

RE: PROPOSED UNDERGROUNDING OF EXISTING OVERHEAD WIRING PROJECTS  
A) 7000 BLOCKS 17TH AVENUE AND 18TH AVENUE (RZ# 4/88)  
B) 4400 BLOCK BUCHANAN STREET AND PORTION OF ROSSER AVENUE (RX# 91/88)

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Director Planning & Building Inspection be adopted.

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TO: MUNICIPAL MANAGER  
FROM: DIRECTOR PLANNING &  
BUILDING INSPECTION

ITEM	20
MANAGER'S REPORT NO.	43
COUNCIL MEETING	89/06/19

SUBJECT: PROPOSED UNDERGROUNDING OF EXISTING OVERHEAD WIRING PROJECTS

- A) 7000 BLOCKS 17TH AVE. AND 18TH AVE. (RZ #4/88)
- B) 4400 BLOCK BUCHANAN STREET AND PORTION OF ROSSER AVENUE (RZ 91/88)

PURPOSE: The purpose of this report is to request Council approval for the expenditure of funds to assist in relocating existing overhead power lines underground.

RECOMMENDATIONS:

1. That Council authorize the expenditure of \$61,000 to coordinate the project with \$30,927 being the Corporation's share to place existing overhead electrical lines underground in the 7000 blocks Seventeenth and Eighteenth Avenues in conjunction with the developers' contribution related to rezoning of the adjacent lands (RZ 4/88).
2. That Council authorize the expenditure of \$135,000 to coordinate the project with \$66,345 being the Corporation's share to place existing overhead lines underground in the 4400 block Buchanan and the 1900 block Rosser Avenue in conjunction with the developers' contribution related to the rezoning of adjacent lands (RZ #91/88 and RZ #12/80A).
3. That the 1989 Capital Budget be amended to include these expenditures with Burnaby's share of \$97,272 to be funded from the capital contingency, if required.
4. That a capital reserves bylaw be brought forward for \$97,272.

REPORT

1.0 BACKGROUND

In 1987 Council adopted a policy of requiring developers of non-industrial land as a condition of rezoning, to either remove smaller overhead lines abutting their sites or to place them underground, where it is technically feasible to do so along their property frontage. Alternatively, if it is not feasible to remove the line at the time of rezoning, the developer will provide a contribution towards the future undergrounding of the line in the form of a cash deposit equal to the cost of underground ducts that would be able to accommodate the wiring removal in the future. The Municipality would in this latter situation be responsible for the removal of the overhead lines and the cost of installing the cables for telephone hydro and television cable services into the ducts provided previously by private developers once enough duct work or funds were available to have undergrounding projects of sufficient

size to be technically feasible. This matter of "feasibility" is in most instances defined by the utility companies who find that it is technically difficult and costly to replace an overhead line underground for a short distance adjacent an average apartment building lot; thus larger projects must be coordinated (refer attached Appendix I for copy of the 1987 policy report).

## 2.0 CURRENT SITUATION

Staff have been working closely with the utility companies to coordinate the implementation of this policy and then determine in the case of each rezoning application whether an abutting overhead line can be removed or replaced underground adjacent the development site. If neither of the above options is feasible, it is necessary to obtain funds from the developers for the construction of underground ducts that will be used in the future.

Two projects have recently come forward where B.C. Hydro has indicated that if the scope of the underground wiring project can be enlarged beyond the frontages of the development sites, significant gains in placing some larger overhead lines underground can be achieved. In each case however the Municipality is required to contribute to the cost of the project after application of the developers' contribution calculated on a prorated basis. Each project is ready for Final Adoption of the respective rezoning pending the resolution of this matter.

It is to be noted that as development proceeds in the Municipality several of these types of projects can be expected each year. In addition, a report on a major shared cost undergrounding project with B.C. Hydro along Canada Way between Smith Avenue and Curle Avenue which has been under discussion for some time is expected to be brought forward for consideration by Council in the next several weeks upon receipt of detailed estimates from the utility companies.

## 3.0 PROPOSED UNDERGROUNDING PROJECTS

- 3.1 7000 block Seventeenth and  
7000 block Eighteenth Avenues  
(RZ Reference #4/88) (refer attached location sketch 1)  
Edmonds Town Centre  
Total estimated cost B.C. Hydro (89 05 16): \$61,000  
(subject to final design-based estimate)

Subject rezoning site: 82.079 m frontage

7007 Seventeenth Avenue  
(Private)

40.17 m frontage on 19th  
Street

7020/44 Eighteenth Avenue  
(Municipal)

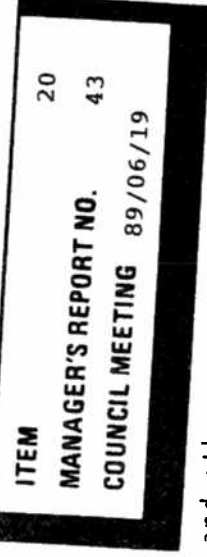
44.43 m frontage on 19th  
Street

**TOTAL PROPERTY FRONTAGE** 166.679 m

Based on these property frontages, it is proposed that the sharing for this undergrounding project be done as follows:

Developer's share based on RZ #4/88 frontage:

82.079 m/166.679/m = 49.3 per cent  
approximately \$30,073 based on \$61,000 estimate.



Municipal share based on Municipal and other property frontage:

$(40.17 + 44.43 \text{ m}) / 166.679 \text{ m} = 50.7 \text{ per cent}$   
approximately \$30,927 based on \$61,000 estimate.

The developers have indicated that they are prepared to proceed on this basis and have in fact contributed their pro-rated share of the cost.

3.2 **4400 Block Buchanan Street  
West of Willingdon Avenue  
(RZ #91/88) (RZ 12/80A) (refer attached sketch 2)  
Brentwood Town Centre**

Total estimated cost B.C. Hydro (89 05 29) \$135,000  
(subject to final design-based estimate)

Subject rezoning site:

100.6 m (RZ 91/88)

Earlier rezoning (4461 Halifax)

40.2 m (RZ 12/80A)  
on Buchanan

Existing portion of  
Buchanan at east end  
(private lot not being  
rezoned (1801 Willingdon)

40.2 m

Rosser Avenue Frontage and  
Street end:  
(private land and street frontage  
unaffected by rezoning)

104.2 m

Total property frontage

285.2 m

Based on these frontages it is proposed  
that the cost sharing be as follows:

Developer's share for RZ 91/88 frontage:

100.6 m/285.2 m = 35.3 per cent  
approximately \$47,655 based upon \$135,000 estimate

Municipal share based on other property frontages:  
184.6 m/285.2 m = 64.7 per cent  
approximately \$87,345 less \$21,000 held in trust from RZ 12/80A  
previously equals \$66,345 for Municipal share based on current  
estimate. (49.1% of total cost).

The developers have indicated that they are prepared to contribute their share of the cost. Were the Municipality to not agree to this expenditure the developers would have to be requested to provide for the construction of underground ducts for future conversion by the Municipality at a higher anticipated total project cost.

4.0 **FINANCING**

The total cost of the projects is estimated at \$196,000 of which \$97,272 is to be financed by Burnaby and the balance by the developers. The 1989 capital budget does not include any funds for undergrounding, so it will have to be amended at recast time to include funding from capital reserves to be repaid over 20 years at prevailing interest rates. Burnaby's share will have to be interim financed from capital contingency, if necessary, until the capital reserves bylaw is adopted. The developers' share of the funding must be received and "in-hand" before construction can commence. The projects are expected to start about in late 1989.

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5.0 GENERAL COMMENTS

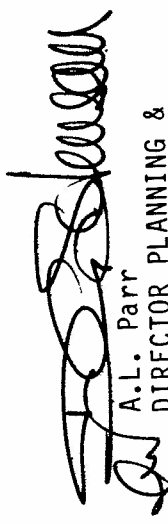
While it is recognized that these projects are moderately complex and costly, the effort to remove overhead pole lines in our major urban areas is an important step in improving the visual environment. In each of the above cases the alternatives basically involve the expenditure of funds by the developers to relocate the existing poles for road construction which is not only costly in itself but will tend to make it very difficult in the future to come back to each area to remove the lines and also results in damage to new roads in future. While shared cost approaches with the utility companies may be achievable in large projects, at this time, the joint Municipal/developer approach for this scale of project appears to be the best option if the work is to proceed.

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*AL.*  
BR:zn

Attachments

cc: Director Finance  
Director Engineering

  
A.L. Parr  
DIRECTOR PLANNING &  
BUILDING INSPECTION

ITEM SUPPLEMENTARY 10  
MANAGER'S REPORT NO. 40  
COUNCIL MEETING 87/06/08

RE: PROPOSED TWO-FOLD POLICY APPROACH FOR THE UNDERGROUNDING OF HIGH CAPACITY OVERHEAD POWER TELEPHONE AND CABLE LINES ABUTTING REDEVELOPMENT SITES AS A CONDITION OF REZONING

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Director Planning & Building Inspection be adopted.

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TO: MUNICIPAL MANAGER

1987 JUNE 03

FROM: DIRECTOR PLANNING &  
BUILDING INSPECTION

OUR FILE: 09.300

SUBJECT: PROPOSED TWO-FOLD POLICY APPROACH FOR THE UNDERGROUNDING OF HIGH CAPACITY OVERHEAD POWER TELEPHONE AND CABLE LINES ABUTTING REDEVELOPMENT SITES AS A CONDITION OF REZONING

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RECOMMENDATIONS:

1. THAT Council adopt a policy to obtain, as a condition of rezoning, the installation of underground ducts or the deposit of funds equal to the cost of underground ducts for high capacity power, telephone and other cable lines abutting development sites in situations where it is currently not practicable for technical reasons to remove major existing overhead systems which about sites being rezoned until such time as the Municipality obtains the legislative authority to implement a development cost charge levy..
2. THAT Council authorize staff to prepare a request to the Ministry of Municipal Affairs for consideration of legislative authority from the Province to utilize a development cost charge in situations where redevelopment takes place in Community Plan Areas or along arterial streets having major overhead lines which can be replaced underground only as part of larger undergrounding projects.

REPORT

1.0 SUMMARY:

The purpose of this report is to discuss a two-fold policy approach for the replacement of major overhead telephone hydro and cable feeder or trunk lines underground. Most overhead lines in the Municipality are of a local service nature and the Municipality has been quite successful in having developers pay the full cost of either removing or replacing these overhead lines underground, and no change to this practice is proposed. What is presently required is an equitable and consistent policy for the replacement of the major or high capacity lines underground which cannot be removed or placed underground for short distances, but require a more comprehensive approach.

The first, or interim approach proposed is to adopt a policy that is within the Municipality's authority at the present time. This interim approach would require that developers of individual properties either construct or bond for the cost of underground ducts for future use abutting their sites.

The long term approach proposed is to obtain new legislative authority for a development cost charge approach which would enable us to collect from developers at the time of rezoning where their properties about major overhead lines. In either case a contribution of Municipal funds would be required to see the projects through to completion.

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MANAGER'S REPORT NO. 40  
COUNCIL MEETING 87/06/08

2.0 BACKGROUND:

On 1986 December 08 Council tabled a report which outlined a proposed policy for obtaining, as a condition of rezoning, the installation of underground ducts for heavy hydro, telephone and other major cable lines where it is currently not possible for technical reasons to remove short portions of the larger capacity existing overhead systems. This report was considered by Council on 1987 February 17 and a number of questions were raised which are dealt with in this report. The purpose of this report is to outline an interim and a long term policy approach to achieving the goal of obtaining the replacement of major pole lines underground.

3.0 POTENTIAL MEANS TO FINANCE THE REMOVAL OF MAJOR POLE LINES AND RELATED ISSUES:

3.1 Proposed Interim Approach: Developers to Provide Underground Ducts as a Condition of Rezoning

In this case it is proposed that where a major overhead pole line abuts a development site but it is not technically feasible to remove a short portion of line, developers would be required to install underground tubes or ducts that would be used in the future once the undergrounding project becomes feasible and funds are available. The cost of the ductwork can vary considerably but is in the order of a half of the total cost of replacing hydro, telephone and cable lines in the ducts. The duct installation work would normally be done, or equivalent funds would be held in trust, at the developer's cost for future construction by the Municipality if it is not feasible at the time to install the ducts when the building or street construction takes place.

This approach is considered appropriate as it is practicable and is within the Municipality's existing authority.

This approach would necessitate a contribution by the Municipality for the balance of the costs at the time that the lines are actually moved.

Another method to provide funds for the removal of major pole lines in priority areas such as Community Plan Areas or along arterial streets would be a development cost charge levy applicable to all new residential, commercial or institutional development. Presently there is no authority in the Municipal Act for municipalities to implement cost charges for this type of purpose.

In discussion with senior staff at the Ministry of Municipal Affairs in Victoria, there is an acknowledgement of the need for some of the inner suburban municipalities to have mechanisms for providing a higher level of services in their urban areas, however, this need must be reconciled with current overall policy directions of the Provincial Government which relate to encouraging market development activity. It is considered appropriate to investigate further what possible approaches to this issue would be potentially workable.

Under the circumstances it is suggested that an approach be made to the Ministry of Municipal Affairs to consider introducing legislation to permit Development Cost Charges for underground wiring. An alternative of placing the matter before the Union of B.C. Municipalities would also be possible. An amendment to Section 985 of the Municipal Act which deals with development cost charges would be required.

The cost charge approach could be utilized in the case of all new development in Community Plan areas where major lines occur.

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If authorization for this approach is given by the Province, this type of levy would necessitate the Municipality providing a proportional contribution to the fund each year to build a reserve which could then be programmed for use on a project-by-project basis.

This long-term cost charge approach will produce what is probably the lowest total overall cost as large projects could be identified and scheduled in advance. In addition to achieving the best economies of scale for undergrounding longer lines, the cooperation of the utility companies could be best utilized by pre-planning the projects.

4.0 POTENTIAL SOURCES OF FUNDS AND IMPLEMENTATION PROCESS:

It is central to both policy approaches, development cost charges or the underground ducting by developers that the Municipality share in the cost of replacing major lines underground. The requirement for a municipal contribution will assist in making the program more effective, will improve the acceptability of the approach to the development community, and demonstrate a commitment to the utility companies.

In 1986 the Provincial Government did offer funds under Part 12 of the Revenue Sharing Act regulations for assistance with transmission line undergrounding projects provided that the utility companies and the municipalities shared the costs with the Province equally.

Recent contact with the Ministry of Municipal Affairs has indicated that \$300,000 per year has been budgeted for this program Province-wide and we have received application forms which will be submitted upon Council's concurrence with each project.


This individual property approach of placing the wiring into the ducts provided by developers would necessitate a contribution by the Municipality for the balance of the costs at the time that the lines are actually moved.

While the scope of this work could increase over time, it is anticipated that initially the costs would be on the order of \$100,000 to \$200,000 per year which would do one or two projects depending upon their size and cost. If a development cost charge approach is approved, our capacity to do this work could increase along with the annual cost. Funding would need to be provided for in the annual budget process. The Engineering Department would be responsible for the execution of the projects. The Planning and Building Inspection Department would make recommendations on the priorities as part of the annual budget preparation process and would prepare the necessary reports to Council prior to the initiation of each project to place the wires into the ducts and complete the undergrounding projects.

5.0 PRIORITIES:

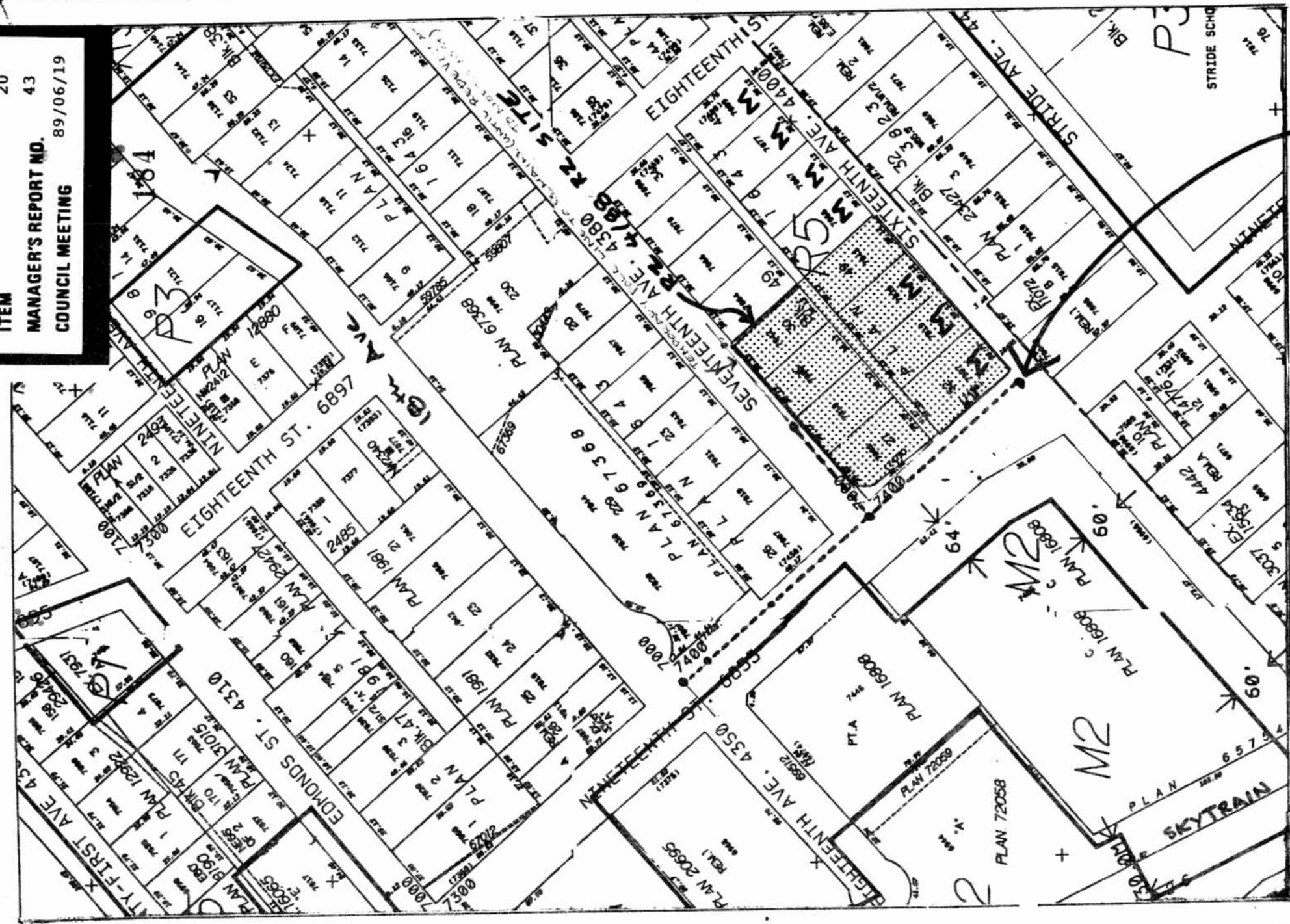
It is intended that funds will be raised through the deposit of funds for the construction of ducts from individual developers at the time of rezoning or through a cost charge bylaw. Priority for construction of undergrounding projects should be given to Metrotown and other higher density Community Plan areas. Areas with existing underground ducts would also be given priority. It is intended that industrial areas and low density residential areas would be excluded from the program.

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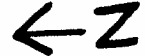
  
A.L. Parr  
DIRECTOR PLANNING &  
BUILDING INSPECTION

BR/js  
cc: Director Engineering  
Director Finance  
Municipal Solicitor

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Planning &  
Building Inspection  
Department

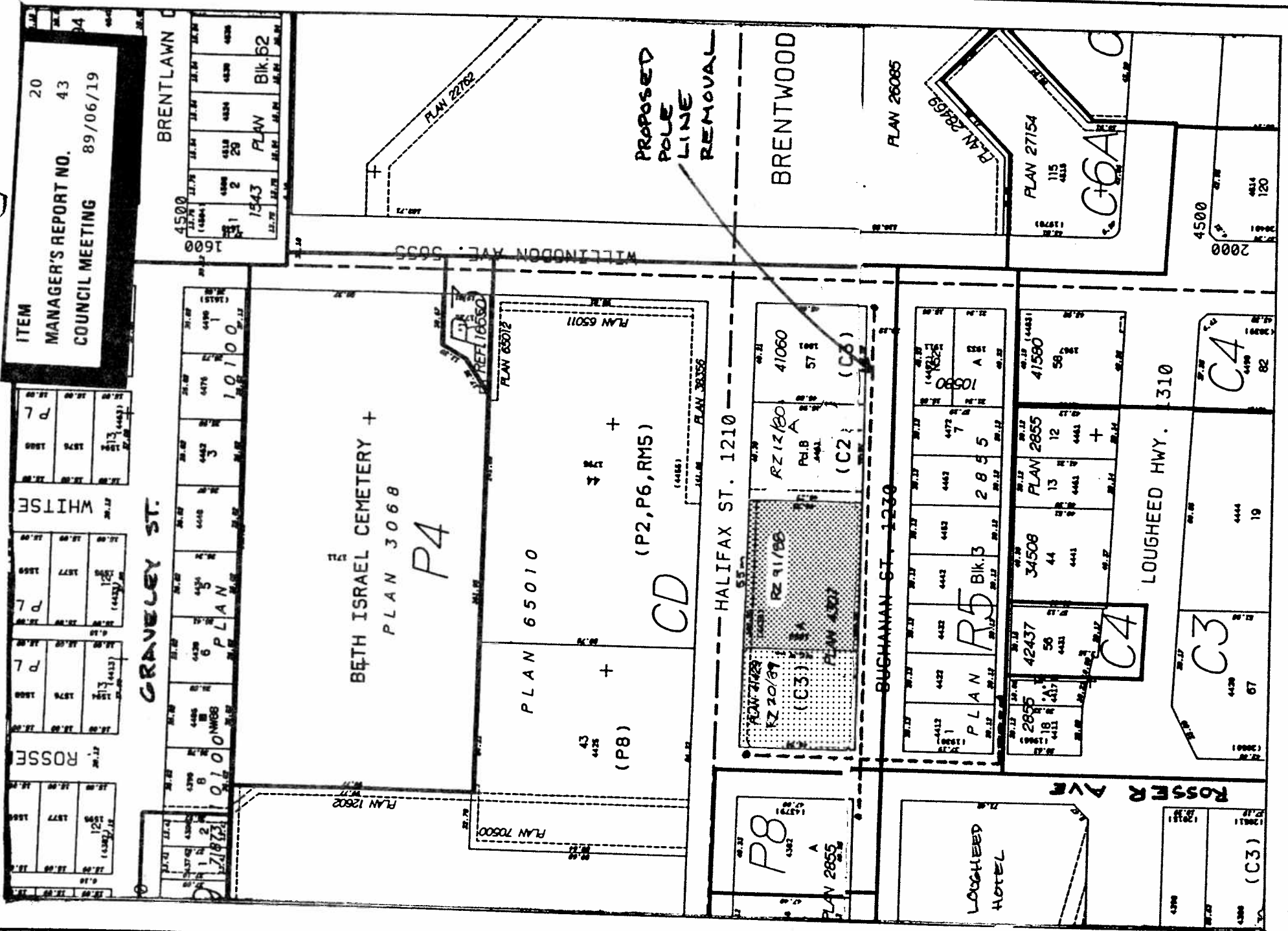


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**RZ 4100**

**HYDRO LINE TO BE REMOVED**





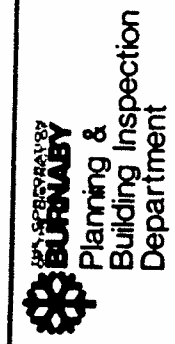
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PROPOSED UNDERGROUND WIRING PROJECT  
 REZONINGS 91/88/20/09/12/80A 185  
 SKETCH 2

