

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28

RE: BARNET MARINE PARK - ENGAGING AN ENGINEERING CONSULTANT TO UNDERTAKE
A PRELIMINARY DESIGN OF VEHICULAR OVERPASS TO PUBLIC BOAT LAUNCHING
AND MARINA FACILITIES

Following is a report from the Director of Planning and the Municipal Engineer regarding the proposed vehicular overpass at Barnet Marine Park.

RECOMMENDATION:

1. THAT the recommendation of the Director of Planning and Municipal Engineer be adopted.

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TO: MUNICIPAL MANAGER 1979 May 23
OUR FILE: 15.152(1) (d)

FROM: DIRECTOR OF PLANNING/MUNICIPAL ENGINEER

SUBJECT: BARNET MARINE PARK - ENGAGING AN ENGINEERING CONSULTANT
TO UNDERTAKE A PRELIMINARY DESIGN OF VEHICULAR OVERPASS
TO PUBLIC BOAT LAUNCHING AND MARINA FACILITIES

RECOMMENDATION:

THAT Council authorize the Municipal Engineer to prepare the terms of reference and to invite proposals for the preparation of a preliminary design of the proposed vehicular overpass, including a cost estimate, as more particularly described in the following report.

REPORT

BACKGROUND:

On 1978 October 10 Council received a report which proposed certain revisions to the Master Plan for the Barnet Marine Park. These revisions were prompted as a result of the Canadian Transport Commission's concern over the use of the Kapoor level crossing as access to the proposed Marina. After consideration of the ramifications of the proposed change in use of this crossing, Council approved the revisions of the application to the C.T.C. to prohibit the use of this crossing as access to the Marina. Consequently, on 1979 March 30, the C.T.C. authorized the installation of signalized level crossing facilities under Board Order No. 28590.

BARNET MARINE PARK - ENGAGING A CONSULTANT
TO UNDERTAKE A PRELIMINARY DESIGN OF VEHICULAR
OVERPASS TO PUBLIC BOAT LAUNCHING AND MARINA
FACILITIES.....PAGE 2.....1979 05 16

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28

Article 6 of the Order states that the cost of construction and maintenance of this crossing and the cost of installation, maintenance and operation of the protection devices are reserved for further order of the Railway Transport Committee. To help expedite the installation of these facilities, the Corporation has issued a work order to the C.P.R. on the understanding that once the C.T.C. has confirmed that the documentation provided by the Planning Department entitles Burnaby to a level crossing to be constructed at C.P.R.'s expense, the C.P.R. would reimburse the Corporation.

The Planning Department has requested the Railway Transport Committee to advise us on the status of the review of the assessment of costs and when we could anticipate a ruling in this regard.

Council further approved the revision of the Master Plan for the Barnet Marine Park as illustrated on the attached Figure 3 entitled "Conceptual Plan of Proposed Vehicular Overpass and Foreshore Access Road". Council also directed staff to prepare and submit a detailed report on the proposed establishment of a vehicular overpass and foreshore roadway to provide access to the proposed public boat launching facility and to the proposed Marina.

Council will recall that, on the basis of certain documentation obtained from the Land Registry records, it is evident that the Cariboo Road right-of-way is senior to the railway right-of-way and therefore, we have requested the C.T.C. to rule on the assessment of costs for the construction and maintenance of the proposed vehicular overpass at this location.

EXISTING SITUATION:

As can be seen on the attached Figure 3, certain lands will need to be acquired from Allied Chemical to permit the construction of the overpass and the foreshore access road. Allied Chemical has advised staff that they agree in principle to the proposed acquisition and they have requested us to advise them of our requirements in this regard. It is necessary to obtain this information at this time as they intend to embark on a rehabilitation program to improve their existing plant and related facilities. Moreover, we need to predetermine the precise requirements for land acquisition, the geometry of the access roads to the overpass and the effect of these structures on the area available for boat launching, parking and access to the Marina.

Council has directed staff to prepare a detailed report on these proposals. This matter has been discussed with the Parks and Recreation Department and the Engineering Department staff with the result that it is our opinion that an engineering consultant should be engaged to undertake a preliminary design of these facilities. His involvement would directly deal with the question of locating and designing the overpass in the most advantageous location keeping in mind the parameters associated with the design of the boat launching and marina facilities. Once this question has been resolved, staff would undertake the more detailed design of the boat launching facilities and the access to the proposed Marina.

Following this undertaking staff would then be in a position to pursue definitive negotiations with the C.T.C. and C.P. Rail for the construction of the overpass. It has been our experience

BARNET MARINE PARK - ENGAGING A CONSULTANT
TO UNDERTAKE A PRELIMINARY DESIGN OF VEHICULAR
OVERPASS TO PUBLIC BOAT LAUNCHING AND MARINA
FACILITIES.....PAGE 3.....1979 05 16

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28

that these matters tend to be somewhat protracted and therefore, every effort needs to be made to proceed as expediently as possible.

It is, therefore, recommended that Council authorize staff to prepare the terms of reference and to invite proposals for the preparation of a preliminary design of these facilities, including a cost estimate, according to the following guidelines:

1. Point of Access - access shall be from the Barnet Highway and shall utilize the existing Cariboo Road right-of-way.
2. Overpass Structure - the structure shall provide for a 24 foot (7.32 m) driving surface with a 5 foot (1.5 m) sidewalk with a minimum clearance of 26 feet (7.92 m) from the top of the rail to the bottom of the structure.
3. Alternatives for access to the overpass - the consultant shall investigate the alternatives for providing access to the overpass, recognizing the effects on the area available for boat launching, the extent and desirability of reclamation, and the effect on the Allied Chemical facilities. Consideration should be given to costs of the various alternatives, however, equal weight needs to be given to the land use considerations.
4. The consultant shall investigate the most appropriate form of construction given the access considerations.

Three possible alternatives are as follows:

- (a) Cloverleaf design to west - as illustrated on the attached Alternative A. This proposal would reduce the effect of the access roads and the structure on the Allied Chemical property. However, it would substantially encroach on the area available for the boat launching facilities and the area available for car and trailer parking. The Parks and Recreation Department have undertaken a preliminary assessment of the area available and they have concluded that while sufficient land is available, it is at a premium and if at all possible, the area required for the structure and the access roads needs to be minimized. If a cloverleaf design is employed as shown on Alternative A, it would necessitate reclamation in the area to the west which would have a dramatic effect on the natural bay to the west.
- (b) T-type design - as illustrated on the attached Alternative B. This proposal seems to minimize the effect on the land available for boat launching to the west and the Allied Chemical facilities to the east. While it may not provide for the most desirable traffic pattern, it could well prove to be the best land use solution.
- (c) Cloverleaf design to the east - as illustrated on the attached Alternative C. This proposal would involve relatively major acquisitions from Allied Chemical. However, staff feels that serious consideration should be given to this alternative as it would provide the greatest flexibility in designing the boat launching and parking facilities. It should be recognized that we would then need to pursue an area for area land exchange with Allied Chemical which would involve lands involved with the Bestwood Industries lease. In our view, this fact need not impede this alternative as we could easily reclaim additional lands to the east of Bestwood for the proposed Marina. In fact, it may be desirable to reclaim additional lands to expand the land base for a Marina.

BARNET MARINE PARK - ENGAGING A CONSULTANT
TO UNDERTAKE A PRELIMINARY DESIGN OF VEHICULAR
OVERPASS TO PUBLIC BOAT LAUNCHING AND MARINA
FACILITIES.....PAGE 4.....

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28

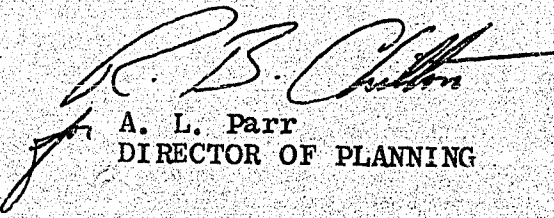
1979 05 16

SUMMARY:

139

The implementation program for the development of the Barnet Marine Park has advanced to the point whereby firm decisions need to be made on the access to the eastern sector of the parksite. The overriding factor is the design and location of the proposed vehicular overpass which necessitates the employment of a consultant to undertake a preliminary study.

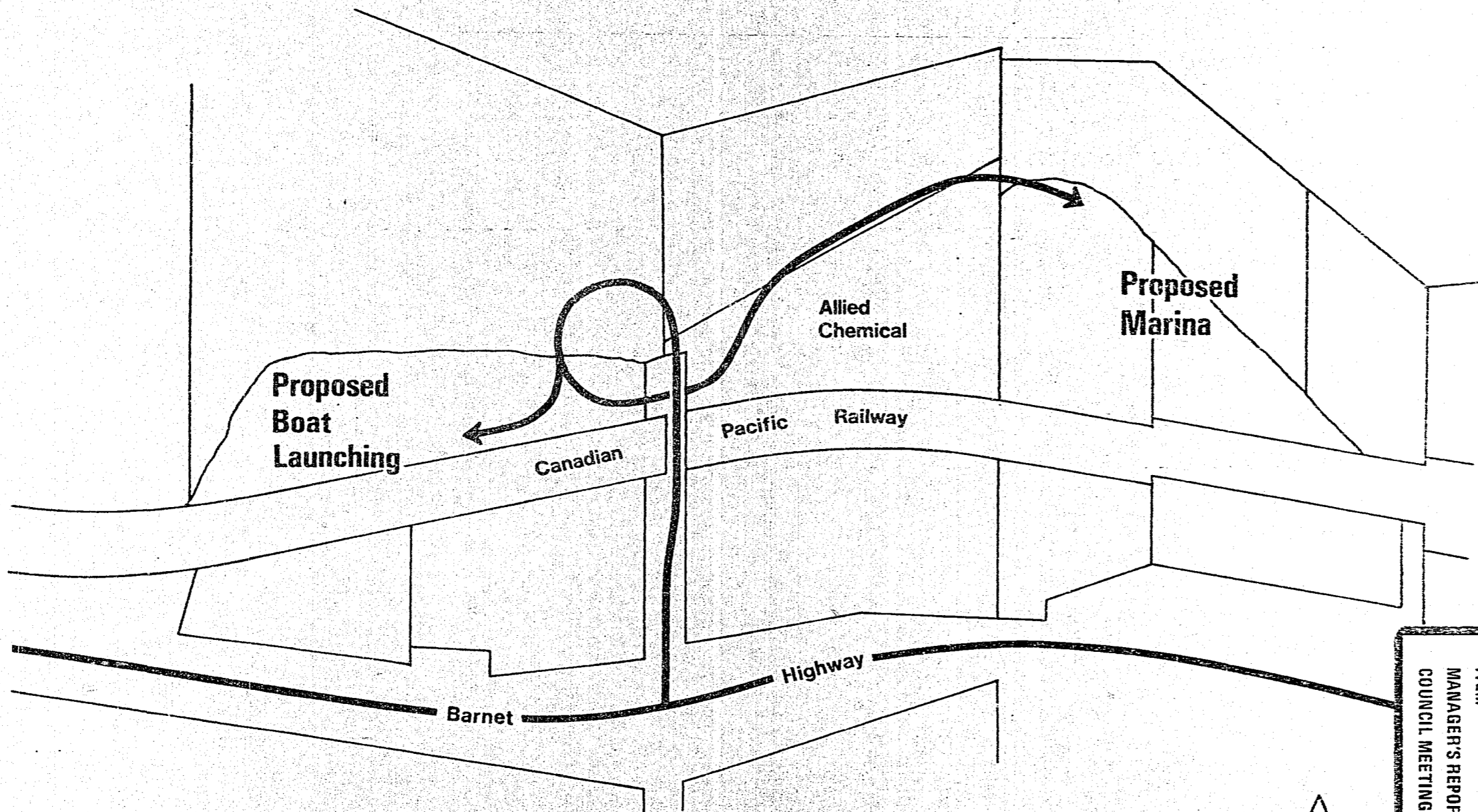
Once this aspect has been satisfactorily resolved, staff can proceed with the further design of the related facilities and with a formal application to the Canadian Transport Commission for the construction of the overpass.


A. L. Parr
DIRECTOR OF PLANNING


E. E. Olson
MUNICIPAL ENGINEER

PB/sam
Attachments

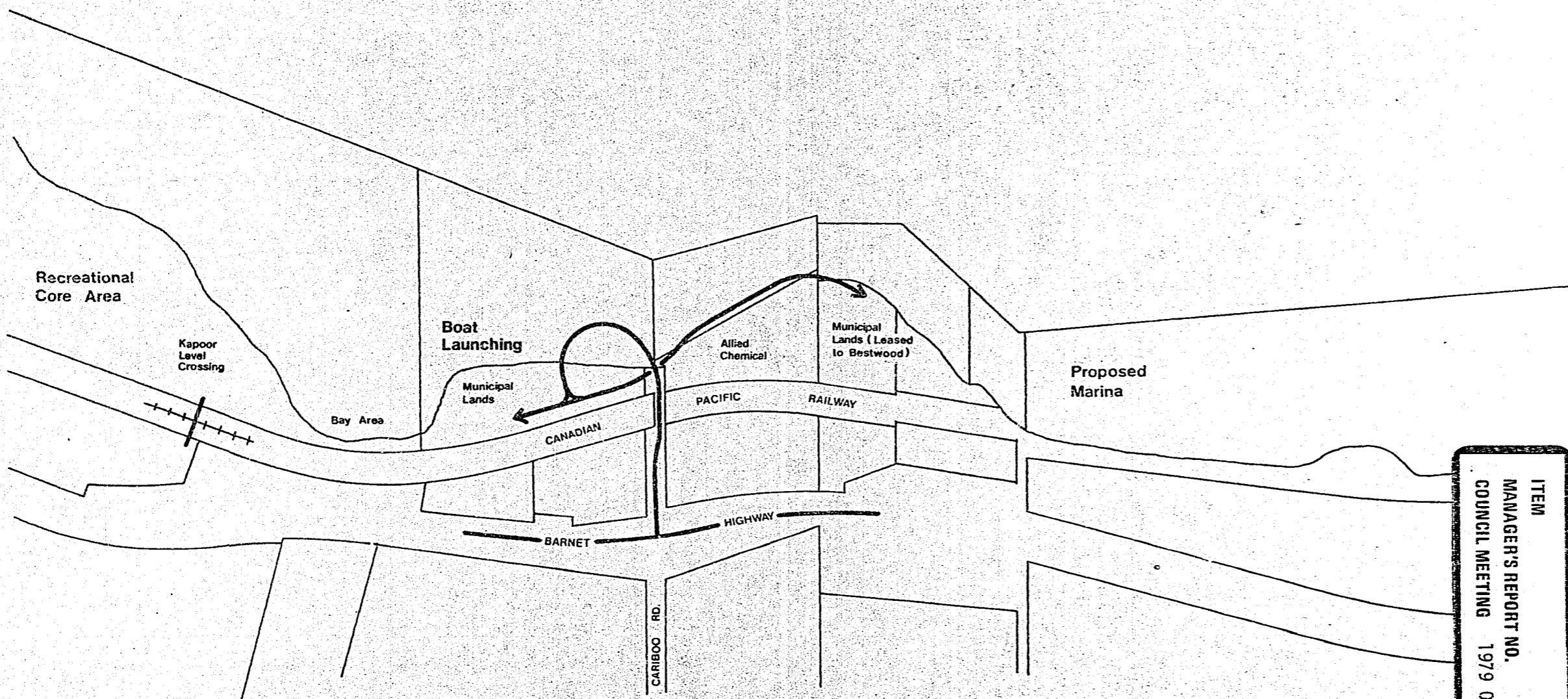
cc: Parks and Recreation Administrator



**CONCEPTUAL PLAN OF PROPOSED VEHICULAR OVERPASS
AND FORESHORE ACCESS ROAD**

Figure 3

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28

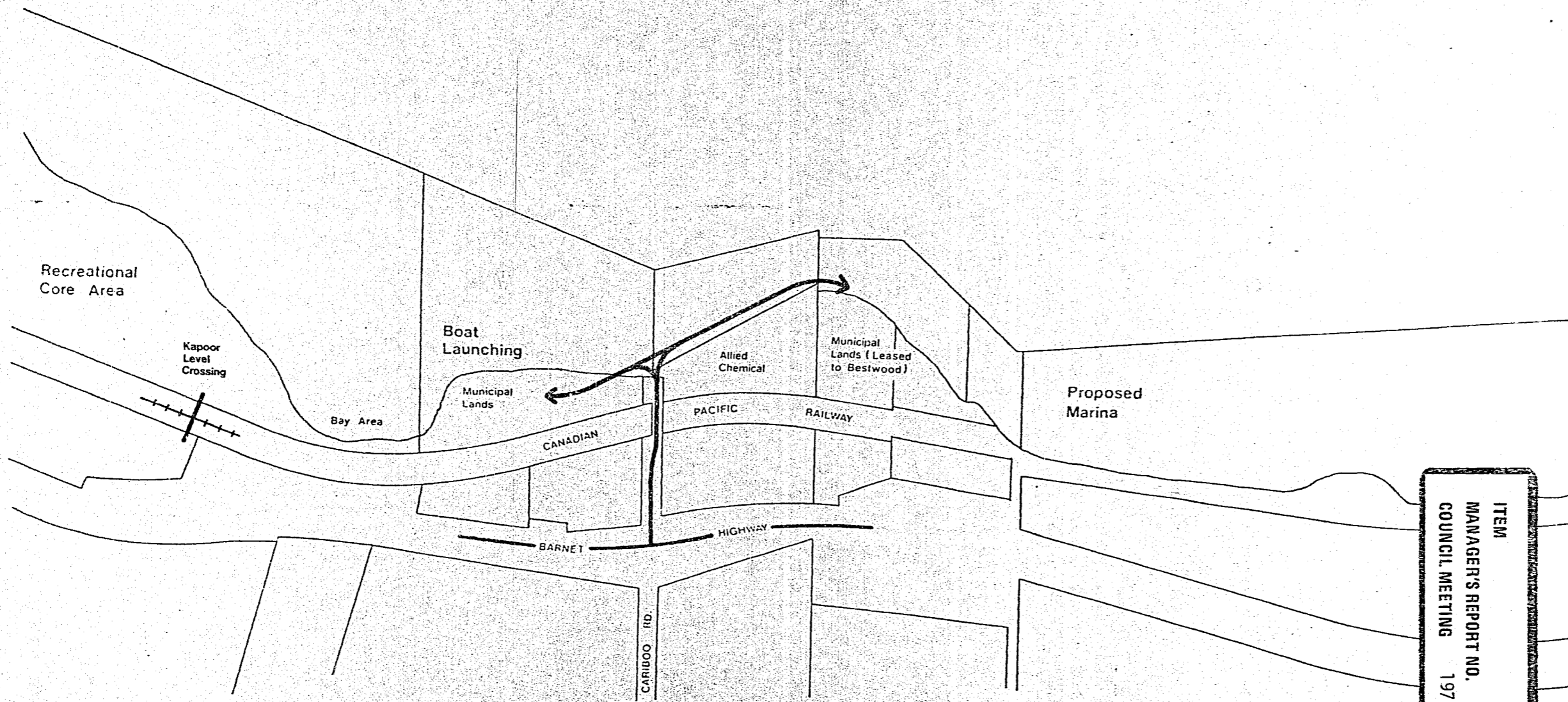


**ACCESS PROPOSAL TO BOAT
LAUNCHING AND MARINA FACILITIES**

Alternative 'A'

141
Scale: 1" = 400'

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28



**ACCESS PROPOSAL TO BOAT
LAUNCHING AND MARINA FACILITIES**

Alternative 'B'

Scale: 1" = 400'

ITEM	4
MANAGER'S REPORT NO.	40
COUNCIL MEETING	1979 05 28