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e: a.) BIG BEND DEVELOPMENT PLAN - NORTHEAST SECTOR SEWAGE DISPOSAL FACILITIES

) REQUEST FOR REVIEW OF REZONING (C. ROZMAN)

MANAGER'S REPORT NO. 16 COUNCIL MEETING 1978 02 27

Following is a report from the Chief Public Health Inspector regarding sewage disposal facilities relative to properties that are located within the Northeast Sector of the Big Bend Development Plan. The report also contains specific information on an application for rezoning from Mrs. Charlotte Rozman regarding her property at 6483 Trapp Avenue.

It appears, from previous correspondence that Council has received from Mrs. Rozman, that her appearance before Council on 1978 February 27 will be related to the possibility of subdivision of her property on Trapp Road. The property is presently zoned Small Holdings District (A2), a designation which will not accommodate subdivision. Rezoning of the property would therefore be required if subdivision were to proceed.

The Municipality has no sanitary sewer available in the area and there are no sewers proposed for construction in the foreseeable future.

It is not simply a matter of Mrs. Rozman's property that is of concern, but rather the consequences that would be experienced within the area as a whole if she were given permission to subdivide, i.e., if she were given such permission, a situation would be created whereby other owners of properties would upon application have to be given permission as well. It is, therefore, necessary to keep in mind the overall affect on the area if permission to subdivide is given to an applicant for subdivision. It should be kept in mind that the responsibility for approving subdivisions rests with the Approving Officer. This is a statutory responsibility.

In summary, in the opinion of staff, rezoning and subdivision should not be considered for the property at 6483 Trapp Road. However, if Council should decide to permit density in the area to increase, we should then prepare a proposal related to the eventual construction of a conventional sanitary sewer to service the properties in the area in question.

This is for the information of Council.

TO: MUNICIPAL MANAGER

1978 February 22.

FROM: CHIEF PUBLIC HEALTH INSPECTOR

E: BIG BEND DEVELOPMENT PLAN - NORTHEAST SECTOR SEWAGE DISPOSAL FACILITIES

On 1976 September 24, the Planning Department requested information of the Health Department as to whether sixteen (16) lots situated within the Northeast Sector of the Big Bend Development Area were capable of controlling sewage by use of septic tank and tile disposal field methods. The requested survey was carried out and Health Department report forwarded to the Planning Department on 1976 December 07. (Copy <a href="https://doi.org/10.1016/journal.org/">https://doi.org/10.1016/journal.org/</a> (Copy <a href="https://doi.org/10.1016/journal.org/">https://doi.org/10.1016/journal.org/</a> (Copy <a href="https://doi.org/">attached</a>). This report, in summation, stated that sewage could be controlled on each of the sixteen (16) lots providing elevated tile disposal fields were utilized.

The Planning Department included the Health Department information in their report on the overall development that was presented to Council on 1977 January 17. Council was desirous of further information relating to alternate methods of sewage control and as a result the matter was referred to the Health Department for additional information.

Since receiving your instructions for further information pertaining to alternate methods of sewage control, this Department has considered the following systems:

- (1) Privies.
- (2) Mouldering toilets.
- (3) Individual septic tanks and tile disposal field methods.
- (4) Individual aerobic systems.
- (5) Community sewer systems (gravity).
- (6) Community sewer systems (vacuum).

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# (1) PRIVIES

The use of privies within an urban area such as Burnaby should not be considered.

# (2) TROPIC, HUMAMAT AND OTHER MOULDERING TOILETS

The Provincial Health Department has recommended that this type toilet not be approved by Medical Health Officers under Section 2.17 of the Sewage Disposal Regulations. (Copy of Directive attached).

# (3) INDIVIDUAL SEPTIC TANKS AND TILE DISPOSAL FIELD METHODS

As reported on 1976 December 07, this method could be satisfactory providing large lot size is maintained and additional care taken in the design and construction of tile disposal fields.

### (4) INDIVIDUAL AEROBIC SYSTEMS

These sewage systems could be utilized; they do reduce the quantity of effluent and do improve effluent quality, but still require a tile disposal field for the disposal of effluent. Under the Provincial Sewage Disposal Regulations they also require a service contract, which results in an additional and continuing cost.

### (5) COMMUNITY SANITARY SEWER SYSTEMS (GRAVITY)

Gives great flexibility as to density and type of occupancy in any area; eliminates local sanitary nuisances and are maintained by and under full control of Governmental authorities.

### (6) COMMUNITY SANITARY SEWER SYSTEMS (VACUUM)

These systems require street installation of sewers, but utilize the principle of vacuum and a smaller quantity of water for the transportation of sewage rather than gravity and large quantities of water as in the conventional gravity flow community sanitary sewer. It is our opinion that this type of system is feasible, but a full explanation of a community vacuum sanitary sewer system is best presented by Engineering authorities. At present, the vacuum system is being installed in the Bridgeview Area of the Municipality of Surrey and, we understand, proposed for the Queensborough Area in New Westminster.

Further to Item (6) above, and more specifically regarding Mrs. C. Rozman's proposal for this particular type of alternate system, we would advise that we are not in a position to complete our evaluation of her proposal as submitted because it lacks some vital information that is required by the Sewage Disposal Regulations pursuant to the Provincial Health Act. For example, we do not have from Mrs. Rozman information as to site plans, percolation rates, soil conditions and size and location of the proposed ground disposal system. There are also legal ramifications that would have to be considered such as:

- a. Can one system provide sewage control for two separate dwellings and if so, who is responsible for maintenance?
- b. Can one sub-surface disposal field provide disposal of sewage from two dwellings and again, who would be responsible for maintenance?

It should be pointed out that the proposed system of sewage collection, known as Vacusan, is an accepted system. However, while it reduces the volume of effluent, it still requires disposal of effluent by either a.) holding tank and trucking the contents of a holding tank to a disposal

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site, b.) discharging directly to a sanitary sewer or c.) by connection to a sub-surface ground disposal field.

### GENERAL COMMENTS

At present, any person owning one or more of the sixteen (16) undeveloped lots in this area may apply for a permit to construct a sewage disposal system and providing they comply with the Sewage Control Regulations made pursuant to the Provincial Health Act would be issued the necessary permit. Such permit could include terms or conditions considered necessary by the Medical Health Officer.

We would advise that there must have been a misunderstanding when Mrs. Rozman said that a Public Health Inspector stated "that nothing could be built at that property". Our Inspector's statement to Mr. Rozman was "that nothing could be done until the matter had gone before Council."

#### SUMMARY

- 1. The Planning Department in their memo of 1977 July 27 advise that there are, at present, one hundred and thirty (130) single family residences situated in this area. If the sixteen (16) undeveloped lots were developed the total would then be one hundred and forty-six (146) single family residences. It is our opinion that given the existing lot size in the area and a maximum of one hundred and forty-six (146) single family residences, then sewage control, in this area, can be accomplished by methods other than common sanitary sewer. (such methods subject to the requirements of the Sewage Disposal regulations pursuant to the Provincial Health Act; and
- 2. If it is the desire of Council to increase density through further subdivision or zoning, then this change should be carried out only in conjunction with the installation of a common sanitary sewer by reason of the following:
- a) high water table;
- b) soil formation and unacceptable percolation rates.

G.H.

G.H. Armson, C.P.H.I. (C) CHIEF PUBLIC HEALTH INSPECTOR

GHA:bp Atts.

c.c. Municipal Engineer Director of Planning Environmental Engineering Division, Province of British Columbia, Victoria, B. C., Attention: S.B. Carroll, P. Eng.

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Chief Public Health Inspector

Sept. 24/76

Director of Planning

Sewage Disposal Facilities - North East Sector Big Bend Development Plan

The Municipal Council on September 13, 1976 tabled the consideration of a Planning Department report on a proposed detailed development plan for the subject area pending receipt of certain additional information. One of Council's concerns dealt with the provision of sanitary sewage facilities in the area.

The area in question is shown on the attached sketch No. 4. You will note on this sketch that the majority of the lots in the area are developed. Sixteen lots are undeveloped and it is conceivable that they could be developed with a single family dwelling under the A2 zoning regulations. The question of the capability of these 16 lots to support septic tanks and disposal fields was raised in Council.

Would you kindly provide this department with your comment on their suitability for septic facilities on a general basis only. We appreciate that you cannot provide a definative statement on a given lot as an evaluation must be site specific and be related to a particular dwelling size and siting. We would appreciate, however, a general evaluation of the acceptability of septic facilities per se in the study area.

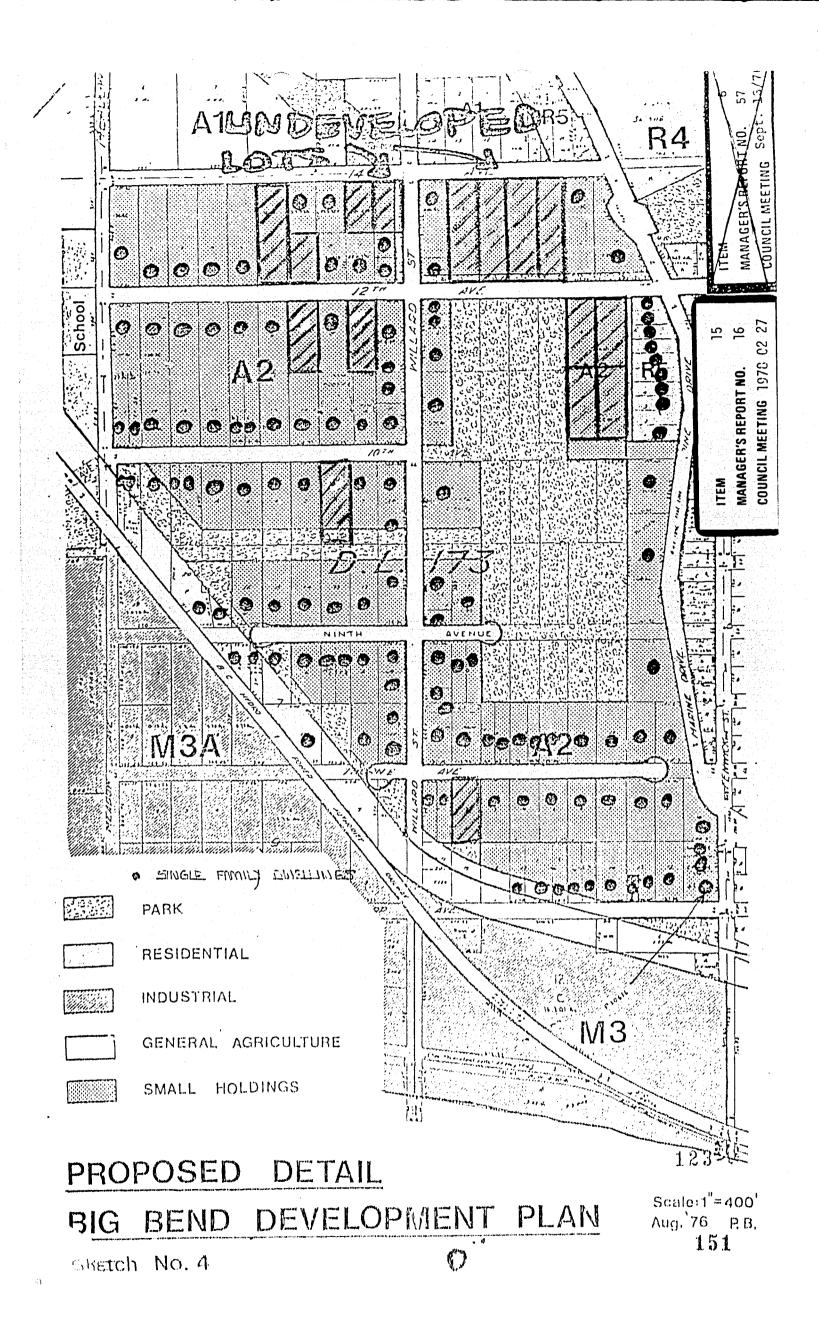
Council further requested information on alternative disposal systems which might be acceptable in this area. Would you kindly comment in this regard.

Al J. Parr

DIRECTOR OF PLANNING

PB/dm

attach.



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# THIC RPORATION OF THE DISTRICT OF BUCABY

INTER-OFFICE COMMUNICATION

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PLANNING DIRECTOR

DEPARTMENT:

DATE: Dec. 7/76.

FROM:

OUR FILE # 2-1-76.

CHIEF PUBLIC HEALTH

**DEPARTMENT:** 

YOUR FILE #

INSPECTOR SUBJECT:

SEWAGE DISPOSAL FACILITIES

NORTHEAST SECTOR - BIG BEND DEVELOPMENT PLAN

Further to your memorandum of September 24th, 1976, we would advise as follows.

Question of the Capability of the Sixteen (16) Lots to Control Sewage from Private Dwellings by the Use of Septic Tanks and Tile Disposal Field Methods

The subject lots were inspected and the following particulars noted:

- (1) 6178 14th Avenue (125' x 221') - Lot covered with short grass.
- (2) 6241 12th Avenue (125' x 435')
- (3) 6261 12th Avenue (125' x 435')
- (4) 6281 12th Avenue (125' x 435')
- (5) 6338 12th Avenue (125' x 310') - Lots being used as farm land.
- (6) 6358 12th Avenue (125 x 310') (7) 6361 10th Avenue (125 x 310') (8) 6341 10th Avenue (125 x 310')
- 6116 10th Avenue (125' x 357') - Lot covered with short grass.
- (10) 6148 14th Avenue (125' x 220') - Lots covered with heavy bush, trees
- (11) 6240 Thorne Avenue (125' x 268')
- and grass.
- 6107 12th Avenue (12)
- (13) 6320 14th Avenue
- (14) 6088 12th Avenue Lots 12 to 16 inclusive contain dwellings.
- (15) 6150 12th Avenue
- (16) 6062 14th Avenue

Based upon the recent inspection of the subject vacant lots and this Department's past experience in sewage control within the Big Bend Area, we would believe that due to an existing high water table, the subject lots would be unsatisfactory for development using a conventional septic tank and field system.

Although this existing high water table is most likely to exclude sewage control by means of a conventional septic tank and field, it may be possible to develop the vacant lots using an alternative designed sewage disposal system.

### Information on Alternative Sewage Disposal System

As the water table within the Big Bend Area is high during a goodly portion of the year, most sewage disposal systems within this area are designed as alternative sewage disposal systems.

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COUNCIL MEETING 1978 02 27

# CORPORATION OF THE DISTRICT OF GURNABY

INTER-OFFICE COMMUNICATION

TO:

PLANNING DIRECTOR

DEPARTMENT:

DATE: Dec. 7/76.

FROM:

CHIEF PUBLIC HEALTH
INSPECTOR

DEPARTMENT:

OUR FILE # 2-1-76

YOUR FILE #

SUBJECT:

SEWAGE DISPOSAL FACILITIES

NORTHEAST SECTOR - BIG BEND DEVELOPMENT PLAN

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Generally speaking, this alternative system incorporates an elevated field composed of layers of hog fuel and sand as a filtration media. This alternative method of disposal was designed and has been successfully used by this Department for approximately fifteen (15) years. However, it should be pointed out that an alternative method of sewage disposal must comply with the Provincial Government Regulations Governing Sewage Disposal.

As this alternative designed sewage disposal system incorporates a sizable ground absorption field, we would suggest that the existing one acre minimum lot size standard for subdivision within the subject area be strictly adhered to.

#### SUMMARY

In summation, we would state that it is possible that the subject lots within the Northeast Sector of the Big Bend Development Area could be serviced with an alternative designed sewage disposal system.

One must appreciate that this Department cannot give formal approval to development of the subject lots until the following information is made available:

- Percolation rate
- Size and location of dwelling and accessory buildings
- Depth to water table
- Description of soil content

### RECOMMENDATION

- (1) THAT Council be advised that it is possible that the subject lots within the Northeast Sector of the Big Bend Development Area could be serviced with an alternative designed septic tank and field disposal system.
- (2) THAT the alternative sewage disposal system, which is applicable to the Big Bend Area, is a septic tank using an elevated absorption field composed of successive layers of hog fuel and sand.

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CE CORPORATION OF THE DISTRICT OF GRNABY

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INTER-OFFICE COMMUNICATION

TO:

PLANNING DIRECTOR

DEPARTMENT:

DATE: Dec. 7/76.

FROM: CHIEF PUBLIC HEALTH
INSPECTOR

DEPARTMENT:

OUR FILE # 2-1-76

SUBJECT:

SEWAGE DISPOSAL FACILITIES

NORTHEAST SECTOR - BIG BEND DEVELOPMENT PLAN

YOUR FILE #

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(3) THAT the existing one acre minimum lot size standard for subdivision within the Big Bend Development Area be strictly adhered to.

GVH/GHA/pm

G.H. Armson, C.P.H.I. (C) CHIEF PUBLIC HEALTH INSPECTOR

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# Administrative Circular

To: All Medical Health Officers
All Public Health Inspectors
Greater Vancouver Metropolitan
Board of Health
Capital Regional District
Community Health Service
Director, Environmental Engineering

From: AIM/PHP 11

### Re: Tropic, Humamat and other mouldering toilets

In view of the interim report "Experiences with Clivus Multrum and Mull-Toa Toilets in Northern Manitoba" with respect to mouldering toilets, which was distributed to Chief Public Health Inspectors in Victoria during the week of February 21st, 1977, it is recommended that these toilets not be approved by Medical Health Officers - per Section 2:17 of the Sewage Disposal Regulations.

II /WEW/In

	RECEIVED IN ENVIRONMENTAL HEALTH DEPARTMENT
7- K.I.G. Ben	AUG 2 1977
	REFEN TO NOTED DATE
	ACTION TAKEN TO DATE

