

TO: CITY MANAGER 2002 January 30

FROM: DIRECTOR PLANNING & BUILDING

SUBJECT: **REZONING REFERENCE #99-42**
Reconfiguration of the Intersection of Cameron and Beaverbrook

PURPOSE: To advise Council on two options for the reconfiguration of the intersection of Cameron and Beaverbrook and to recommend that they be forwarded to the Traffic and Transportation Committee (Transportation and Transit Division) for more detailed analysis and reporting back to Council.

RECOMMENDATION:

1. **THAT** Council approve Alternatives 1 and 2 as shown on *Figures 3 and 4* for the reconfiguration of the intersection of Cameron and Beaverbrook being forwarded to the Traffic and Transportation Committee (Transportation and Transit Division) for a more detailed comparative review and a subsequent report to Council.

REPORT

1.0 INTRODUCTION

At its regular meeting of 2002 January 07, Council considered a report from the Planning and Building Department recommending First Reading be given to Rezoning Reference #99-42 to permit the construction of a townhouse development in the triangular area bounded by Noel Drive, Beaverbrook Drive and Cameron Avenue. A servicing requirement of the development involves the construction of a cul-de-sac on Cameron west of the intersection with Beaverbrook as shown in Figure 1 (*attached*). Arising out of the discussion on the rezoning, Council directed staff to report on the feasibility and advisability of the proposed cul-de-sac on Cameron and to examine alternatives to the proposed closure. This issue was also raised at the Public Hearing for the subject rezoning.

This report provides a preliminary response to Council's direction.

2.0 CURRENT PLAN

The current servicing requirements for the proposed townhouse development (Rezoning #99-42) include the intersection of Cameron and Beaverbrook being reconfigured as defined in the Loughheed Town Centre Plan as shown in Figures 1 and 2 (*attached*). This configuration involves the proposed realignment of Beaverbrook and the closure of Cameron west of

Beaverbrook as part of the Lougheed Town Centre Plan to reduce commuter traffic on Cameron, decrease traffic congestion in the Cameron/Noel/Beaverbrook triangle and improve access within the Town Centre area.

The Lougheed Advisory Committee, which was formed to help prepare the Lougheed Town Centre Plan for consideration by Council, endorsed a two-part approach to address the problem of commuter “rat running” through the area. This problem was primarily related to commuters using Bell and Cameron as a by-pass route to Austin and North Road. The first approach related to proposed road improvements on routes such as Lougheed, Gaglardi Way, and Austin to encourage commuter traffic to stay on these designated arterial routes. The second involved discouraging traffic from using Cameron by making the commuter route from Bell to Cameron less convenient and somewhat more circuitous by closing Cameron west of Beaverbrook.

The realignment of the Beaverbrook “sweep” to Cameron and its construction to a four-lane standard was designed to help provide a continuous collector road of sufficient capacity to meet current and future needs for access within the Town Centre area. Cameron, east of Beaverbrook, has been designated as a Major Collector - Primary in the Burnaby Transportation Plan which provides for its development to a 14 m standard pavement surface accommodating four travel lanes. The provision of a four-lane standard on the section of Cameron between Beaverbrook and the driveway access to the Library was to allow traffic to move more smoothly through the Town Centre area, while not specifically accommodating the Bell to Cameron to North Road movement. Under the current road reconfiguration proposal, a pedestrian activated traffic signal would enable the urban trail/pedestrian crossing of Beaverbrook at Cameron.

When the Lougheed Town Centre Plan was prepared with extensive public input and subsequently adopted, the more limited access for residents particularly in the Bell and Cameron area was recognized (this proposal was included in a substantial summary of the proposed Lougheed Town Centre Plan forwarded to every residence and business within the area) and viewed as acceptable relative to the objective of eliminating commuter traffic on Cameron west of Beaverbrook.

3.0 INTERSECTION OPTIONS

Staff have undertaken a preliminary review of a number of possible intersection alternatives and are of the opinion that keeping Cameron at Beaverbrook open has merit in terms of neighbourhood, access and capacity issues. As a result of our review, there are two alternatives that staff believe have merit and warrant further consideration in relation to their respective benefits. These are shown on the attached Figures 3 and 4 respectively.

3.1 **Alternative 1:**
Signalized Cameron/Beaverbrook Intersection with Beaverbrook Realignment

As shown in Figure 3 (*attached*), this option would allow full movements from Cameron (west of Beaverbrook) by providing a signalized intersection, with Cameron entering Beaverbrook with a right angle configuration. The crossing of the urban trail and pedestrian movements across the intersection is readily handled by this traffic light controlled intersection.

The issue of dissuading the identified Bell to Cameron commuter bypass traffic would be addressed by placing a priority on the Beaverbrook “green” time at the expense of the Cameron right-of-way through the intersection.

This alternative addresses better the existing and anticipated traffic flows in the area and positions Cameron to a more secondary status relative to Beaverbrook.

Under this option, the access to the townhouse development would likely continue to be located at Noel Drive rather than Cameron (west of Beaverbrook) as traffic volumes and queues on Noel Drive would be lower than on Cameron.

3.2 **Alternative 2:**
Signalized Cameron/Beaverbrook Intersection With No Beaverbrook Realignment

Figure 4 (*attached*) shows the upgrading of the existing intersection to accommodate four lanes on Beaverbrook and four lanes on Cameron with full signalization. As the current T intersection configuration would be maintained, the two major movements would require 90 degree left and right turns and include dual left turn lanes from Beaverbrook to Cameron eastbound.

Alternative 2 would have less road right-of-way requirements from the adjacent park area given the greater use of the existing intersection configuration. It would require the same road right-of-way dedication for the Cameron Street widening as in the case of Alternative 1 and the current proposal.

Alternative 2 would also result in a greater constraint on traffic proceeding across the Beaverbrook intersection from Cameron as “straight through on red” movements would not be possible given the full stop nature of the intersection configuration on Cameron at Beaverbrook. While constraining traffic movements and overall capacity through the intersection, this right angle option does likely provide more opportunity to have greater breaks in the traffic flows on Cameron east of Beaverbrook. The 90 degree turns required at the intersection for the major flows would reduce speeds in the area, but at the same time raise issues concerning safety and the impact on longer term capacity through the intersection.

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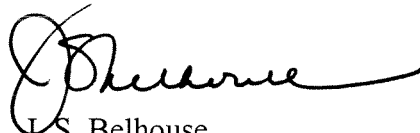
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Under this option, access to the proposed townhouse development would also likely continue to be located off of Noel Drive.

4.0 CONCLUSION

The Lougheed Town Centre Plan incorporated a configuration for the intersection of Cameron and Beaverbrook which included the closure of Cameron west of Beaverbrook to reduce commuter traffic through the town centre and the realignment of Beaverbrook to Cameron to eliminate the stop sign controlled T- intersection which is a capacity impediment to local access within the town centre and the future growth of the town centre.

The closure of Cameron as has been proposed in the Lougheed Town Centre Plan would to some degree be a deterrent to those looking to use Bell and Cameron as a bypass to the Austin/North Road intersection congestion during the evening rush hour period. However, it is also agreed that the introduction of such a closure would place additional pressures on Noel Drive and the Noel/Beaverbrook intersection that would affect access to and from that intersection. This situation is even more focused given the total restriction of access to and from the Sullivan Heights area through this intersection as a result of the existing road closures to and from the adjacent North Road and Broadway arterials. As a result of the reassessment of the current proposal, staff agree that retention of a Cameron connection to Beaverbrook would be advisable from an overall neighbourhood perspective. The selection of a preferred alternative needs to be based on a more detailed analysis of the two options identified examining factors such as existing and projected traffic movements, access to the town centre for local residents, commuter through traffic and neighbourhood impact. It is recommended that a more detailed comparative analysis on the alternatives be prepared for the Traffic and Transportation Committee (Transportation and Transit Division) for subsequent consideration by Council.



J. S. Belhouse
Director Planning and Building

JSB:BLS:hr
Attachments

cc: Director Engineering

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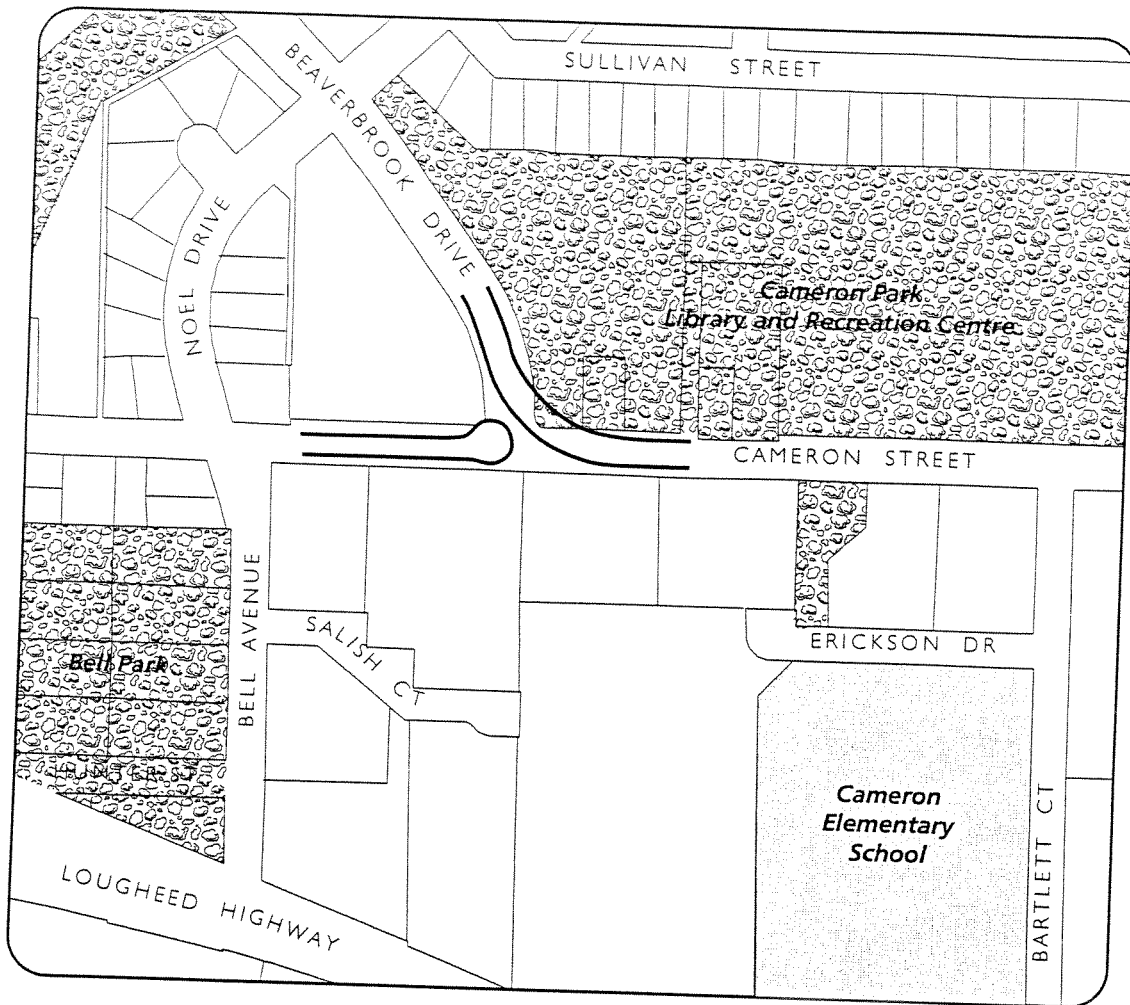


Figure 1
Current Plan:
Beaverbrook realignment / Cameron closure



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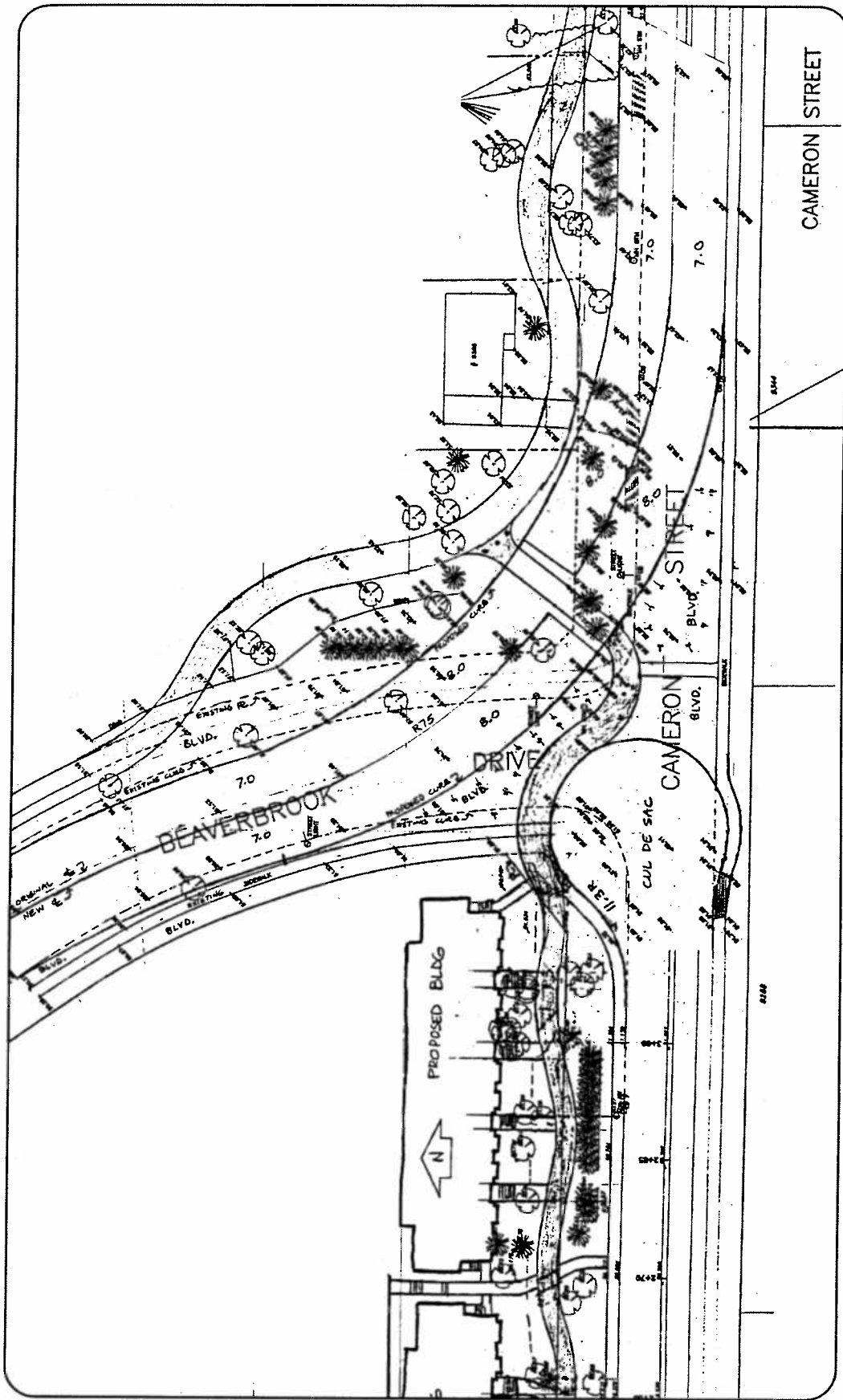
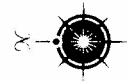


Figure 2
Current Plan
Beaverbrook realignment
Cameron closure



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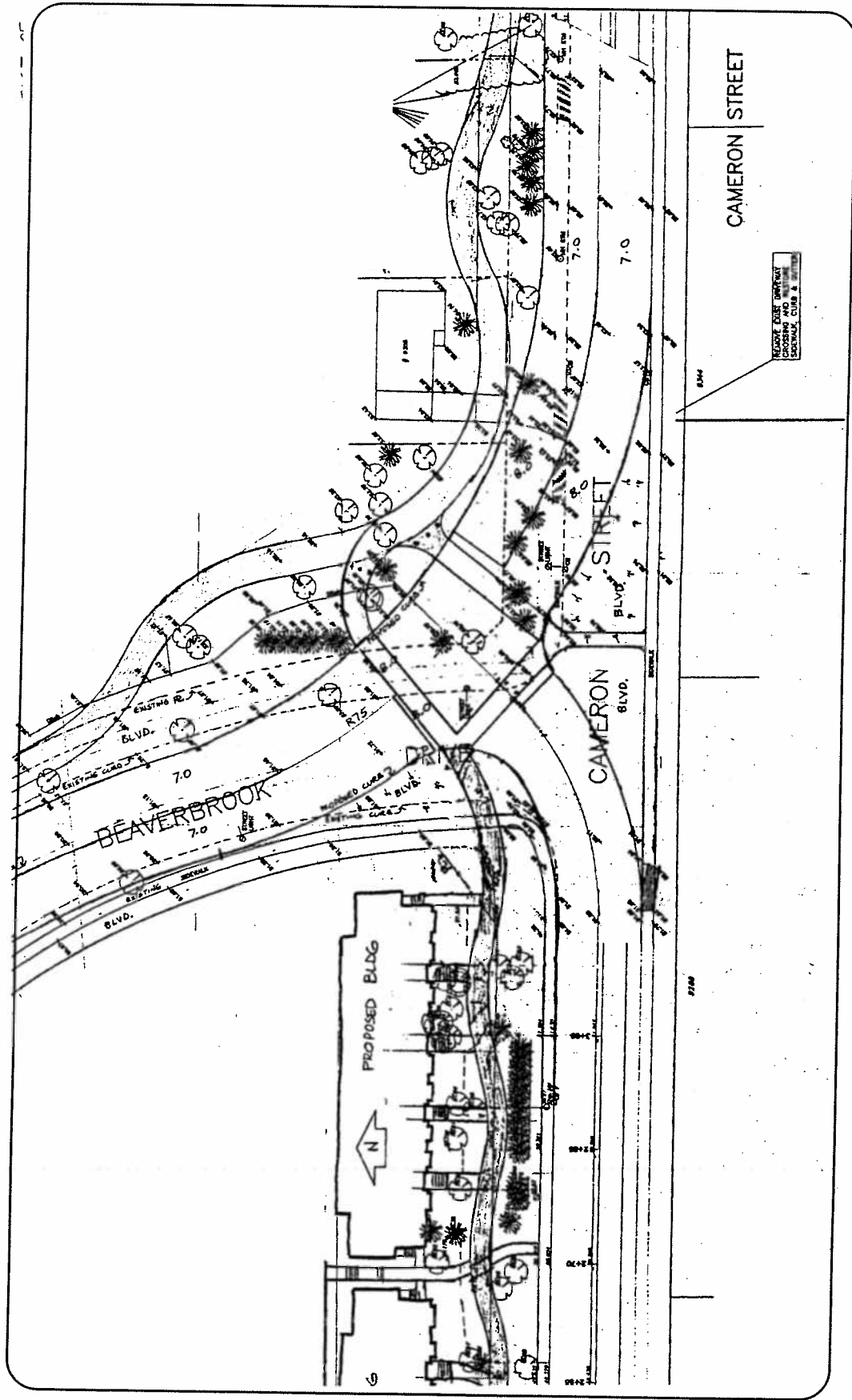
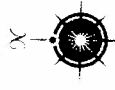


Figure 3
Option 1

Beaverbrook realignment
Cameron full movement



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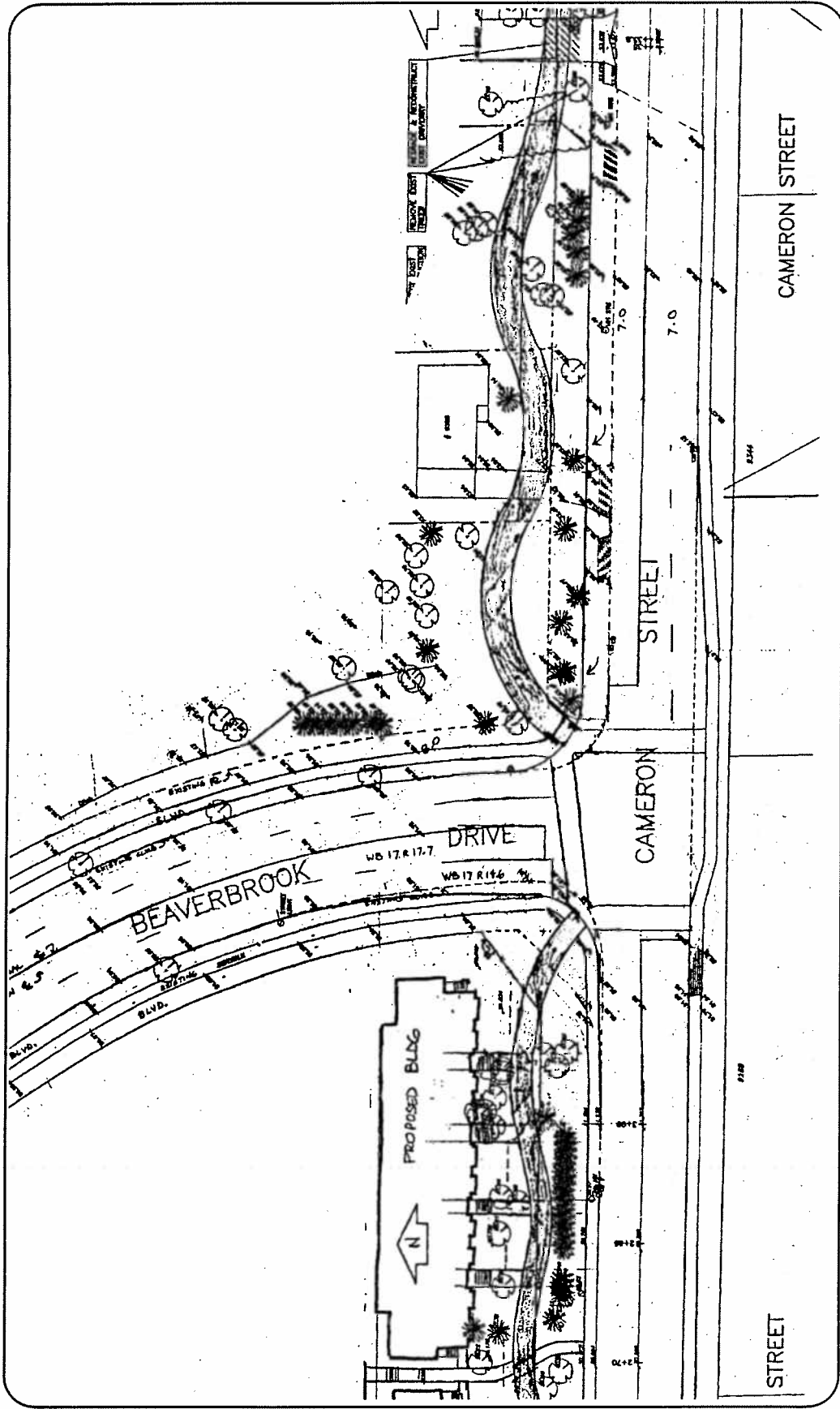
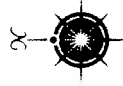


Figure 4
Option 2
Upgrade existing intersection
Cameron full movement



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