

REPORT
Regular Council Meeting
1984 March 05

File: 1763

THE CORPORATION OF THE DISTRICT OF BURNABY

TRANSPORTATION COMMITTEE

HIS WORSHIP, THE MAYOR
AND MEMBERS OF COUNCIL

Madam/Gentlemen:

REPORT OF THE TRANSPORTATION COMMITTEE

A. Central Area Transportation Planning
Study Staff Review Report

Recommendations:

- (1) THAT Council approve in principle the road network concept recommended on Figure 6 of Item 17, Municipal Manager's Report No. 50, 1983 July 25.
- (2) THAT staff submit a report to the Transportation Committee providing the order of sequence for the proposed implementation of the Central Area Transportation Planning Study.

REPORT

A memorandum dated 1983 September 14 was received from the Municipal Clerk advising that Council, at the regular Council meeting held on 1983 September 12 received the Central Area Transportation Planning Study Staff Review Report and adopted the following recommendations, AS AMENDED:

1. THAT Council forward this report to the Parks & Recreation Commission, the Heritage Village Museum Board and the Transportation Committee for their consideration and comments of the proposed road plan illustrated on Figure 6 and of the proposed staged Implementation Approach.
2. THAT following receipt of comments of the various groups in (1.) above, a further staff report be prepared addressing the recommendations and implementation approach outlined in this report for the consideration of Council.

This item of correspondence was received and TABLED at the Transportation Committee meeting held on 1983 September 20.

The Transportation Committee, at its meeting held on 1984 February 23 lifted the Central Area Transportation Planning Study Staff Review Report from the table and as a result of their consideration respecting this matter, the abovenoted recommendations are submitted.

For Council's information, attached as APPENDIX I is a copy of "Figure 6" from Item 17, Municipal Manager's Report No. 50, 1983 July 25 - "Central Area Transportation Planning Study Staff Review Report" as referred to in recommendation (1) of this report.

B. Extension of 16th Avenue to Cariboo Road

Recommendation:

- (1) THAT Council consider the option of extending 16th Avenue to Cariboo Road as a major collector in the context of the review of the proposed Development Plan for the Cariboo Lands and within the scope of the adopted Conceptual Transportation Plan.

!:- AGENDA 1984 MARCH 05
!:- COPY - MANAGER

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A memorandum dated 1983 November 03 was received from the Municipal Clerk advising that Council, at the regular Council meeting held on 1983 October 31 received Item 3, Municipal Manager's Report No. 65, 1983 October 31 regarding the matter of traffic implications of the George Derby Long Term Care Facility, and arising out of Council's consideration respecting this matter, the following motion was adopted:

"THAT this Item with particular reference to the following paragraph contained in the report;

'Sixteenth Avenue east of Cumberland is presently developed to an interim 20 foot wide pavement standard terminating at the Cariboo Hill School. It is proposed that, as part of the rezoning, Sixteenth Avenue be improved to a 36 foot curb-to-curb standard to the entrance/exit point of the new facility. To reflect the Conceptual Transportation Plan, Sixteenth Avenue will not connect to Coldicutt Street or extend east of it,'

be referred to the Transportation Committee."

A report dated 1984 February 07 was received from the Director Planning and Building Inspection regarding the extension of 16th Avenue to Cariboo Road, the contents of which are contained hereunder:

"RECOMMENDATION:

1. THAT Council consider the option of extending 16th Avenue to Cariboo Road as a major collector in the context of the review of the proposed Development Plan for the Cariboo Lands.

1.0 INTRODUCTION/SUMMARY

At its meeting of 1983 October 31 Council considered a staff report on the 'Traffic Implications of the George Derby Long Term Care Facility' (Manager's Report No. 65, Item 3) and referred it to the Transportation Committee for its consideration. It is our understanding that Council was concerned that access to the George Derby site would be drawn solely from 16th Avenue which would be terminated by a cul-de-sac east of Endersby. There was some discussion as to whether there was merit in extending 16th Avenue to Cariboo Road.

Council has since received a report on the 'Proposed Development Plan - Cariboo Study Area' (1984 January 16, Manager's Report No. 4, Item 12). In its consideration Council again discussed the possibility of extending 16th through to Cariboo Road. It should be noted that the land use and road layout proposed in the Cariboo Study Area Plan does not necessarily preclude the extension of 16th to Cariboo (See APPENDIX II attached).

Neither of the reports referred to above however proposed the extension of 16th to Cariboo because such a route would function as a major collector and hence not conform to the adopted Transportation Plan. It is clear that if such a new road link is implemented there will be a substantial transfer of traffic to it from Armstrong Avenue. The directness of the new link may also attract a through component of traffic that presently uses Cariboo and 10th Avenue. However the through traffic on Cariboo will substantially decrease with the implementation of the Stormont/Newcombe/McBride connector.

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The pros and cons for both options are discussed below and it is our conclusion that the possibility of extending 16th to Cariboo Road has sufficient merit to warrant its further consideration in the context of the review of the proposed Development Plan for the Cariboo Lands.

2.0 STATUS QUO

The primary advantage of maintaining the existing travel/street pattern in this area is that it has some acceptance by area residents. It also conforms to the Conceptual Transportation Plan. The circuitous nature of the existing major collector link via 16th, Cumberland and Armstrong is perceived as an actual impediment to through traffic movement between Cariboo Road and 6th Street.

The possible extension of 16th to Cariboo Road will influence traffic patterns in two neighbourhoods: Cariboo/Armstrong and Second Street (Planning Study Areas 18 and 19 respectively). The combined population of the two neighbourhood areas is 7,000. With the development of the Cariboo lands (as outlined in Item 12, Municipal Manager's Report No. 4, 1984 January 16) the resident population will increase by up to 50%.

2.1 Second Street Neighbourhood Study

The existing Second Street neighbourhood (bounded by 10th Avenue, Newcombe Street, 10th Avenue and 6th Street) is a stable mature residential area and is not expected to change in population for the foreseeable future. The streets in this area are laid out in a regular grid pattern but the local street hierarchy has been ordered to preclude McBride/Canada Way traffic from shortcutting through the area. The existing street pattern was implemented as a result of the 'Second Street Neighbourhood Study' (1965 August report). Apart from two additional traffic diverters along 13th Avenue the street layout conforms to the 'stage one' improvements originally proposed.

Further changes to the local street layout were proposed with the implementation of the Stormont/Newcombe/McBride Connector and the eastward extension of Edmonds to this new arterial link. However the Comprehensive Transportation Plan redefined the layout of major road network elements in the area. The plan specifies that the Stormont/Newcombe/McBride link is to pass through the neighbourhood in a cut and cover tunnel, unconnected to any neighbourhood streets. The extension of Edmonds has been eliminated and the major collector link along 16th/Cumberland/Armstrong has been confirmed by the Plan.

2.2 Traffic Flows

The total weekday (24 hour) traffic flows on streets in and adjacent to the Second Street and Cariboo/Armstrong Neighbourhoods is shown in APPENDIX III attached. The proportion of 'through' traffic on major roads within the neighbourhood is not certain but available survey data confirms that the majority of peak period traffic on Cariboo Road is travelling 'through' the neighbourhood. Some of this 'through' traffic is composed of short distance trips or trips with an origin or destination immediately tributary to Cariboo Road. Not all of these trips will be diverted to the Stormont/Newcombe/McBride Connector although the majority of long distance on Cariboo will.

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The amount of commuter 'through' traffic on the Armstrong/Cumberland/16th Avenue route is not known but the volume is not considered to be significant. It is estimated that the households in this residential area currently generate up to 20,000 vehicle trips per day and accordingly the proportion of 'through' traffic on the major collector streets may not be as great as supposed from casual observations.

3.0 EXTENSION OF 16TH TO CARIBOO

The advantages of extending 16th Avenue can be regarded as disadvantages relative to maintaining the status quo and vice versa.

3.1 Advantages

There are a number of advantages to extending 16th. These include the following:

- (1) An improved environment to the residents along Armstrong as a result of decreased traffic.
- (2) A reduction in vehicle traffic and consequent 'exposure to risk' for pupils at the Armstrong Elementary School and the Private School along Armstrong.
- (3) A reduction in exposure to risk for users of Cariboo Park.
- (4) A reduction in exposure to risk at the Armstrong/Cariboo Road intersection which is currently relatively hazardous.
- (5) An operationally more flexible road pattern offering improved intra-neighbourhood accessibility. An opportunity is available in the design of the 16th Avenue extension to limit access and to provide buffering for residential uses abutting this road.
- (6) Secondary access to the George Derby development which is desirable for operational/safety reasons.

3.2 Disadvantages

The disadvantages of extending 16th to Cariboo include the following:

- (1) Increased traffic flows on 16th between Cumberland and 6th Avenue.
- (2) Increased traffic adjacent to the Cariboo Hill Junior Senior High School but the level of risk for students along 16th may be offset by the reduction of traffic on Armstrong which is at the back of the school.

4.0 CONCLUSIONS

Although the extension of 16th to Cariboo appears to have some merit the weight of benefits does not necessarily overwhelm the weight of the disbenefits. The option for continuity however should be explored in the context of the approval process for the Cariboo Development Plan and this link should explicitly be included in the review which will include public input as well as further consideration by Council and staff. If it is decided that this option should be pursued, the Transportation Plan should be amended to include the extension of 16th from

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Cumberland to Cariboo Road as a major collector and the declassification of Armstrong. The link should then be implemented in conjunction with the development of the Cariboo lands."

C. Proposed Amendment to Kingsway/Edmonds Area Plan - Griffiths Avenue/19th Street Connector (Community Plan Six)

Recommendations:

- (1) THAT Council reaffirm the Transportation Plan concept of a secondary arterial link between Kingsway and Tenth Avenue via Griffiths Avenue/19th and 20th Streets.
- (2) THAT Council support in principle the implementation of the Griffiths/19th/20th route by 1986 in accordance with the design concept outlined in this report.
- (3) THAT Council give favourable consideration to the recommendations set out in Item 7, Municipal Manager's Report No. 59, 1983 October 03 as contained hereunder:
 - (1) THAT Council approve the Griffiths/19th Street alignment.
 - (2) THAT Council approve the amendment to the Kingsway/Edmonds Area Plan (Community Plan Six).
 - (3) THAT Council authorize staff to initiate negotiation with B.C. Hydro with regard to use of the unused B.C. Hydro right-of-way east of Griffiths Avenue for park purposes.
 - (4) THAT Council approve the proposed changes to Powerhouse Park in the Park Acquisition Program as approved by the Parks and Recreation Commission.
- (4) THAT Council classify Rumble between Gilley and the 19th/Griffiths route as a local collector in the Conceptual Transportation Plan.

A memorandum dated 1983 October 05 was received from the Municipal Clerk advising that Council, at the regular Council meeting held on 1983 October 03, received Item 7, Municipal Manager's Report No. 59, 1983 October 03 regarding the subject of a proposed amendment to the Kingsway/Edmonds Area Plan - Griffiths Avenue/19th Street Connector (Community Plan Six), and arising out of Council's consideration respecting this matter, the following motion was adopted:

"THAT Item 7, Municipal Manager's Report No. 59, 1983 October 03, be referred to the Transportation Committee along with the points raised by Council during consideration of this matter."

A report dated 1984 February 14 was received from the Director Planning and Building Inspection regarding the Griffiths Avenue/19th Street Connector, the contents of which are contained hereunder:

"RECOMMENDATIONS:

1. THAT Council reaffirm the Transportation Plan concept of a secondary arterial link between Kingsway and Tenth Avenue via Griffiths Avenue/19th and 20th Streets.
2. THAT Council support in principle the implementation of the Griffiths/19th/20th route by 1986 in accordance with the design concept outlined in this report
3. THAT Council give favourable consideration to the recommendations set out in Item 7, Manager's Report No. 59 considered by Council at its meeting of 1983 October 03.

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4. THAT Council classify Rumble between Gilley and the 19th/Griffiths route as a major collector in the Conceptual Transportation Plan.

1.0 INTRODUCTION/SUMMARY

At its meeting of 1983 October 03 Council considered a report on the Griffiths Avenue/19th Street Connector and proposed amendments to the Kingsway/Edmonds Area Plan (Community Plan 6) which reflected the realignment of the streets in the vicinity of Griffiths, Rumble and 19th. Council referred the report to the Transportation Committee because of concern that the Griffiths/19th/20th secondary arterial concept shown in the Conceptual Transportation Plan might direct extraneous traffic to the residential area north of Kingsway.

This report reviews the Transportation Plan concept and the detail of the proposed design. Our conclusion is that the route concept and proposed design are appropriate and warrant early implementation given the approaching completion of the A.L.R.T. system (the Edmonds station) and the Annacis Crossing. The available evidence suggests that development of the Griffiths/19th/20th secondary arterial link will not direct through traffic into the residential area north of Kingsway but will complement neighbourhood accessibility via existing major and local residential collectors.

2.0 TRANSPORTATION PLAN CONCEPT

The Griffiths/19th/20th Street link was included in the Comprehensive Transportation Plan by the Transportation Committee and as a result is considering a number of inter-related issues. These included the following:

2.1 Annacis Crossing

The Transportation Committee foresaw a need for a semi-direct northern link between the Queensborough Bridgehead and Kingsway if the Annacis System were developed as supposed at that time. The Committee's supposition regarding the configuration of the Annacis System has been validated and although there is still some question relative to the use of 20th Street as a link from the Queensborough Bridgehead to New Westminster it is expected that Griffiths/19th/20th route in Burnaby would form part of the northward access route for Annacis traffic.

2.2 Truck Route Consideration/Edmonds Classification

The Transportation Committee as a result of its deliberations elected to classify Edmonds between 19th and Kingsway as a major residential collector. This route was to be eliminated from the truck route network upon the development of the Griffiths/19th/20th route between Kingsway and 10th Avenue as a secondary arterial.

2.3 Rumble Declassification

The 19th/20th route is currently aligned to direct northbound traffic to Rumble westbound. The Transportation Committee was concerned by the present level of through traffic on Rumble and saw the realignment of 19th/20th route to Kingsway via Griffiths as part of a solution for reducing traffic on Rumble. Additionally the Committee proposed in the Comprehensive Transportation

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Plan Implementation Strategy that the segment of Rumble east of Gilley be deleted from the major road network possible by closure. The closure of Rumble however would seriously impair access from the South Slope to the Edmonds A.L.R.T. station.

3.0 PROPOSED DESIGN CONCEPT

The design concept for the Griffiths/19th/20th route and related issues is shown in APPENDIX IV attached. The related design issues are annotated on this plan and discussed below. APPENDIX V attached shows a forecast (1996) of traffic flow on the 19th/20th/Griffiths route as derived from G.V.R.D. transportation model projections.* The model projections indicate that the level of demand for travel on the proposed route decline (as would be expected) with distance from the Queensborough Bridgehead. It is worth noting that the traffic volumes on Griffiths north of Kingsway are accounted for solely by trip generation and attraction in the traffic zone that includes the residential area north of Kingsway. The transportation model does not predict any through traffic on the residential collectors in this neighbourhood. The following factors are pertinent to the design of the Griffiths/19th/20th route.

3.1 Griffiths North of Kingsway

Griffiths between Kingsway and Imperial is a local collector built to an interim pavement standard. Apart from commercial development on the corners of Kingsway this length of Griffiths is flanked by three storey walk-up apartments and nine single family residences. Expansion of the apartment area in conformance with the Kingsway/Edmonds Community Plan will reduce the number of single family residences flanking the street to three. North of Imperial, Griffiths is built to a finished local residential standard with a cul-de-sac at Stanley/Walker to preclude northward through movement. Accordingly traffic entering or exiting the residential area north of Kingsway via Griffiths would use Imperial for intra-neighbourhood distribution.

If the Griffiths route did not have through continuity northward to Imperial then Kingsway would have to perform the neighbourhood traffic distribution function with consequent detrimental effects on its operational efficiency as a primary arterial.

3.2 Griffiths/19th Connector

The Council report referred to the Transportation Committee specifically deals with this segment of the route. The alignment recommended reflects the functional designation of Griffiths/19th/20th as a secondary arterial and truck route. The basic plan and profile alternatives are constrained by Edmonds, Beresford and Prenter, the Rumble rail level crossing and A.L.R.T. column placement. The plan and profile of the proposed connector are shown on APPENDIX VI attached.

* These traffic volumes must be interpreted with some caution since the computer model in its present state of development is considered to be relatively imprecise in its ability to predict traffic volumes on individual road links (although it does perform relatively accurately on a network aggregate basis).

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3.3 Rumble

The Comprehensive Transportation Plan excludes the section of Rumble between Griffiths and Gilley in the major collector road network. The intent of the Plan was to de-emphasize the current 'arterial' function of Rumble. The Transportation Plan Implementation Strategy suggests the closure of Rumble in this section subsequent to the construction of the Marine Way/10th Connector. However it is our conclusion that Rumble should not be closed because it provides sole convenient access route to the A.L.R.T. station at Edmonds for South Slope residents travelling by private car (for kiss-and-ride) or bus. On this basis we have specified that ALRT column placement allow for continued use and improvement of Rumble.

Additionally the reconfiguration of the road layout proposed in the Griffiths/19th connector plan should discourage through traffic on Rumble. This plan shows the alignment of Rumble east of the A.L.R.T./BCHR crossing pushed northward so as to optimize junction layout and to maximize the separation between Rumble and Edmonds junctions.

Given the need to maintain the continuity of Rumble between Griffiths and Gilley it would seem to be reasonable to reintroduce this link into the Comprehensive Transportation Plan as a major collector.

3.4 Edmonds A.L.R.T. Station

The Griffiths/19th/20th route offers primary access to the Edmonds A.L.R.T. station via 18th Avenue. The station will have a major bus interchange, a public access cul-de-sac and an adjacent facility for kiss-and-ride waiting. The Griffiths/19th/20th route with proposed connections maximizes the accessibility to the station by bus and car.

3.5 Neighbourhood Protection

With the advent of A.L.R.T. there is some potential for commuter traffic intruding into the residential area bounded by Edmonds, 19th Street, 15th Avenue and Kingsway (See APPENDIX VII attached). To protect this neighbourhood and to maximize the through function of the 19th/20th Street route it is proposed that 18th, 17th, 16th Avenues be closed east of 19th Street. Staff are also considering options for closing Stride east of 19th and intend to discuss the possibilities with area residents' groups(s) prior to a further report to Council. It is further proposed that the residential area be buffered from 19th by a landscaped berm. Pedestrian access to the station from the neighbourhood would be provided at 18th Avenue where there would be a crosswalk and possible demand actuated signal control on 19th Street to facilitate pedestrian movement and bus access to the A.L.R.T. interchange.

4.0 CONCLUSIONS

As a result of our review of the 19th/20th/Griffiths secondary arterial concept we believe that it should be developed in accordance with the Comprehensive Transportation Plan.

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North of Kingsway, Griffiths should have its continuity maintained to Imperial and be constructed to a residential collector standard. The Griffiths/19th connector should be constructed in accordance with the design concept recommended to enable the route to function adequately as a secondary arterial. Rumble west of Griffiths should be reintroduced into the network as a major collector because of its importance in providing accessibility to the A.L.R.T. for the South Slope residents.

The proposed project has immediate importance given the advanced state of construction of the A.L.R.T. and the implementation of the Annacis System. As a consequence it is proposed that the improvements outlined in this report be completed before 1986. The schedule of major road projects in the 1984-88 Capital budget reflects this target date. Ministry of Transportation and Highways staff have indicated that this route would have a high priority as a Revenue Sharing project although they cannot assure availability of funds."

D. Halifax Street - Sperlign To Phillips Avenues

Recommendation:

1. THAT Council adopt the recommendations made by the Director Engineering to the Traffic Safety Committee, as amended by the Transportation Committee, viz

- (1) THAT Halifax Street remain as a major collector as designated in the Conceptual Transportation Plan through the placement of stop signs on

- a) Yeovil Avenue
- b) Moore Avenue
- c) Cliff Avenue
- d) Blaine Avenue
- e) Sherlock Avenue
- f) Pepperidge Court
- g) Augusta Avenue

- (2) THAT six months after the installation of the stop at the Cliff Avenue intersection, the two stops on Halifax Street be removed.
- (3) THAT Mr. A. Dalkin of 1891 Cliff Avenue, Burnaby, B.C. be sent a copy of this report.

REPORT

A memorandum dated 1983 November 07 was received from the Municipal Clerk advising that Council, at the regular Council meeting held on 1983 October 31 received a report from the Traffic Safety Committee concerning a request for the reversal of the existing stop signs at the intersection of Cliff Avenue and Halifax Street, and arising out of Council's consideration respecting this matter, the following motion was adopted:

"THAT Item 3, Traffic Safety Committee Report, 1983 October 31 regarding Halifax Street from Sperlign to Phillips Avenues be referred to the Transportation Committee."

A report dated 1984 February 14 was received from the Director Planning and Building Inspection regarding Halifax Street from Sperlign to Phillips Avenue, the contents of which are contained hereunder:

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"RECOMMENDATION:

1. THAT Council adopt the recommendations made by the Director Engineering to the Traffic Safety Committee, viz

1) THAT Halifax Street be designated as a major collector residential street through the placement of stop signs on

- a) Yeovil Avenue
- b) Moore Avenue
- c) Cliff Avenue
- d) Blaine Avenue
- e) Sherlock Avenue
- f) Pepperidge Court
- g) Augusta Avenue

2) THAT six months after the installation of the stop at the Cliff Avenue intersection, the two stops on Halifax Street be removed.

3) THAT Mr. A. Dalkin of 1891 Cliff Avenue, Burnaby, B.C. be sent a copy of this report.

At its meeting of 1983 October 31 Council considered a report from the Traffic Safety Committee regarding Halifax Street between Sperling and Phillips Avenues and referred it to the Transportation Committee. In response to a citizen's request the Engineering Department had proposed that Halifax Street between Sperling and Phillips Avenues be signed through priority in accordance with its Conceptual Transportation Plan designation as a major collector route.

The Comprehensive Transportation Plan Implementation Strategy (see APPENDIX VIII attached) suggests that the designation of Halifax as a major collector should occur concurrently or subsequent to the declassification of Curtis as a major east/west collector east of Sperling Avenue. The intent was that some major east/west collector preferably centrally located in the neighbourhood was a requirement and Halifax would 'substitute' for Curtis. The designation of Halifax as a major east/west collector route now in no way prejudices the Comprehensive Transportation Plan Implementation Strategy and accordingly the recommendations from the Director Engineering should be adopted."

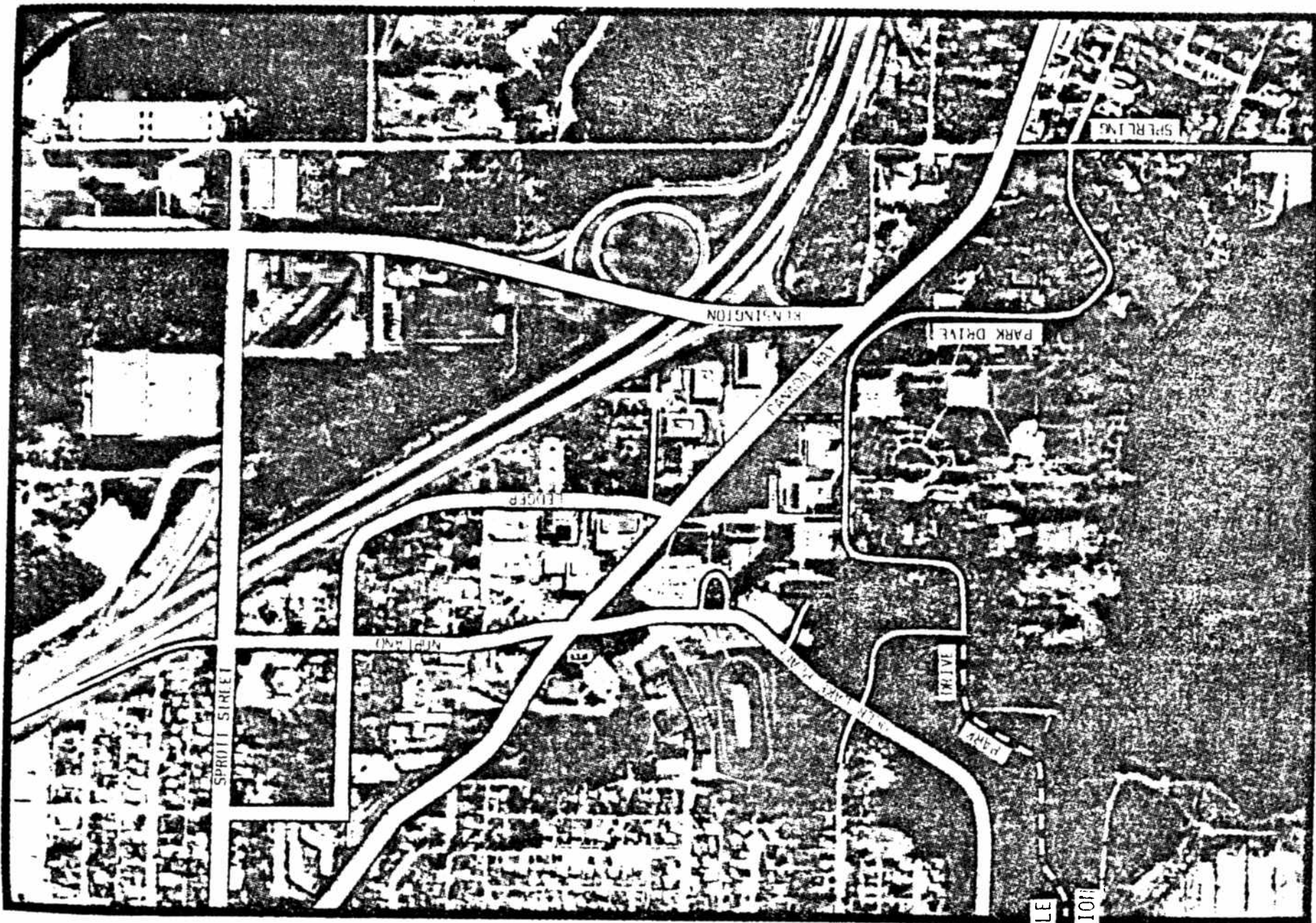
Respectfully submitted,

Alderman Egon Nikolai
Chairman

Alderman G.H.F. McLean
Member

Alderman L.A. Rankin
Member

ITEM 17
MANAGER'S REPORT NO. 50
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POSSIBLE
EXTENSION



STAFF RECOMMENDED ROAD NETWORK

FIGURE 6

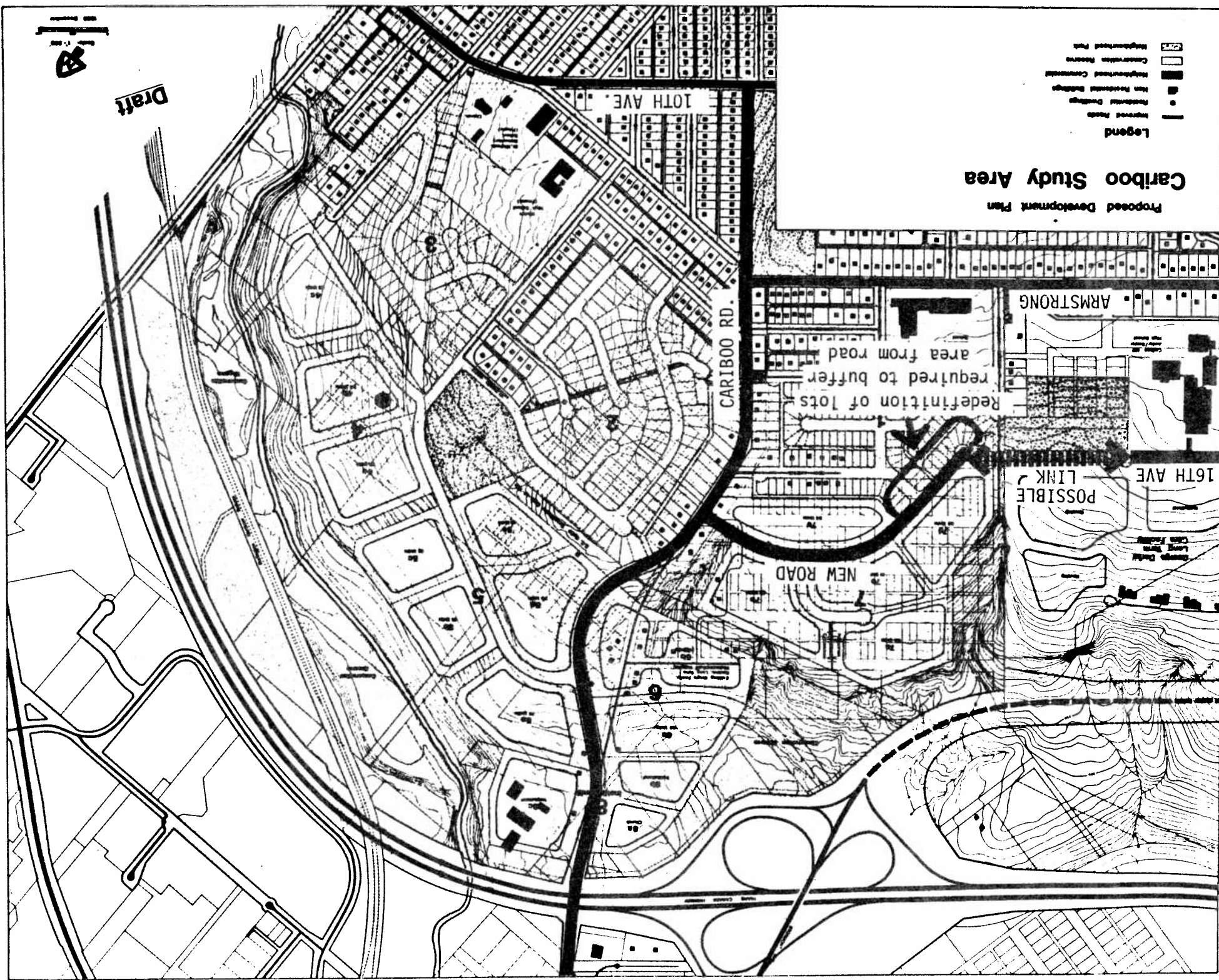


FIGURE 1 POSSIBLE EXTENSION OF 16th AVENUE TO CARIBOO ROAD

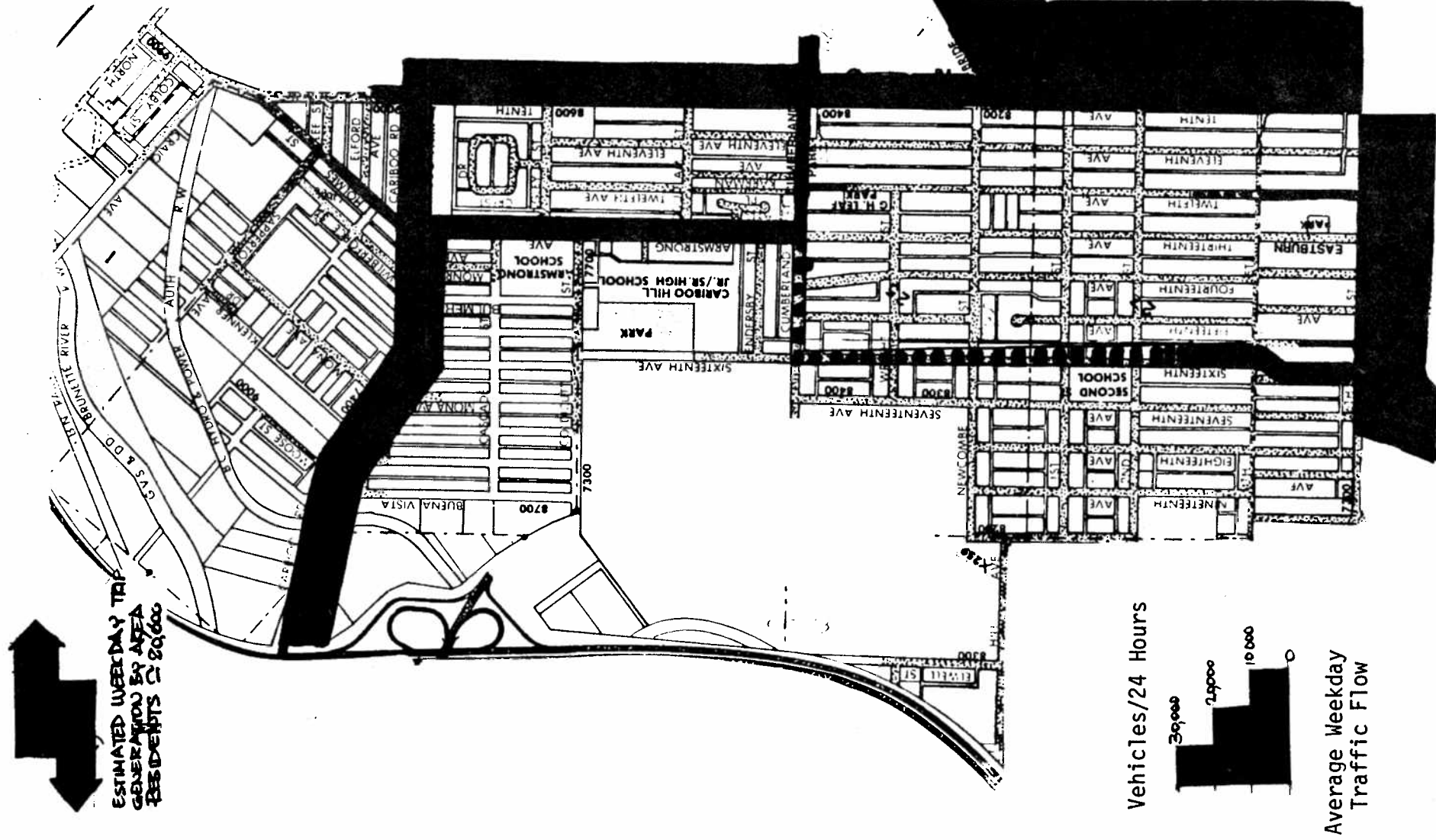


FIGURE 2 TRAFFIC FLOWS IN PLANNING STUDY AREAS 18 & 19

Source: Engineering Department Automatic Count Data

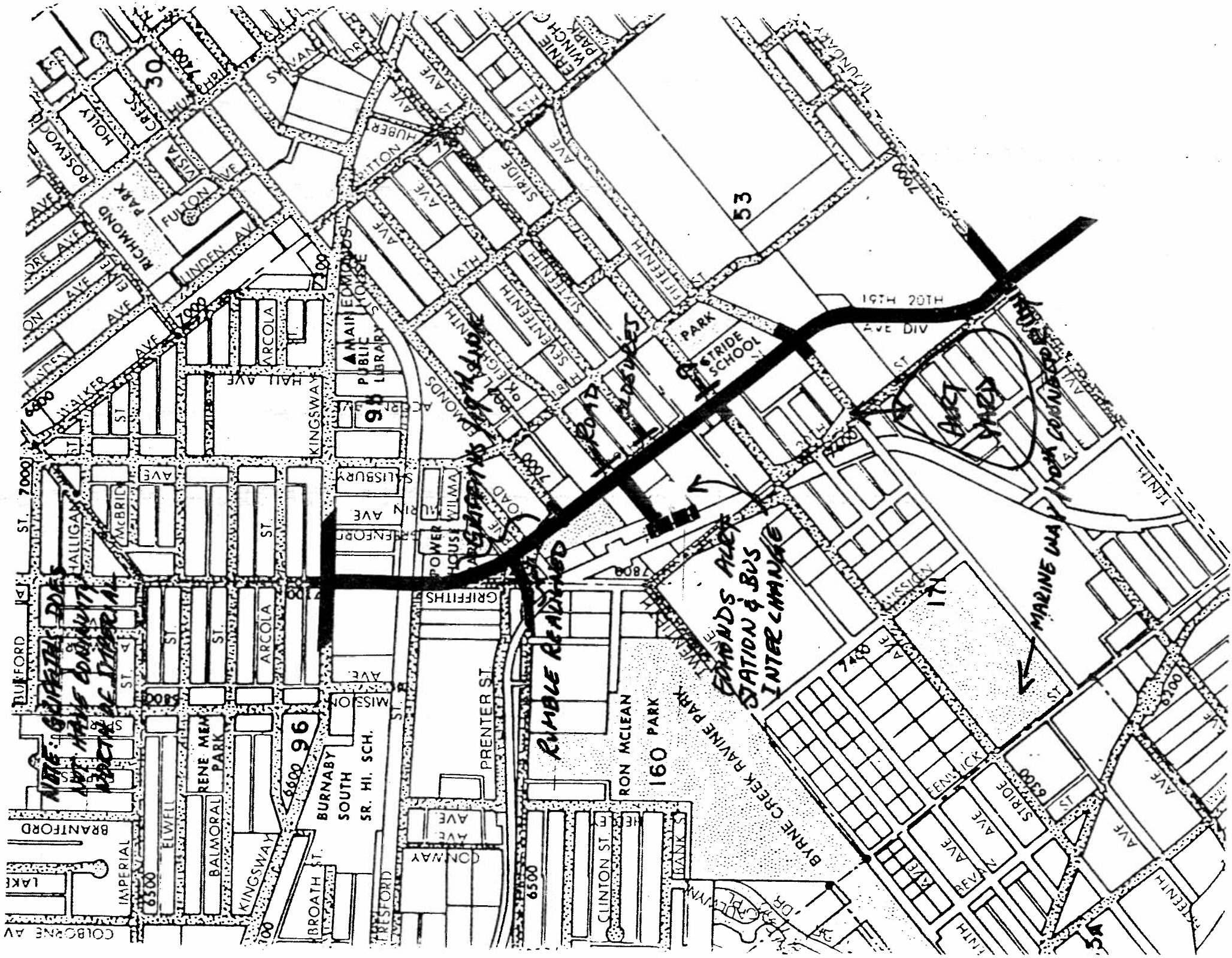
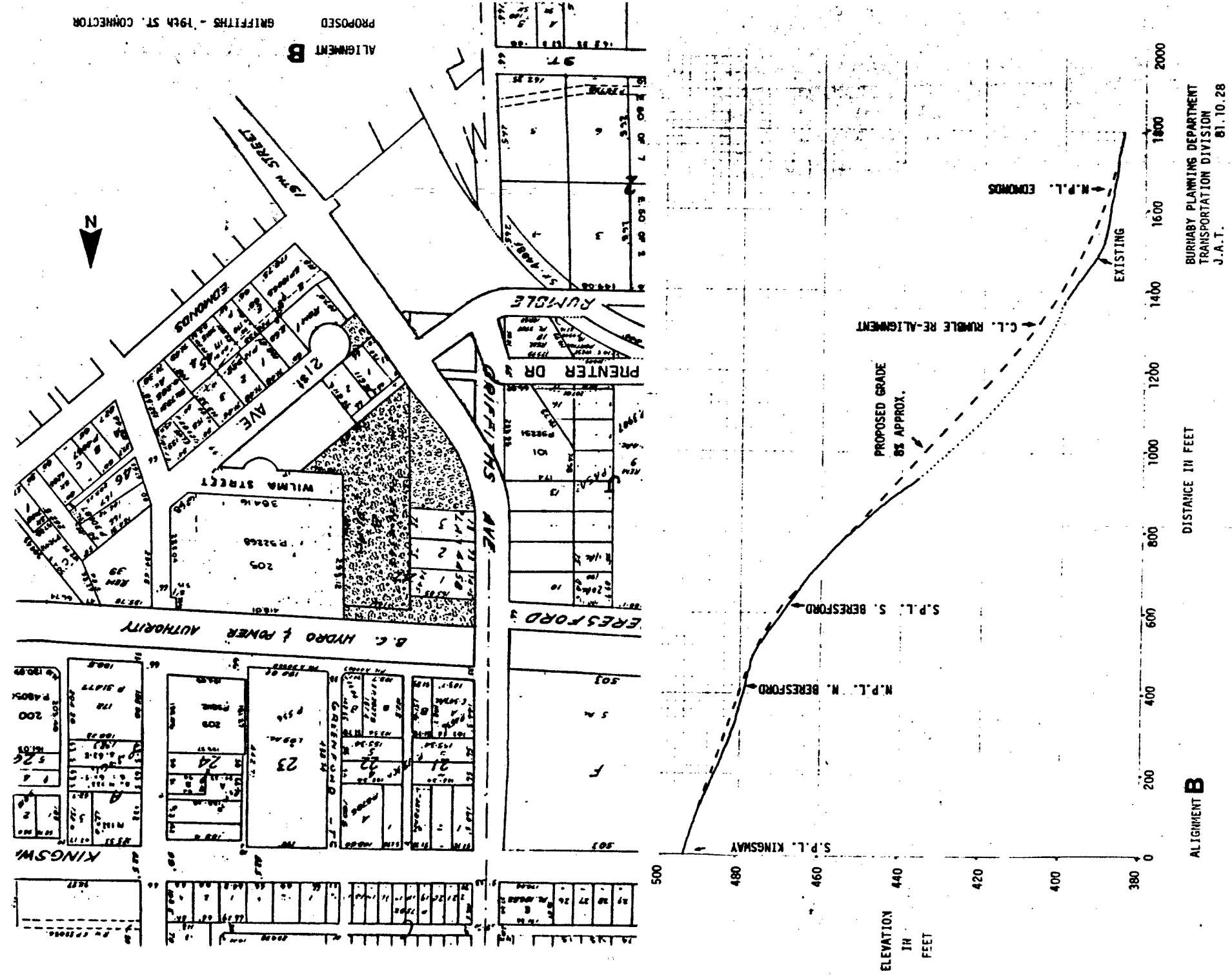


FIGURE 1 GRIFFITHS/19th/20th SECONDARY ARTERIAL DESIGN CONCEPT

APPENDIX IV

GRIPPER

100% LINE



ALIGNMENT **B**
 PROPOSED
 GRIFFITHS - 19TH ST. CONNECTOR

BURBARY PLANNING DEPARTMENT
 TRANSPORTATION DIVISION
 J.A.T. 61.10.28

FIGURE 3 PLAN AND PROFILE OF THE GRIFFITHS/19TH CONNECTOR
 (Recommended Alignment)

APPENDIX VI

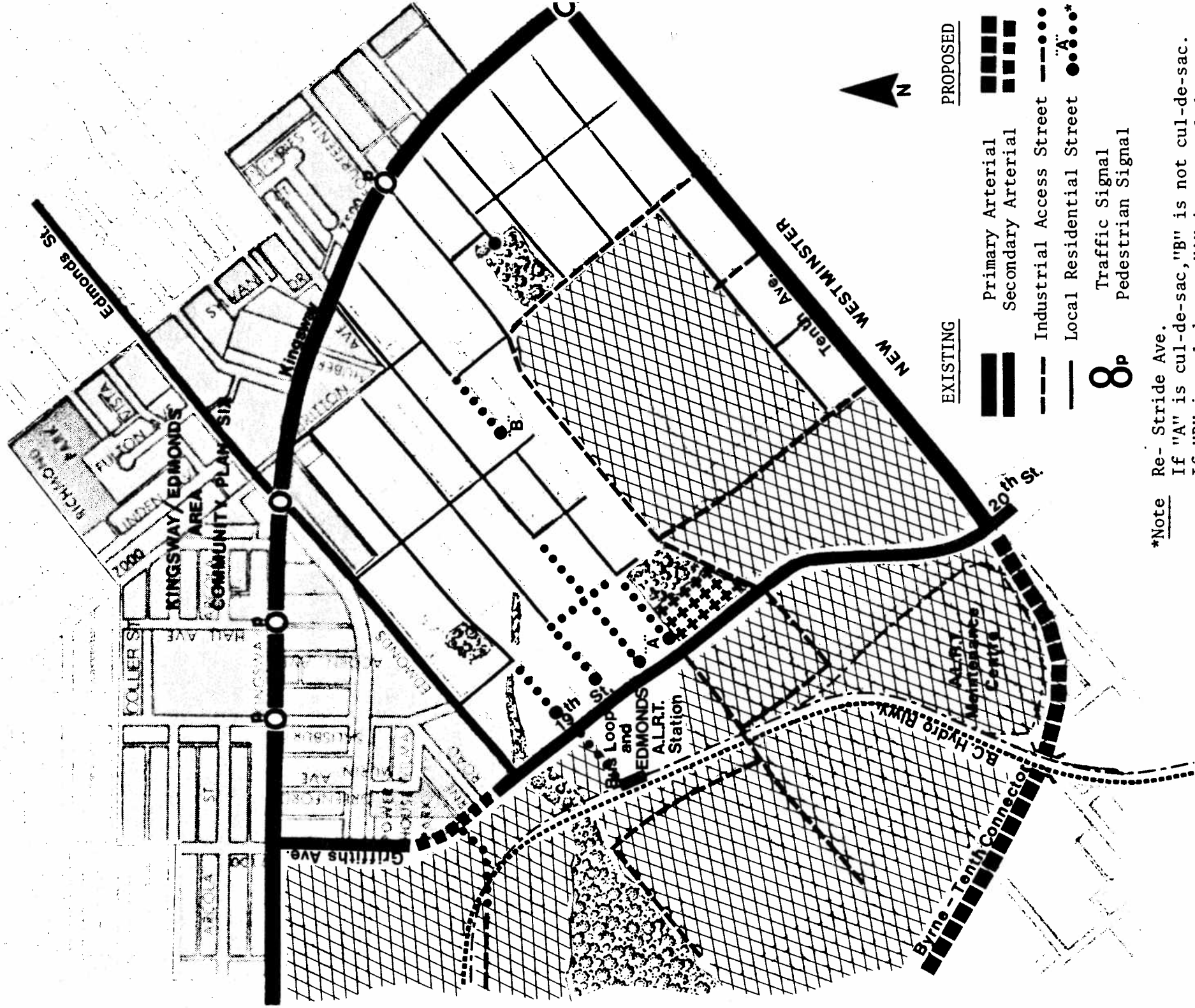


FIG. 4 PROPOSED NEIGHBORHOOD STREET PATTERN

