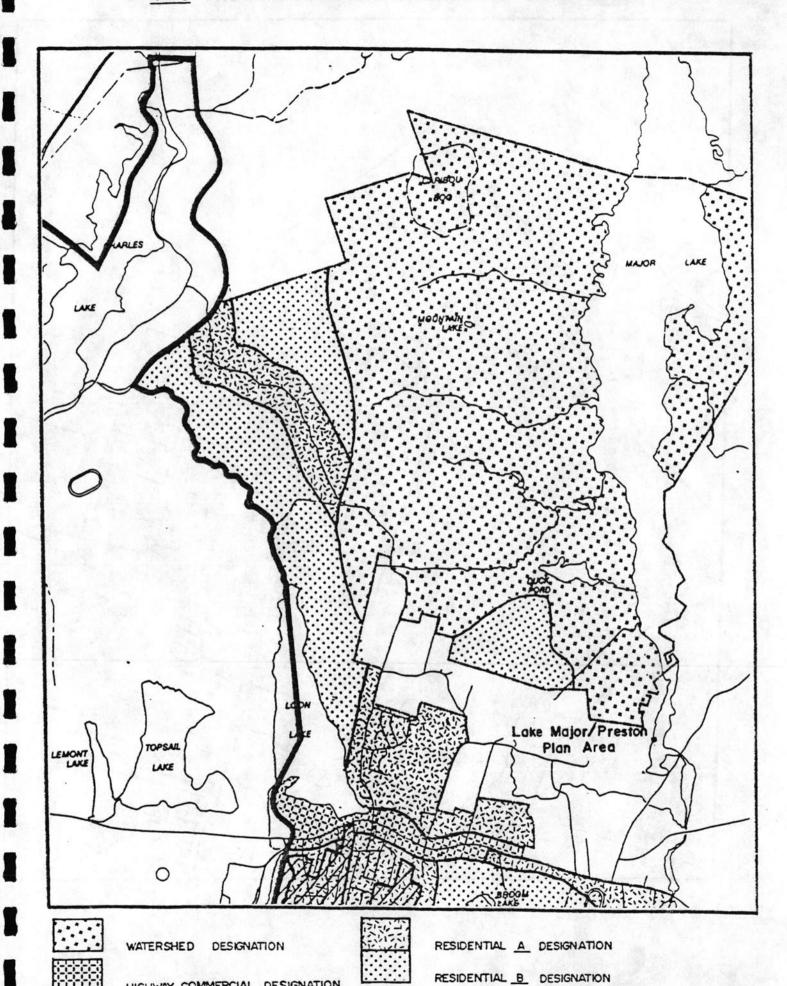
### A BY-LAW TO AMEND THE ZONING BY-LAW

### FOR COLE HARBOUR/WESTPHAL

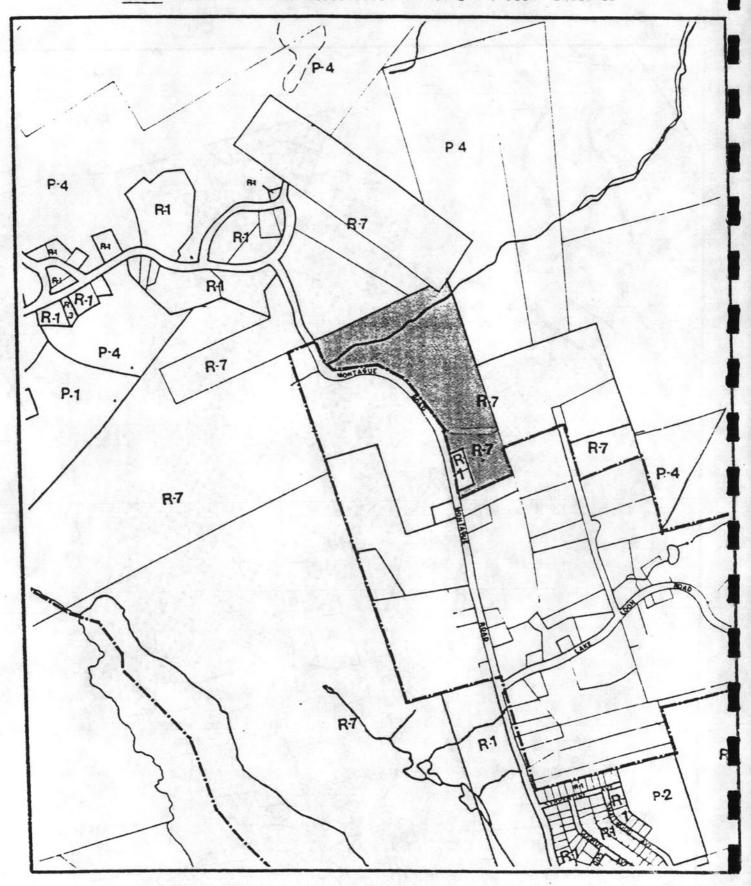
The Zoning By-law for Cole Harbour/Westphal is hereby amended by:

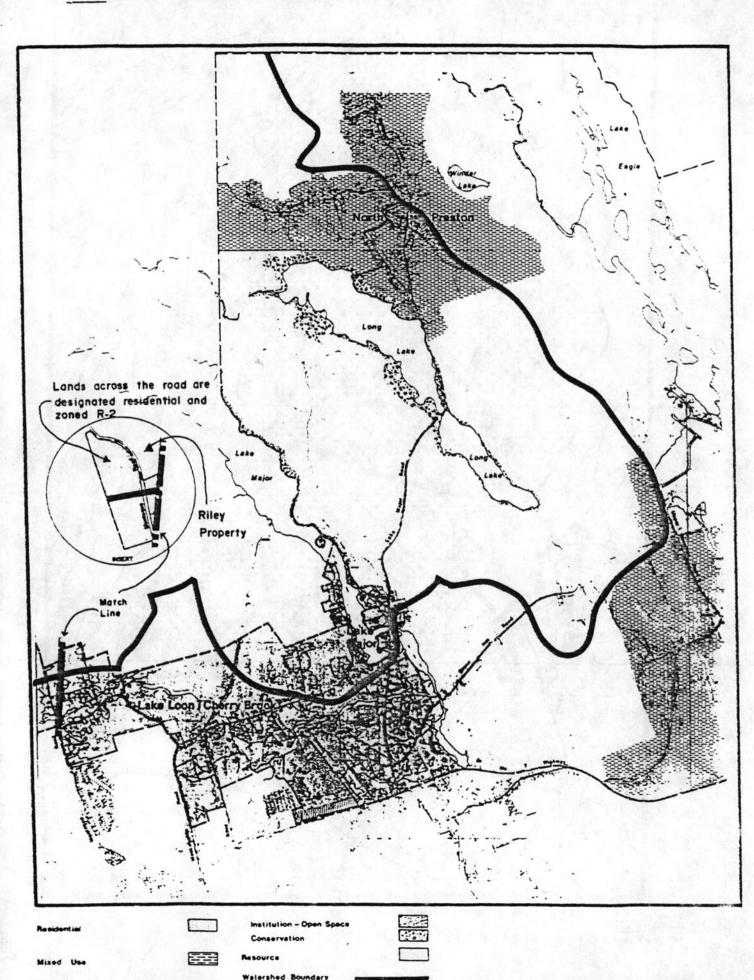
(a) inserting the following after the word "waterbody" and before the word "Notwithstanding" in Section 4.19:

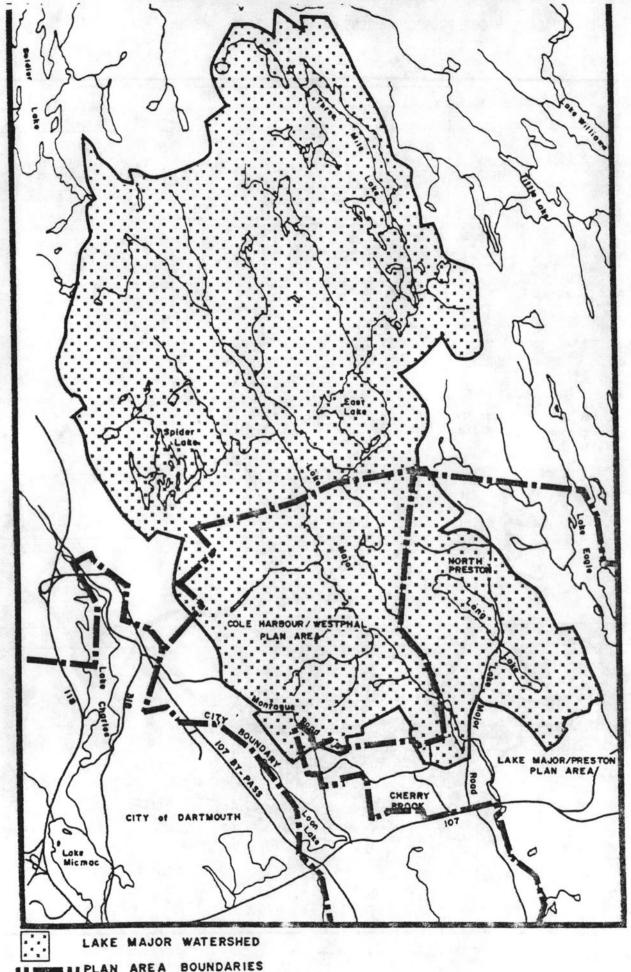
"or less than 250 feet from Lake Major or less than 100 feet from any tributary within the Lake Major Watershed as designated by the Minister of the Environment on April 8, 1986."



HIGHWAY COMMERCIAL DESIGNATION







BEEPLAN AREA BOUNDARIES

STAFF REPORT

TO: The Planning Advisory Committee

FROM: Planning and Development

DATE May 4, 1987

APPLICATION NO .: DA-SA-01-87-16

DIRECTOR PLANNING AND DEVELOPMENT

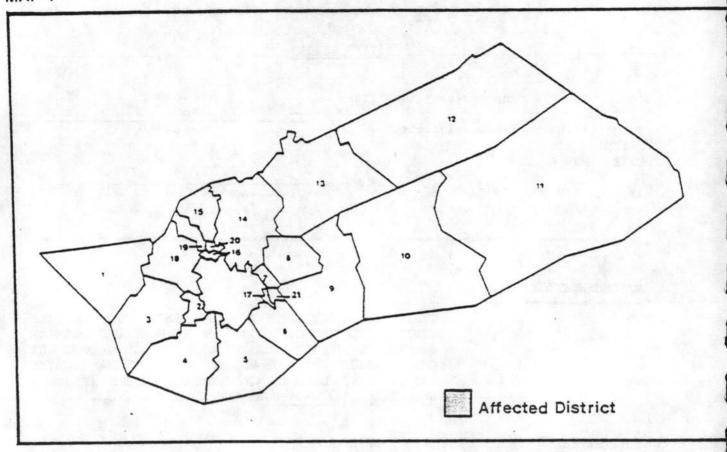
#### RECOMMENDATION

THAT THE DEVELOPMENT AGREEMENT BETWEEN THE MUNICIPALITY OF THE COUNTY OF HALIFAX AND HARDWICK PROPERTIES LIMITED, FOR THE CONSTRUCTION OF A SINGLE UNIT DWELLING ON LOT 42R OF THE RIVERSIDE ESTATES SUBDIVISION, LOCATED ON ABBEYDALE COURT AT LOWER SACKVILLE BE APPROVED BY MUNICIPAL COUNCIL.

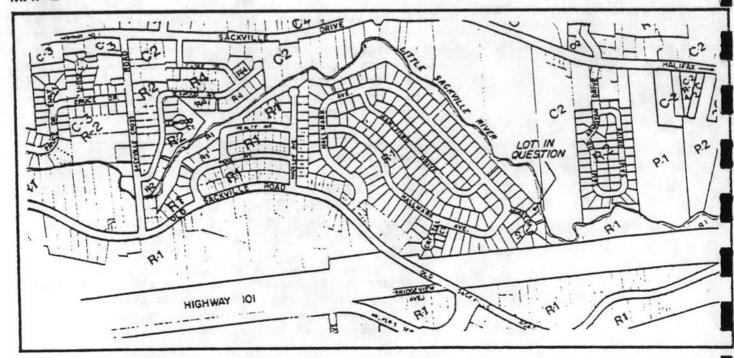
## Information:

Attached is a proposed development agreement between the Municipality and Hardwick Properties Limited of Sackville, N.S., for the construction of a single unit dwelling on Lot 42R of the Riverside Estates Subdivision, located on Abbeydale Court at Lower Sackville, Map 3 (p.3). The necessity for this agreement stems from Policy P-87 of the Sackville Planning Strategy, which permits consideration of new uses within 100 feet of the Little Sackville River, subject to a development agreement.

The general objective of this agreement is to protect the proposed development from flooding and to prevent siltation and erosion along the Little Sackville River. Municipal staff and the applicant determined an appropriate method development based on the physical and topographic features of the lot and the proximity of the proposed building to the Little Sackville River. The agreement requires that plans with respect to a wide variety of matters, including floor elevations, general landscaping and environmental protection measures, must be prepared and approved prior to the actual signing of this agreement (clauses 5 & 6).







Holifor

BETWEEN:

HARDWICK PROPERTIES LIMITED, hereinafter called the "Developers"

OF THE FIRST PART

THE MUNICIPALITY OF THE COUNTY OF HALIFAX, a body corporate, hereinafter called the "Municipality"

OF THE SECOND PART

WHEREAS the Developers have good title to lands known as Lot 42R of the subdivision of the lands of Hardwick Properties Limited, located at or about Lower Sackville in the County of Halifax, Province of Nova Scotia (hereinafter called the "Property"), said lands being more particularly described in Schedule A of this Agreement;

AND WHEREAS at the request of the Developers that they be permitted to erect, construct, or otherwise locate a single unit dwelling on the Property, said dwelling unit to be hereinafter called the "Building";

Witness that in consideration of the sum of One Dollar (\$1.00) now paid by the Developers to the Municipality (the receipt of which is hereby acknowledged), the request for the erection of the Building is agreed upon between the Developers and the Municipality subject to the following terms and conditions:

- That the Building and Property be used solely for those land use activities as identified under Section 6.1, PART 6, of the ZONING BY-LAW FOR SACKVILLE.
- 2. That the Building conform to all applicable regulations as set forth in the NATIONAL BUILDING CODE OF CANADA 1985 and any amendments made
- 3. That the Building be erected, constructed or otherwise located on the Property in conformity with the following requirements:

Minimum Front Yard Minimum Side Yards Maximum Lot Coverage Maximum Height

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20 feet

8 feet 35 per cent 35 feet

4. That the erection, construction or otherwise locating of any accessory building on the Property be in conformity with the following requirements:

Minimum Front Yard 20 feet
Minimum Side Yard 8 feet
Maximum Distance from
Front Lot Line 75 feet
Maximum Height 15 feet
Maximum Floor Area 120 square feet
Minimum Distance to
any other Structure 8 feet

- 5. That prior to the signing of this Agreement by the Parties, the Developers shall supply to the Municipality all necessary plans and written materials to accurately show and explain the following:
  - the proposed location of the Building;
  - the proposed elevation of the Building's basement floor;
  - the manner in which the Property is to be serviced;
  - the existing grade of the Property;
  - the proposed grade of the Property upon completion of the Building;
  - the manner in which siltation of the Little Sackville River is to be prevented during any land filling operation and during construction of the Building;
  - the manner in which erosion of the Property is to be prevented upon completion of the Building.
- 6. That all plans and written materials required under Section 5 of this Agreement shall meet with the approval of the Development Officer for the Municipality, wherein said plans and written materials shall form an appendix(s) to this Agreement.
- 7. That prior to the issuance of an occupancy permit for the Building, the Developers shall bring the Property to its agreed upon final grade and condition and upon the issuance of the said occupancy permit, shall not from that point onward alter the final grade or condition of the Property without consent of the Municipality.
- 8. For the purposes of this Agreement, all words shall carry their customary meaning except those defined under Part 2 of the Zoning By-law for Sackville where such words shall carry the meaning defined therein.
- Subject to the provisions of this Agreement, the Developers shall be bound by all by-laws and regulations of the Municipality as well as to any applicable statutes and regulations of the Province of Nova Scotia.
- 10. Upon breach by the Developers of any of the terms or conditions of this Agreement the Municipality, may, after thirty days notice in writing to the Developers of the breach, enter and perform any of the terms and conditions of the Agreement. It is agreed that all reasonable expenses whether arising out of the entry or from the performance of the terms and conditions may be recovered from the Developers by direct suit and shall form a charge upon the Property.
- 11. This Agreement shall run with the land and be binding upon the Developers' heirs, assigns, mortagees, lessees, successors, and occupiers of the Property from time to time.

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- 12. This Agreement shall be filed by the Municipality in the Registry of Deeds at Halifax, Nova Scotia, and shall form a charge or encumbrance upon the Property.
- 13. The Developers shall pay the costs of recording and filing all documents in connection with this Agreement
- 14. The provisions of this Agreement are severable from one another and the invalidity or unenforcability of one provision shall not prejudice the validity or enforcement of any other provisions.

WITNESS that this Agreement, made in triplicate, was properly executed by the respective parties on this  $$\operatorname{day}$$  of , A.D., 1987.

SIGNED, SEALED AND DELIVERED )
in the presence of )

SEALED, DELIVERED AND ATTESTED)
to by the proper signing )
officers of the Municipality )
of the County of Halifax duly )
authorized in that behalf in )
the presence of

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HARDWICK PROPERTIES LIMITED

MUNICIPALITY OF THE COUNTY OF HALIFAX

WARDEN

CLERK

#### SCHEDULE "A"

ALL that parcel of land situate on the easterly side of Abbey Dale Court, at Lower Sackville in the County of Halifax. Province of Nova Scotia, designated as Lot 42R on a Plan of "Riverside Estates" (Phase 3B), being a "Plan of Survey of Lots 40R to 48R Inclusive, being Resubdivision of Lands of Hardwick Properties Limited (Lots 40 to 48 Inclusive)", prepared by Wallace MacDonald & Lively, Ltd., signed by Kirk T. Nutter, N.S.L.S., dated October 2, 1986, approved by the Municipality of the County of Halifax October 22, 1986, and recorded at the office of the Registrar of Deeds at Halifax as Plan , Drawer , said Lot 42R having an area of 9091 square metres, more or less, and being more particularly described as follows:

PREMISING that the line joining Nova Scotia Coordinate Monument 6 to Nova Scotia Coordinate Monument 12 has a grid bearing of North 58°48'28" West, and relating all bearings herein thereto;

COMMENCING at a point on the easterly limit of Abbey Dale Court at the southwest corner of Lot 41R, as shown on said plan;

THENCE North 79°38'24" East along the southerly limit of said Lot 41R a distance of 34.678 metres to a survey marker placed on the southwesterly limit of Parcel P-3, as shown on said plan;

THENCE South 31°41'41" East along the southwesterly limit of said Parcel P-3 a distance of 19.54 metres, more or less, to the ordinary high water mark of the Little Sackville River, as shown on said plan;

THENCE southwesterly along the various courses of the ordinary high water mark of the Little Sackville River a distance of 7.8 metres, more or less, to the northeast corner of Lot 43R, as shown on said plan;

THENCE South 87°04'26" West along the northerly limit of said Lot 43R a distance of 42.643 metres, more or less, to a survey marker placed on the easterly lmit of Abbey Dale Court aforesaid;

THENCE North 08°08'13" East along the easterly limit of Abbey Dale Court a distance of 9.433 metres to a survey marker placed at the beginning of a curve having a radius of 34.154 metres, as shown on said plan;

THENCE along said curve to the left an arc distance of 10.500 metres, chord equivalent being 10.459 metres, measured on a course North 00°40'13" West to the point of commencement.

## STAFF REPORT

TO: Planning Advisory Committee

ZONING ERRORS

FROM: Dept. of Planning & Development

DF.

RA-24-10-87-04 / RA-CH/W-11-87-07 /

RA-CH/W-12-87-21

DATE: June 8, 1987

CAO

DIRECTOR, PLANNING & DEVELOPMENT

RA-24-10-87-04

#### RECOMMENDATION

IT IS RECOMMENDED THAT B.J. SETTLERS GROCERY AND TAKE OUT, CIVIC NUMBER 3706, HIGHWAY 333, SHAD BAY, BE REZONED FROM R-2 (TWO FAMILY DWELLING) ZONE TO C-1 (LOCAL COMMERCIAL) ZONE, DISTRICT 4 AS PER APPENDIX "A" (p.5).

#### Information

In 1974, an area along Highway 333 was zoned R-2 (Two Family Dwelling) Zone at the request of area residents. Included in the area that was zoned was a commercial establishment known as the Bay Take Out Restaurant, which had operated from the late 1960s (Map 3, p. 4). Since that time, a number of commercial operations have been run from the property, including Chandelier Restaurant and, most recently, B.J. Settlers Store. Mr. Gary Peddle, the present owner of the property now wishes to expand the operation and cannot due to its non-conforming status.

As this property has been used for commercial purposes for a number of years, including a time period before any residential zoning was in effect, it is recommended that the property be zoned to C-1 (Local Commercial) Zone to bring it into a conforming status.

#### RA-CH/W-11-87-07

#### RECOMMENDATION

IT IS RECOMMENDED THAT PROPERTY OWNED BY MR. R.J. BHATNAGAR, LOCATED AT 43-45 ROSS ROAD, COLE HARBOUR, BE REZONED FROM R-1 (SINGLE UNIT DWELLING) ZONE TO R-2 (TWO UNIT DWELLING) ZONE, DISTRICT 7 AS PER APPENDIX "B" (p.8).

#### Information

As shown on Map 6, p.7, this property is occupied by a two unit dwelling. However, the property is zoned R-1 (Single Unit Dwelling) Zone and has been since 1982 when the Cole Harbour/Westphal Planning Strategy and By-law were adopted. Prior to this the zoning was R-4 (Multi-Family Dwelling) Zone under Zoning By-law No. 24.

According to the owner of the property, Mr. R.J. Bhatnagar, the two unit dwelling has been located on the lot since 1976. Mr. Bhatnagar has supplied old real estate listings and an affidavit to support his claim.

#### RA-CH/W-12-87-21

#### RECOMMENDATION

IT IS RECOMMENDED THAT CIVIC NUMBER 143 COLBY DRIVE AND A PORTION OF BLOCK D-6, LOCATED OFF OF COLBY DRIVE, COLE HARBOUR, BE REZONED FROM P-2 (COMMUNITY FACILITY) ZONE TO R-1 (SINGLE UNIT DWELLING) ZONE, AND A PORTION OF THE COLBY DRIVE BIBLE CHAPEL, CIVIC NUMBER 131, COLBY DRIVE, BE REZONED FROM R-1 (SINGLE UNIT DWELLING) ZONE AND R-2 (TWO UNIT DWELLING) ZONE TO P-2 (COMMUNITY FACILITY) ZONE AS PER APPENDIX "C" (p.11).

#### Information

In 1982, the R-1 and P-2 Zones for the two properties in question were inadvertently reversed. In addition, the zoning did not properly follow the actual property lines.

It is recommended that the appropriate changes be made in order to make the zoning consistent with both the actual uses and configuration of the properties.

#### APPENDIX "A"

## A BY-LAW TO AMEND THE MUNICIPALITY'S

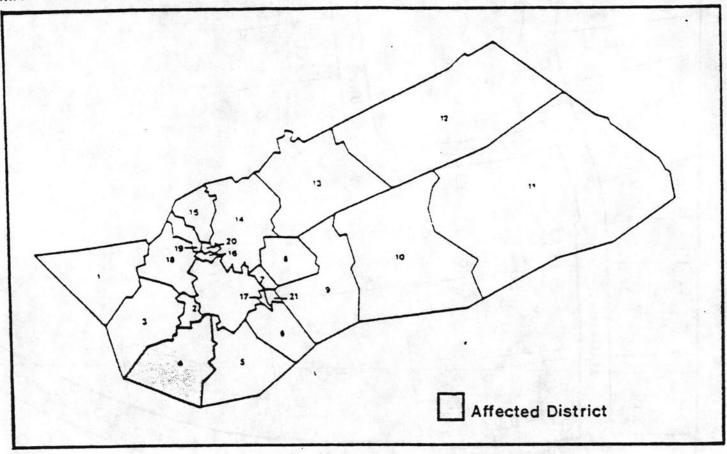
## ZONING BY-LAW NO. 24

The Municipality's Zoning By-law No. 24 is hereby amended by:

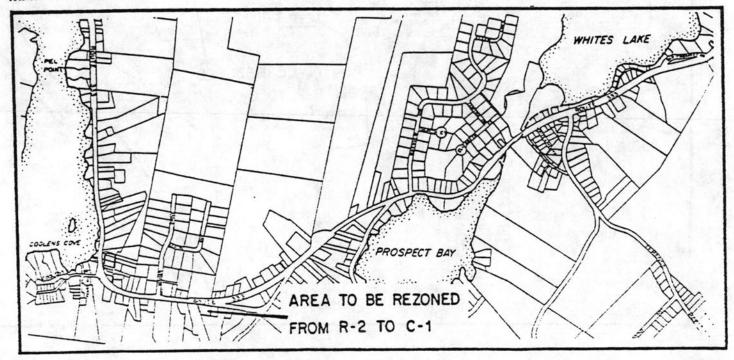
Rezoning Settlers Grocery and Take Out, Civic Number 3706, Highway 333, Shad Bay, from R-2 (Two Family Dwelling) Zone to C-1 (Local Commercial) Zone, as shown on the attached Schedule "A".

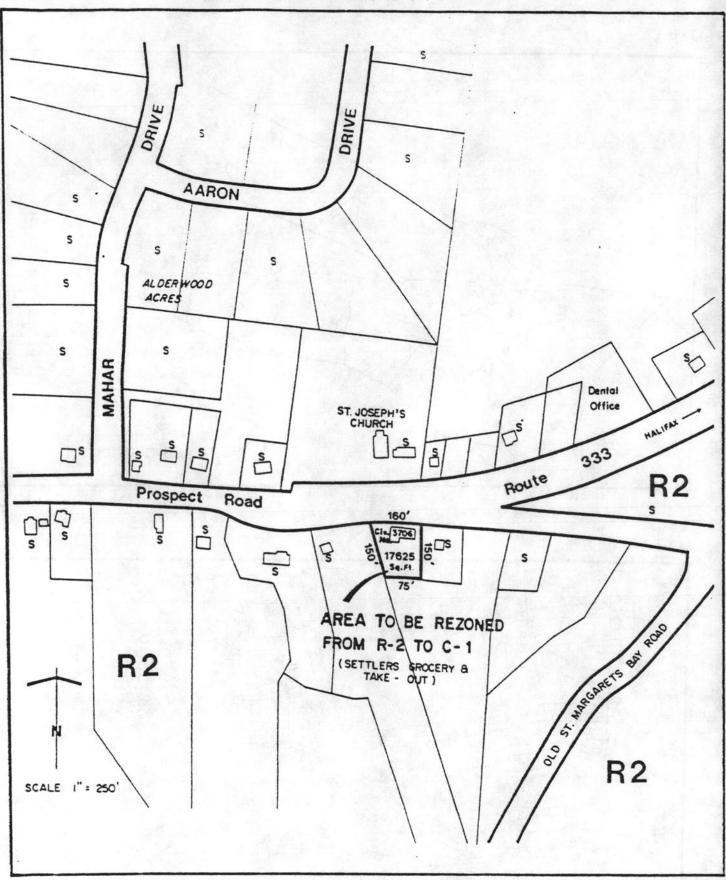
THIS IS TO CERTIFY that the	by-law of
which this a true copy was duly	passed by
a majority vote of the whole Co	
duly called meeting of the	
Council of the Municipality of	the County
of Halifax held on the	
, A.D. 1987.	d pell
GIVEN under the hand of the	
Clerk under the corporate sea	
said Municipality this, A.D. 1987.	_ day of

GERARD J. KELLY, Municipal Clerk MAP 1



# MAP 2





## APPENDIX "B"

## A BY-LAW TO AMEND THE ZONING BY-LAW

## FOR COLE HARBOUR/WESTPHAL

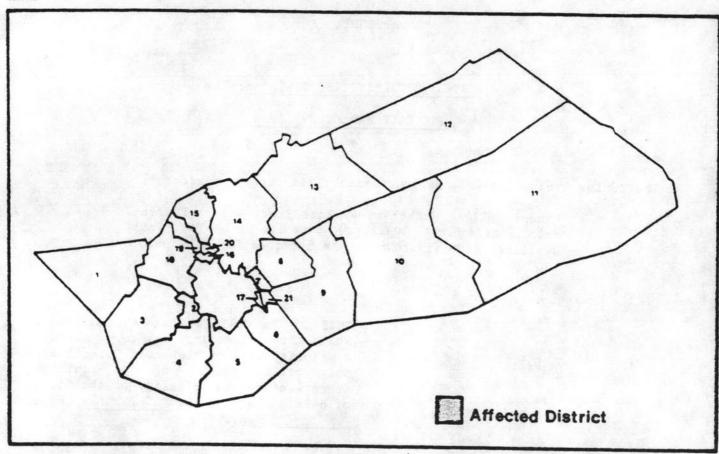
The Zoning By-law for Cole Harbour/Westphal is hereby amended by:

Rezoning Civic Number 43-45 Ross Road, Westphal, from R-1 (Single Unit Dwelling) Zone to R-2 (Two Unit Dwelling) Zone as shown on the attached Schedule "B".

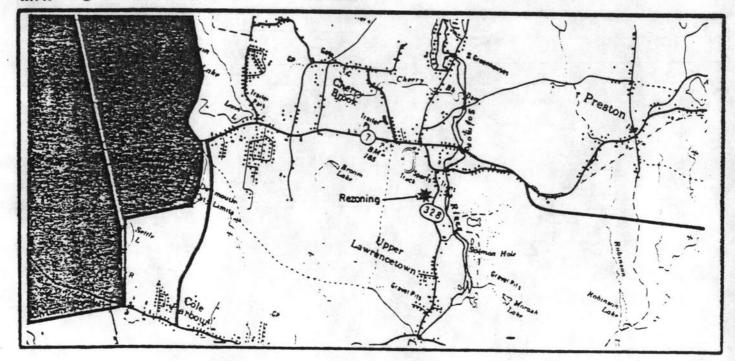
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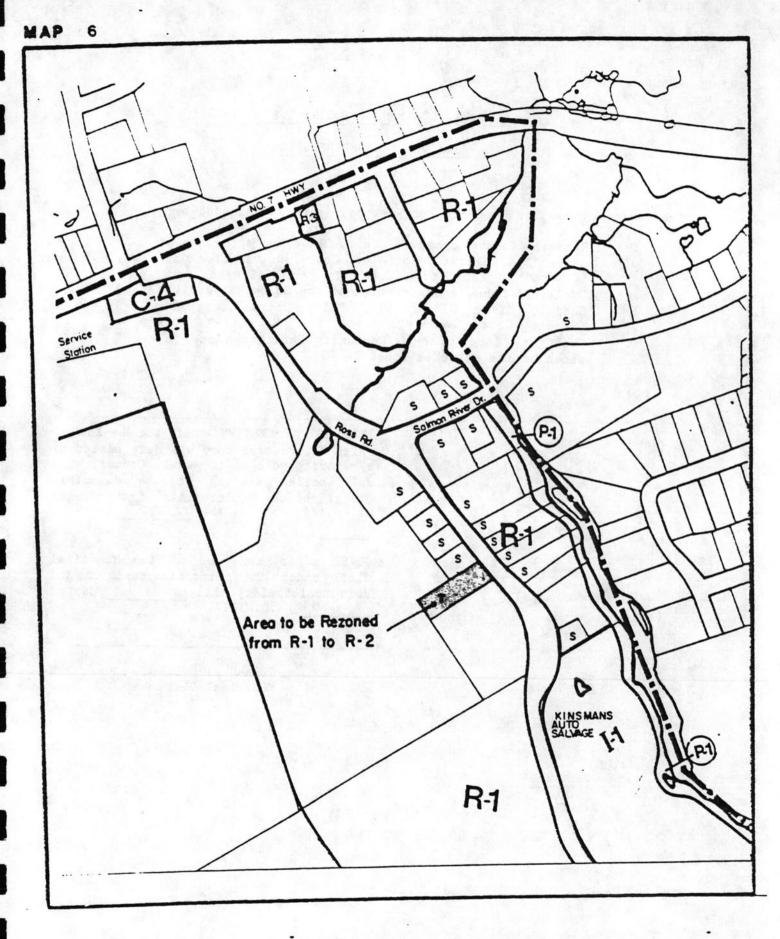
GERARD J. KELLY, Municipal Clerk

MAP 7



MAP 8





#### APPENDIX "C"

## A BY-LAW TO AMEND THE ZONING BY-LAW

## FOR COLE HARBOUR/WESTPHAL

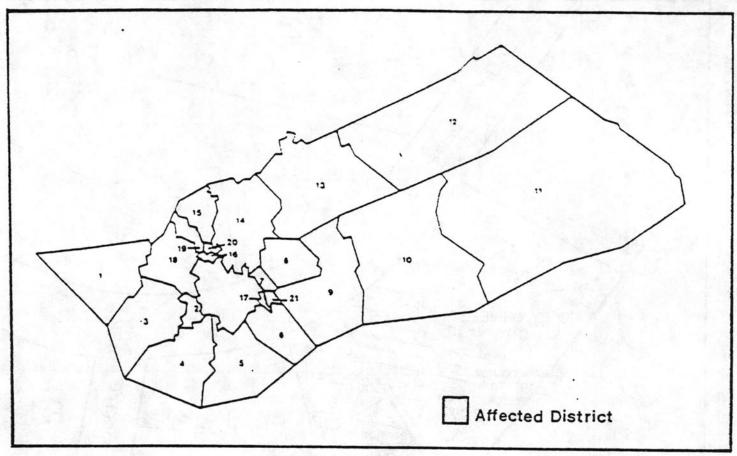
The Zoning By-law for Cole Harbour/Westphal is hereby amended by:

Rezoning Civic Number 143 Colby Drive and a portion of Block D-6, located off of Colby Drive from P-2 (Community Facility) Zone to R-1 (Single Unit Dwelling) Zone, and a portion of the Colby Drive Bible Chapel, Civic Number 131, Colby Drive, from R-1 (Single Unit Dwelling) Zone and R-2 (Two Unit Dwelling) Zone to P-2 (Community Facility) Zone, as shown on the attached Schedule "C".

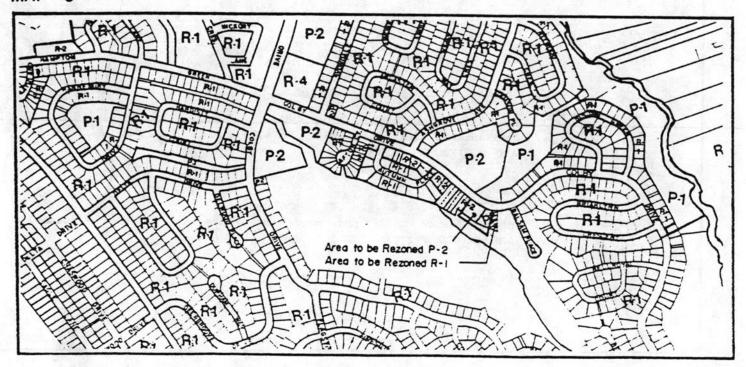
THIS IS TO CERTIFY that the by-law of which this a true copy was duly passed by
a majority vote of the whole Council at a
duly called meeting of the Municipal
Council of the Municipality of the County
of Halifax held on the day of
, A.D.1987.
GIVEN under the hand of the Municipal
Clerk under the corporate seal of the
said Municipality this day of
, A.D. 1987.
(1) 4年 接近,其上有 15 x 10 x
GERARD J. KELLY.

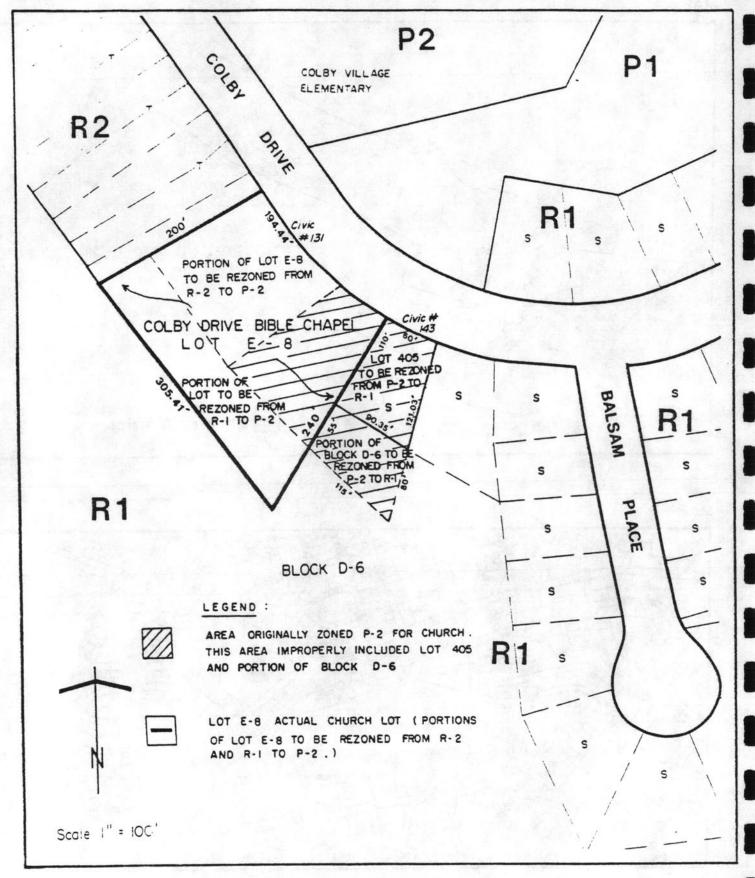
Municipal Clerk

MAP 4



MAP 5





#### SPECIAL COUNCIL SESSION

JULY 22, 1987

PRESENT WERE: Warden MacKenzie

Councillor Rawding Councillor Fralick Councillor P. Baker Councillor C. Baker Councillor Deveaux Councillor DeRoche Councillor Randall Councillor Bayers Councillor Reid Councillor Lichter Councillor Snow Councillor Merrigan Councillor McInroy Councillor Eisenhauer Councillor Wiseman Deputy Warden Mont

ALSO PRESENT: Mr. G.J. Kelly, Municipal Clerk

SECRETARY: Glenda Higgins

Warden MacKenzie called the meeting to order at 7 p.m., advising the purpose of the meeting is to continue discussions about the Halifax Harbour study by MAPC.

The discussion began with a presentation by Mr. Alan Ruffman. He stated everybody in Halifax County, especially in Herring Cove, wants to see some form of treatment for the raw sewage going into Halifax Harbour. He outlined the location of the existing sewage treatment plants in Halifax County. He stated the consultants have proposed to have a tunnel built along the Dartmouth waterfront, crossing to Halifax, and through a plant at Sandwich Head. He stated this would mean much tunnel building at a great expense. Another option was to built three plants; one at Herring Cove, one in downtown Halifax to deal with the Pennisula of Halifax, and one at Tufts Cove. Mr. Ruffman stated the City of Dartmouth and the Town of Bedford have opted for a single plant, and he felt this would prove difficult to find a location for the plant. He stated it is not impossible to locate a sewage treatment plant at Sandwich Head, but he expressed concern that another option is more achievable that will have longer-term benefits. He stated there is no money available from the Cities of Halifax and Dartmouth and the Province to deal with the expense of the single plant option. Mr. Ruffman stated MAPC opted for the one-plant option is 1972 and re-confirmed this in 1977, but nothing has been done. He stated there will be no treatment until something is done.

Mr. Ruffman circulated a proposed resolution for consideration by Halifax County. He noted that the City of Halifax has decided to endorse the one-plant option, provided there is regional cooperation. Mr. Ruffman informed he has very little criticism of the report by MAPC, but he felt the regional responsibility should be to support the idea of regional co-operation, which is the first portion of his resolution to be considered by Halifax County. He next reviewed five qualifying phrases to this resolution, noting they are supporting the single plant option for a short period of time of one year, given the money is available. If the money is not available at the end of one year, that MAPC revert to a three of multi-plant option with the intention of commencing construction. He informed this portion of the motion will give the one plant option a chance for a period of time, and if people are enthusiastic about the regional approach, they will be given time to work on it. Mr. Ruffman informed the second suggestion is that MAPC continue to investigate the potential plant locations for a three or multi-plant option in the intervening year. If the money is thought to come forward, it should continue to be The toughest problem will be to find a location, and work should continue on this until one is found. If the money does not come through, three plant locations will have to be found. He stated when considering plant locations, MAPC has to look at how to allow Dartmouth to deal with its problem, but don't ask Dartmouth to deal with the Halifax problem. He felt transporting the sewage across the Harbour could be a technical problem.

Mr. Ruffman also suggested that full secondary treatment be required for the single plant option, or for any plant dumping affluent in the area that affects Purcell's Cove, Herring Cove, McNabs Island, Portugeuse Cove, or Eastern Passage. Primary treatment will remove about 55 percent of the solids, which is approximatley 15 to 12 percent more expensive to go for secondary treatment, as opposed to primary treatment. If all the sewage outfall is to be at one location, it should receive secondary treatment to protect the active fishery in the area.

Mr. Ruffman continued with the suggestion that when construction starts the forcemain bringing the sewage from Herring Cove should be commenced from the begining. He also felt it important that the County of Halifax make it clear that they only consider its fair share of cost according to its proportion of use of the system. To date Halifax County has paid for a great deal of sewage treatment. Ruffman also suggested that County staff be instructed to consult with Herring Cove residents immediately to select a possible site for a plant at Herring Cove and to temporarily reserve that land for a possible multi-plant option in the event that funding is not found by MAPC in one year for the single plant option. He felt the residents of Herring Cove have existed with this problem long enough that there will be a cooperative process to attempt to define a location for a plant to deal with the problem. He also stated this process should start now. A plant in downtown Halifax is not a bad idea, but it may be a problem to locate a plant there.

Finally, Mr. Ruffman suggested that staff be directed to assess the available draft by-law prepared by MAPC with the view to the four metro municipalities passing a uniform, strong, and enforceable by-law to control the discharge of all industrial and toxic wastes into any part of the inlet. He noted this is a recommendation of the MAPC report which is long over-due.

Mr. Ruffman concluded recommending this resolution for adoption by Halifax County.

Councillor C. Baker asked what happened to the originally proposed treatment plant. Mr. Ruffman responded that the original MAPC report of 1972 suggested a single plant with two recommended locations: the end of Point Pleasant Park, and to fill in half of Purcell's Cove and take in an area of 15 acres to build the plant. He stated there were a group of students from the Technical College who considered other options, and they suggested the tunnel come out through part of McNab's Island, although it was recognized it would be very difficult to get staff in and out of there. There was also a problem with sludge removal from Point Pleasant Park. The students also considered the old Dalhousie quarry, and a few fitted a sewage treatment plant there; there was also further consideration given to another area at Purcell's Cove. He stated there has been no serious consideration given to any of these locations at this point. Therefore, the thrust of the recommended resolution is that MAPC continue to look at the multi-plant option with the thought that money does not become available, the study will be back to the point it was in 1972, which a recommended single plant and no money. He stated the City of Halifax raised \$13 million in their pollution abatement fund since 1973, and it was all spent on everything but sewage treatment. He felt Halifax could realistically take on a plant at Duffus Street or a plant at Herring Cove within the near future because by the time it is designed, enough money will be built up to almost pay for it. The City of Dartmouth has instructed their staff to consider a similar pollution control fund, so there is ability to raise money there. The County of Halifax feel there is a relatively small responisibility having already paid for much of the existing treatment. MacKenzie agreed, stating the County of Halifax has provided treatment for the other areas, paying for it over the years.

Mr. Ruffman stated his resolution is an attempt to address two possibilities: that we may or may not get the money.

Councillor Deveaux referred to the second portion of the recommended resolution, as well as l (e), stating this route will cost the County much money, as Halifax County will be responsible for a plant at Herring Cove. Mr. Ruffman suggested Halifax County only pay for the portion of useage of the plant. Councillor Deveaux also expressed agreement to secondary treatment, stating primary treatment does not do the job it should.

Councillor Rawding asked for clarification of primary, secondary, and turchiary treatment. He asked if it is better to go for something improving on secondary treatment, or will secondary treatment make an improvement to the existing situation. Mr. Ruffman felt it is not

realistic to argue for turchiary treatment; he felt Halifax County must be responsible and realistic in presenting a front to the other metro members. Requesting secondary treatment with a single outfall at an active fishing area is not irresponsible.

Councillor Rawding felt there will be more regional cooperation from a single plant than if there are several spread throughout the area. He felt municipalities may begin to feel possessive about the plants in their area, which he felt could harm cooperation moreso than it has already been damaged. Mr. Ruffman agreed, stating the larger sums of DRIE grants available in the past are no longer available. He stated if there is any chance of getting further money, it will be from a regional approach. He expressed concern that receiving such money may be taking on a large obligation with so many harbours receiving untreated affluent.

Councillor Merrigan expressed concern that we may be confused by the percentage of treated affluent, but there will be more and more affluent, so the end result will not be as beneficial as projected. Mr. Ruffman informed the tunnel is presently 6 feet x 6 feet, and it must be enlarged.

Mr. Smith stated it appears the best option is one plant. However, the Herring Cove Ratepayers Association have taken a different approach. He advised he would respond to the concerns of the Herring Cove Ratepayers Association, hitting the highlights of Halifax County's concerns. He stated ownership, management, and cost-sharing are beyond where we are now, although they are legitimate concerns. Consultation with residents will be logical for Halifax County to require of MAPC. He stated nothing should take place without that public consultation. Mr. Smith stated the emphasis has been on the need for regional cooperation, and he felt if charges are laid under the Fisheries Act, regional cooperation will not be benefitted. also stated there are also County residents using that pipeline into Cove; therefore, the County may also be subject prosecution, and he suggested this be treated with some caution. Mr. Smith continued that there are two major issues: secondary versus primary treatment - what is required; and how it will impact on the question of one versus three plants.

Mr. Pelham of the Herring Cove Ratepayers Association, objected to Mr. Smith's statement about regional cooperation. He stated the County of Halifax has had nothing to say about responsibility for the sewer line since January 16, 1969 when annexation took place. He stated the City of Halifax has claimed all this responsibility under Provincial legislation since that time. Mr. Smith stated the point about harming regional cooperation would still stand.

Mr. Smith stated it is quite strongly stated there should be secondary treatment. However, primary treatment was recommended by MAPC at this point. He stated treatment must start somewhere. The terms of reference for the study require that the consultants look at plants which can eventually be expanded to secondary treatment. He also stated correspondence has been sent to Environment Canada indicating

that we have to start with primary treatment. The model studied suggests this is a reasonable start, although it may not be the end goal. He stated secondary treatment may be considered for a long range goal.

Mr. Murphy reviewed the difference between primary and secondary treatment. He stated organic discharges is the major contaminent we are concerned about. Primary treatment for organic contaminents are in two forms in sewage: suspended and dissolved. Primary treatment is a physical separation process, usually a settling process, which removes the suspended component. It has been assumed and indicated in the study that this reduction will be in the order of 55 percent. Secondary treatment is a biological process which converts the soluable component to a insoluable component, which is subsequently settled. Secondary treatment results in 90 to 95 percent reduction in the organic load. Mr. Murphy also noted that turchiary treatment is usually a physical or chemical process which reduces other contaminents, such as nutrients, etc. He stated you get the biggest reduction for the least cost with primary treatment. With higher treatment levels, you get a smaller reduction in contaminent levels for a relatively high cost.

Mr. Axell added that primary treatment removes 55 percent of the solids, but they are dissettable solids, which form sludge banks. That which remains is very fine. Although primary treatment only removes 55 percent of the solids, it removes all that would be seen around the outfall. The remainder behaves as though it were dissolved. He also stated that the main difference between primary and secondary in terms of water quality is the affect on dissolved oxygen. The organic material in the sewage decays and consumes oxygen, so there can be low oxygen levels. There is no documentation of dissolved oxygen depletion in Halifax Harbour even with the present level of raw sewage being discharged there.

Mr. Smith stated the final analysis is that secondary treatment may be considered in the future, but at this point in time, much money has been spent on a computer analysis of the harbour that tells us primary treatment will achieve something. This will see completion of the pipe work, the tunnel, the interceptor, and it is then a question of how large the plant is to be built, which leads to the question of one versus three plants. He stated the Herring Cove residents must understand this, and he would be willing to attend a Ratepayers Association meeting to discuss this. Mr. Smith expressed appreciation for Mr. Ball's concern that if the one plant option is agreed upon, nothing will become of it. Therefore, he felt Mr. Ruffman's proposed resolution is favourable, giving the opportunity to try the one plant option. He suggested a one year time frame may not be enough given the way government works, but he expressed appreciation for the chance to try this.

Mr. Axell stated it is unrealistic to assume that sewage entering the harbour does not affect Herring Cove. Any sewage dumped into Halifax harbour will eventually go through Herring Cove. The obvious solution is to get sewage as far out of the harbour as possible, which is the

rationale behind the one plant option. He stated all the options for consideration include properly designed outfalls, which will improve the existing situation.

Mr. Pelham stated 55 percent of the sludge will fall in Herring Cove, and he wants 80 percent of the problem removed so fishermen can fish At it is presently, nobody can draw a bucket of water from Herring Cove that will not contain toilet paper and other sludge. expressed concern that this is only another report, and that no action be taken, as has happened with the other recommendations. Mr. Pelham stated the City of Halifax should not be allowed to continue to act illegally while the County of Halifax He stated Halifax County is the model continues to treat sewage. municipality in Canada for the treatment of sewage, and we should not allow the City of Halifax to spoil this for the County; they should not be allowed to dump their sludge on the County at an extra cost to the County. He concluded that the residents of Herring Cove want a single plant in Herring Cove, and if others are required, let them branch off from there.

Following further discussion by Mr. Smith and the consultants, Mr. Murphy stated there may be some misunderstanding with respect to the relative cost of primary versus secondary treatment. He reviewed this, and he also showed the implications of going to secondary treatment with a one and a three plant alternative. Plants and pumping systems will require expansion in the longer term, and the long term costs are likely to be much higher. He reviewed the suggested cost factors involved. Mr. Smith stated this will be a very expensive program, as well as very technically complicated. It could also be very politically complicated for Halifax County.

Councillor DeRoche clarified that the main reason for supporting the single plant option with primary treatment was the operating cost. Mr. Smith agreed, although from a capital cost point of view, the three plants will be cheaper than one, the municipalities are likely to have the on-going responsibility for not only operating, but upgrading and running these plants. Councillor DeRoche informed he is aware that operating costs can far exceed capital expenditures. He asked if the operating cost is a prime factor when supporting the single plant option with primary treatment. Mr. Smith responded that in terms of one versus three plants, MAPC has not taken a position, but has referred to the municipal councils for some direction. The implication to date appears to be one plant rather than three. In terms of primary versus secondary treatment, the terms of reference given to the consultants by MAPC only went to primary treatment. At that time outfall extensions, screening, and primary treatment were given consideration.

Councillor DeRoche expressed objection to the one plant option, stating the other municipalities want this, but not in their areas, although they are the cause of the problem. With respect to the cost factor, Councillor DeRoche stated 200,000 residents using such a system with three outfalls, O & M costs for primary treatment would be \$16 per person, per year; secondary treatment would be \$24 per person,

per year. The single outfall would not cause a significant reduction with the same treatment. With respect to the location of the plants, Councillor DeRoche stated tides flow both ways, and he asked why there would be a projection for the placement of treatment plants where it is proposed to place them at the foot of Morris Street and Tufts Cove, considering that tides will take primary treatment affluent back up the harbour and into the basin. He felt it would be more sensible to have these plants located further towards the harbour mouth with longer outfalls. He suggested it would be more practical to locate the plant behind the new park, near the back of the Imperial Oil locations. This would allow benefits from the greatest tidal flow and current in the harbour.

Councillor DeRoche next asked what the advantages of this proposal will be to the County of Halifax, other than the possibility of correcting an existing situation in Herring Cove. He felt there will be no other benefits to the County as we are already treating our affluent. He felt the beneficaries of the MAPC report are those who have caused the problem from the beginning, but have done nothing to correct it. Mr. Smith responded that this is a political question, rather than a technical one, that he could not comment on. Mr. Murphy informed CBCL Limited as the consultants were to identify six locations that would have the greatest benefit for the overall region where improvements could be implemented. However, it became obvious for both cost reasons and land availability, it made good sense to The regional recommendation of 1977 was consolidate some of those. also taken into consideration, including the plant at Sandwich Point. In 1977, the site of preference was at Sandwich Point. DeRoche commented that it seems the sites were predetermined before CBCL's involvement in the study. He stated the tidal flows and currents in Halifax harbour were identified many years ago.

Councillor Fralick indicated that he is interested in this project, and that he hopes to see activity within one year. He also expressed agreement that the treatment plant should be located at the headlands because it would lead the affluent in the right direction. He felt there should be two treatment plants. He stated \$200 million is only peanuts because Halifax County has proven to be the leader is sewage treatment, and the fish stocks and shellfish in the area will be in the billions of dollars in the future. Therefore, the \$200 million expenditure will be worthwhile.

Councillor Rawding stated he is concerned about the situation at Shad Bay, as noted by Councillor P. Baker. Although there is an internal bias to get initial primary treatment, the regional concept will eventually include some coordination of the existing treatment plant. He felt in the future, Lakeside could become a pumping station, rather than using the Nine Mile River, which dries up, for the dilution of the treated matter. He suggested this would be a long term solution to the problem.

Councillor McInroy inquired about the types of controls there will be in the serviceable area with a single treatment plant. He stated

there is only a certain amount of capacity, and this will have to be controlled, including growth and development. He suggested this would preclude Halifax County from expanding serviceable boundaries and allowing development; he asked who will get this authority. He stated he is also concerned about regional cooperation in this regard. He stated regional cooperation is not tangible, but it is based on the personalities of those who occupy the seats on various Councils, which can rise and fall at various levels. He stated the only way there will be a regionally operated service is by legislation. Everything must be in writing upfront.

Councillor C. Baker stated the people of Herring Cove want a treatment plant because they do not trust the City of Halifax. He stated the City of Halifax have already spent their \$25 million which was to be used for abatement; this cannot be considered regional cooperation. He stated there is also another \$17,000 that the City of Halifax was to cost share for transit in Herring Cove, but they never have. He stated regional cooperation does not seem to work very well between the City and the County of Halifax.

Councillor MacDonald inquired about the total capacity and total population that one plant would accommodate. Mr. Murphy stated the design population of the plant is 200,000 people, and the design period was 15 years (2001). Councillor MacDonald suggested there are almost 200,000 people involved now, and this figure is not taking future growth into consideration. Mr. Smith stated the total regional population is in the area of 300,000, but the plant is to treat an additional 200,000 untreated people. He stated the 300,000 estimate does not include those serviced by the Eastern Passage, Mill Cove, and Lakeside treatments plants. Councillor MacDonald objected, stating by the time the plant is built, it will be to maximum capacity, which will soon lead to dumping problems. He also felt development will increase with a new sewage treatment plant. Councillor MacDonald concluded, expressing concern about regional co-operation. the two cities should be more responsible to the environment than they have in the past. He stated a plant in Halifax from the beginning would solve the majority of the problem. He inquired about hooking Herring Cove to a plant at Pennisula South. Mr. Smith stated from a cost perspective, the tunnel between Pennisula South and Herring Cove would be very expensive.

It was moved by Councillor C. Baker, seconded by Councillor P. Baker:

"THAT THE COUNCIL of the County of Halifax endorse the MAPC Report on the Pollution Control Program for the Region, particularly that all members of MAPC strive to ensure that no raw sewage enter the Chebucto Inlet including industrial waste subject to the following:

a) THAT for one year full funding be intensively sought from all levels of government by MAPC and that at the end of that time (July 30, 1988) if the funding is not firmly in place that MAPC immediately revert to a three or a multi-plant option with the view to an immediate start on the construction of the various components;