

ITEM SUPPLEMENTARY 13
MANAGER'S REPORT NO. 11
COUNCIL MEETING 1983 02 14

RE: OXFORD STREET CLASSIFICATION
DELEGATION 3(c) - COUNCIL MEETING OF 1983 JANUARY 24

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Director Planning and Building Inspections be adopted.

* * * * *

TO: MUNICIPAL MANAGER SUPPLEMENTARY
1983 February 10

FROM: DIRECTOR PLANNING & BUILDING INSPECTION Our File: 15.231.7

SUBJECT: OXFORD STREET CLASSIFICATION
DELEGATION 3(c) - COUNCIL MEETING OF 1983 JANUARY 24

RECOMMENDATIONS:

1. THAT Council not reduce the function of Oxford Street to "local" residential status at this time.
2. THAT Council indicate their concurrence with the concept of closing the west bound Cambridge Street to Cassiar/Second Narrows Bridge "on-ramp" as one of the measures that will reduce the commuter traffic flow through the Vancouver-Burnaby Heights neighbourhoods and request that Vancouver Council expedite a request to the Ministry of Transportation and Highways to implement the ramp closure.
3. THAT Council reemphasize to the Ministry of Transportation and Highways the urgent need to finalize, as quickly as possible, traffic plans for the Highway No. 1 link to the Second Narrows Bridge and the implementation of the traffic management proposals for Hastings Street.
4. THAT concurrently with recommendations 2 and 3 continued efforts be made by staff to develop with residents of the area a comprehensive neighbourhood traffic plan following adoption of which the appropriate function of Oxford Street can be designated.
5. THAT the Ministry of Transportation and Highways and the City of Vancouver be sent a copy of this report.
6. THAT Margaret Rivers, 3815 Oxford Street, Burnaby, B.C., V5C 1C2 be sent a copy of this report.

SUMMARY:

1. This neighbourhood requires a designated "minor" collector road for internal convenience, for the routing of buses and emergency vehicles. This collector needs to be 36 ft. wide but steps should be taken to ensure that it does not function as a "major" collector for "through" movement by commuter traffic.
2. In the future this "minor" collector function may be provided by Oxford Street or by an alternate route in the same general area.
3. At present due to an inefficient and incomplete arterial road network, commuter traffic will continue to find its way through this neighbourhood and declassification of Oxford Street at this time without other measures to prohibit east-west "through" traffic movement will not change matters, in fact it would create unsafe driving situations as commuters attempt to navigate a 28 ft. street with curbs and residential parking.
4. To take ad hoc measures to prevent east-west "through" movement on Oxford Street, without taking similar measures on all other east-west streets will merely move commuters to other parallel routes.
5. It is therefore premature to finally classify Oxford Street until: (a) the arterial network is complete (i.e. Freeway to Second Narrows link which would eliminate the Cambridge "on-ramp" connection to Cassiar, and traffic management improvements on Hastings Street); (b) a comprehensive traffic plan is adopted which would include the designation of a "minor" collector street together with measures to prevent its use and those of other residential streets by east-west commuter traffic.

R E P O R T

1.0 BACKGROUND:

This report arises out of Council's consideration of the presentation by the Burnaby Heights delegate at the regular Council meeting held on 1983 January 24 when the following motion was adopted:

"THAT the staff report on what is required to declassify Oxford Street from the current 36 ft. wide road to a width of 28 ft. between Boundary Road and Willingdon Avenue and what effect such a declassification will have upon future traffic movement in the area."

1.1 Current Status:

Sketch 1 attached shows Oxford Street to be functioning as an east-west "through" or "collector" (meaning - protected by "stop" signs) street from Willingdon Avenue to Gilmore and Gilmore to Boundary approximately midway between the Hastings commercial district and Second Narrows (Montrose) Park, being five blocks north of Hastings Street and six blocks south of Edinburg.

Although the Oxford Street road allowance is 66 ft. over its entire length the street is currently developed with a "cap" pavement 20 ft. wide with gravel shoulders (no curbs) and an old, narrow 4 ft. wide sidewalk on both sides of the street except in the 4400 block, between Willingdon and Rosser, where there are no sidewalks.

Sketch 2 attached shows the routing of the No. 39 Delta and the No. 40 Eton bus services. The No. 39 Delta provides a service link between the Kootenay loop and Brentwood while the No. 40 Eton service provides the Burnaby Heights residents with another link to the Kootenay loop and an additional Vancouver link to Renfrew at McGill.

In three recent public meetings held by G.V.R.D. staff to discuss possible improvements in the North Burnaby bus routes it was quite clear from public comments that service improvements in bus operations in North Burnaby were required. The improvement mentioned included operating frequencies and routing. The No. 39 Delta and No. 40 Eton routes appear to be high on the list in the "needed improvement" category.

Sketch 3 attached shows the approximate magnitude of current average weekday traffic volumes in the north-west Burnaby neighbourhood area.

1.1.1 Progress in Vancouver:

The current status of the Consultant's study of alternative alignments for the Freeway link to the Second Narrows bridge is that a draft report is expected in early April.

The City has completed the west bound Hastings two-lane right-turn facility at Cassiar Street and Council is now dealing with the matter of the west bound Cambridge "on-ramp" to Cassiar/Second Narrows bridge.

Vancouver staff are currently investigating numerous options to reduce the traffic flow through the Vancouver Heights residential neighbourhood.

1.2 Street Classification Procedure:

The street classification procedure used in the past for assigning a higher function to one street over another related to the rectangular "grid" pattern streets, the type of land use and the intensity of the development.

The Vancouver-Burnaby Heights area is an older well established residential area lying between Hastings Street and the steep slopes leading to the Burrard Inlet. The development of the rectangular "grid" pattern of streets and lanes extended from Vancouver into Burnaby and provided the highest degree of travel flexibility. Establishing a street hierarchy was readily accomplished with the rectangular pattern on a spacial distribution basis; e.g. arterial streets could be located on a spacing of approximately one mile while collector streets

Planning & Building Inspection Department
re: Oxford Street Classification - Delegation 3(c)
1983 February 10 Page 4

were established on the one-half mile. Hence we have Willingdon Avenue approximately one mile east of Boundary Road with Gilmore Avenue approximately midway between, while Oxford Street in Burnaby and Cambridge Street in Vancouver, which parallel the Hastings Street arterial, are approximately midway between the developable slopes leading to the Burrard Inlet and Hastings Street.

We can only postulate, (because no record has been found) that Oxford Street rather than Cambridge Street was given "stop" sign protection and hence "collector" designation in Burnaby for possibly two reasons:

1. it provided the continuity desired in Burnaby, at that time, through its direct connection with Penzance Drive at Willingdon Avenue, and
2. the "offset" alignment at Boundary Road between Cambridge Street in Vancouver and Oxford Street in Burnaby provided sufficient discontinuity in the route that would enable a driver to recognize Boundary Road as the higher priority facility.

1.3 Vancouver/Burnaby Interconnecting Streets:

During the time that the planning was being carried out for the Freeway and location of the Second Narrows Bridge and street pattern associated therewith, Vancouver and Burnaby staff jointly were considering the need and location for interconnecting streets between the City and Burnaby.

The route which was given consideration in the Vancouver-Burnaby Heights area was known as the Scenic Drive Alignment. This route extending from Bridgeway Street in Vancouver (west of and beneath the Second Narrows bridge) would have served as an additional arterial carrying commuter traffic around the neighbourhood passing between the neighbourhood and the oil refinery and would have linked with Willingdon Avenue at Eton Street. The route would have continued eastward from Willingdon Avenue to form a Scenic Drive alignment which would have passed around the north side of Capital Hill and linked to Hastings Street at approximately Hammarskjold Drive.

Following representations before Council from the residents in the Burnaby Heights area objecting to the proposed roadway of Council subsequently abandoned the road proposal in favour of retaining the alignment for future development as a major park-trail link in the Burnaby Trail System. In view of the function the route would have served with respect to removal of traffic from the Burnaby Heights neighbourhood it now becomes apparent that an argument can be made for another arterial, namely the Waterfront Road proposal, to provide for additional East-West commuter traffic movement.

2.0 STANDARDS AND CRITERIA:

In order to respond to the motion adopted by Council it is necessary to firstly set forth terms of reference to provide a basis for examining Oxford Street in the neighbourhood, and the neighbourhood relative to the north-west Burnaby community.

Sketch 4 attached is an excerpt from the 1980 July report "A Comprehensive Transportation Plan for Burnaby" and shows the Road Hierarchy Relationships, while the following items relate to the function of the two residential street categories intended to carry the least traffic volume.

2.1 Local Residential Street (Single family):

1. The function of a local residential street is primarily to provide access to abutting property.
 2. A local residential street does not have "stop" sign controlled intersections except where the local street meets a higher function street.
 3. Parking is generally permitted on both sides of a local street.
 4. A local street constructed to the full standard in a single/two family, low density residential area is 8.5 metres (28 ft.) wide between curbs and usually includes sidewalks and tree planting.
 5. The range of traffic volume* normally carried on local streets in low density residential areas is less than 1200 vehicles/average week day.
- * (Depends upon the length of streets and the number of dwelling units per block, overall street pattern, availability and location of higher function "minor" and "major" collector routes within the neighbourhood street network and availability and frequency of bus service.)

2.2 Minor Residential Collector Street:

1. The function of a "minor" collector street in a residential area is to provide improved local traffic mobility that is not available in the narrower "local" residential street whilst providing accessibility and service to abutting residential properties. It is not intended to carry traffic which would desire to simply pass through the area.
2. A "minor" collector street is protected by "stop" sign controlled streets that connect with it.
3. Parking is generally permitted on both sides of the "minor" collector street.
4. A "minor" collector street when constructed to the full standard in a low density residential area is usually 11 metres (36 ft.) between curbs and desirably includes separated sidewalks and tree planting.
5. Bus routes serving a low density residential area are usually assigned to streets serving the "collector" function.

6. The range of traffic volume normally carried on "minor" collector streets in low density residential areas is less than 3000 vehicles/average week day and is dependent on the number of local streets linking to the "minor" route, the continuity that the route provides in the street network, the orientation of the "minor" collector relative to the direction of major travel, the links to other "minor" and "major" collectors and the operating characteristics of the higher function routes in the overall street network, and the operating frequency of bus service in the area.

Recognizing the preceding broad and variable characteristics which may be attributed to any collector street and thereby be reflected in the traffic volume carried on that street, the following are provided as examples of traffic volumes currently carried on collector streets in low density residential areas:

Walker Avenue (Burris to Stanley)	2100 veh/day ('81 Sept.)
Walker Avenue (Stanley to Imperial)	3100 veh/day ('81 Sept.)
*Gilpin Street (Royal Oak to Canada Way)	12000 veh/day ('82 Dec.)
Burke Street (Boundary Road to Smith)	3000 veh/day ('82 Aug.)
Burke Street (Smith to Patterson)	1900 veh/day ('82 Aug.)
12th Avenue (6th Street to Cumberland)	1900 veh/day ('82 June)

* Currently functioning as a major collector.

3.0 DISCUSSION:

The commuter traffic flow problem experienced in both Vancouver Heights and Burnaby Heights particularly along Oxford Street arise because of the existence, in Vancouver, of roadway facilities which provide convenient, if not appropriate, connections to the Vancouver arterial streets which link with the Second Narrows bridge. The absence of sufficient roadway capacity and direct arterial connections to these facilities in the north-west Burnaby/north-east Vancouver communities has led to the increase in traffic passing through these residential areas on streets not intended to accommodate the overflow from the existing arterial street system.

With regard to Oxford Street specifically, the question can be asked - "If the commuter traffic now using Oxford Street was provided for on the arterial facilities, would Oxford Street or an alternative street, need to function as a "minor" collector for the neighbourhood?"

If the response was "negative" on the basis that this neighbourhood does not require a "minor" collector element in order to satisfy the neighbourhood's mobility needs, street hierarchy and bus routing, then steps could be taken to declassify Oxford Street to a local residential category. However should the response be "positive" in that a "minor" collector element is required to provide comprehensive mobility, then Oxford St. should remain as a "minor" collector street, or an alternative street should be designated.

In our view a minor collector street is required in this large neighbourhood to create an ordered pattern of internal east-west travel, facilitate internal accessibility, and reduce excessive and tortuous travel mileage. Minor collector routes in this large residential neighbourhood should be routes that link with streets offering the next higher order of travel priority. Additionally the need and orientation for specific "minor" collector routes is reinforced when consideration is given to providing bus service to this large residential neighbourhood. The designation of such a route should be accompanied by measures to ensure that the route is not used by "through" commuter traffic.

4.0 DECLASSIFICATION OF OXFORD STREET:

With the preceding as background it is now possible to respond to Council's request for information on what is required to declassify Oxford Street from its current status to a "local" residential street between Boundary Road and Willingdon:

1. An alternative route which would perform as a "collector" street at this time would need to be identified. (Eton Street would provide the most immediate alternative to Oxford Street because it currently serves in the same capacity however it does not now carry the same volume of traffic as does Oxford Street.
2. A rerouting would be required of the No. 40 Eton bus service from the one-way east bound operation on Oxford Street between Boundary Road and Gilmore Avenue to a two-way operation along Eton Street between Boundary Road and Gilmore Avenue.
3. Removal would be required of all "stop" signs which are currently located on all streets which link to Oxford Street including Gilmore Avenue where Oxford Street would remain controlled with a "stop" sign and preference given to Gilmore.
4. In order to complete the declassification of Oxford Street to a "local" residential street, a local improvement program would need to be prepared and approved by a sufficient number of residents along Oxford Street in order to initiate the construction of a 28' wide residential street.

5.0 RAMIFICATIONS AND CONCLUSIONS:

Responding to the request for information on what effect such a declassification will have on future traffic movement in the area - we would advise that the immediate impact of the declassification of Oxford Street would be to shift a substantial portion of the traffic to Eton Street and to create a potentially unsafe condition for residents and others who would continue to use Oxford Street as a route of travel.

With regard to future traffic movement in this residential area there remain many important and unresolved issues all of which could have a significant impact on traffic movement in this north-west Burnaby community area; and in our view it would be premature to declassify Oxford St. to a local residential Street for the following reasons:

ITEM SUPPLEMENTARY 13
MANAGER'S REPORT NO. 11
COUNCIL MEETING 1983 02 14

150

Planning & Building Inspection Department
re: Oxford Street Classification - Delegation 3(c)
1983 February 10 Page 8

1. The two lane right-turn lane for westbound Hastings traffic at Cassiar has only recently been put into operation and Vancouver Council is currently dealing with the matter of closing of the westbound Cambridge St. "on-ramp" to Cassiar/Second Narrows Bridge which would eliminate one reason for the current "through" commuter traffic flow through the Burnaby Heights neighbourhood.
2. Vancouver staff are actively examining numerous options which would discourage and reduce the traffic flow through Vancouver Heights and consequently through the Burnaby Heights residential neighbourhood.
3. The unresolved nature of the implementation schedule for traffic management measures to be undertaken along Hastings St. by the Ministry of Transportation and Highways which is intended to improve travel efficiency and hence encourage the use of this arterial street by "through" commuter traffic.
4. The soon to be known outcome of the consultants' study which will develop two alternatives to the current proposal for linking Highway No. 1 with the Second Narrows Bridge. This study will offer the ability to compare the alternatives equally with respect to environmental, social, community, economic and engineering issues.
5. The unresolved nature and implementation schedule of the bus service improvement study for the North Burnaby community service area which was initiated by the G.V.R.D. Transit staff through public meetings held in 1982 December.
6. The current absence of a comprehensive plan for the large Burnaby Heights residential neighbourhood which would designate street function based on the mobility needs of the area and would include measures to eliminate "through" commuter travel.

WSS/mcb

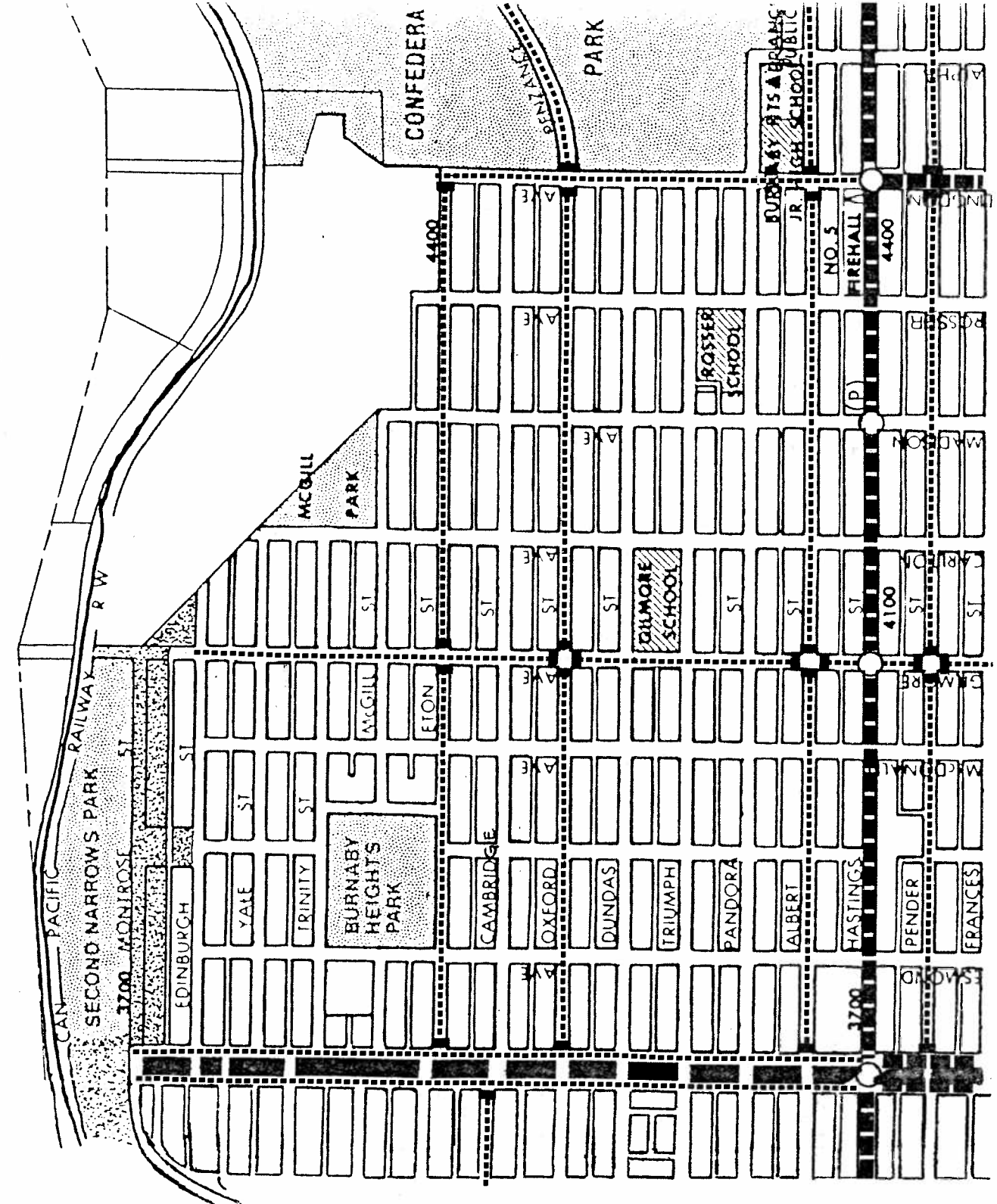
Attachs.

cc: Director Engineering



A.L. Parr
DIRECTOR PLANNING &
BUILDING INSPECTION

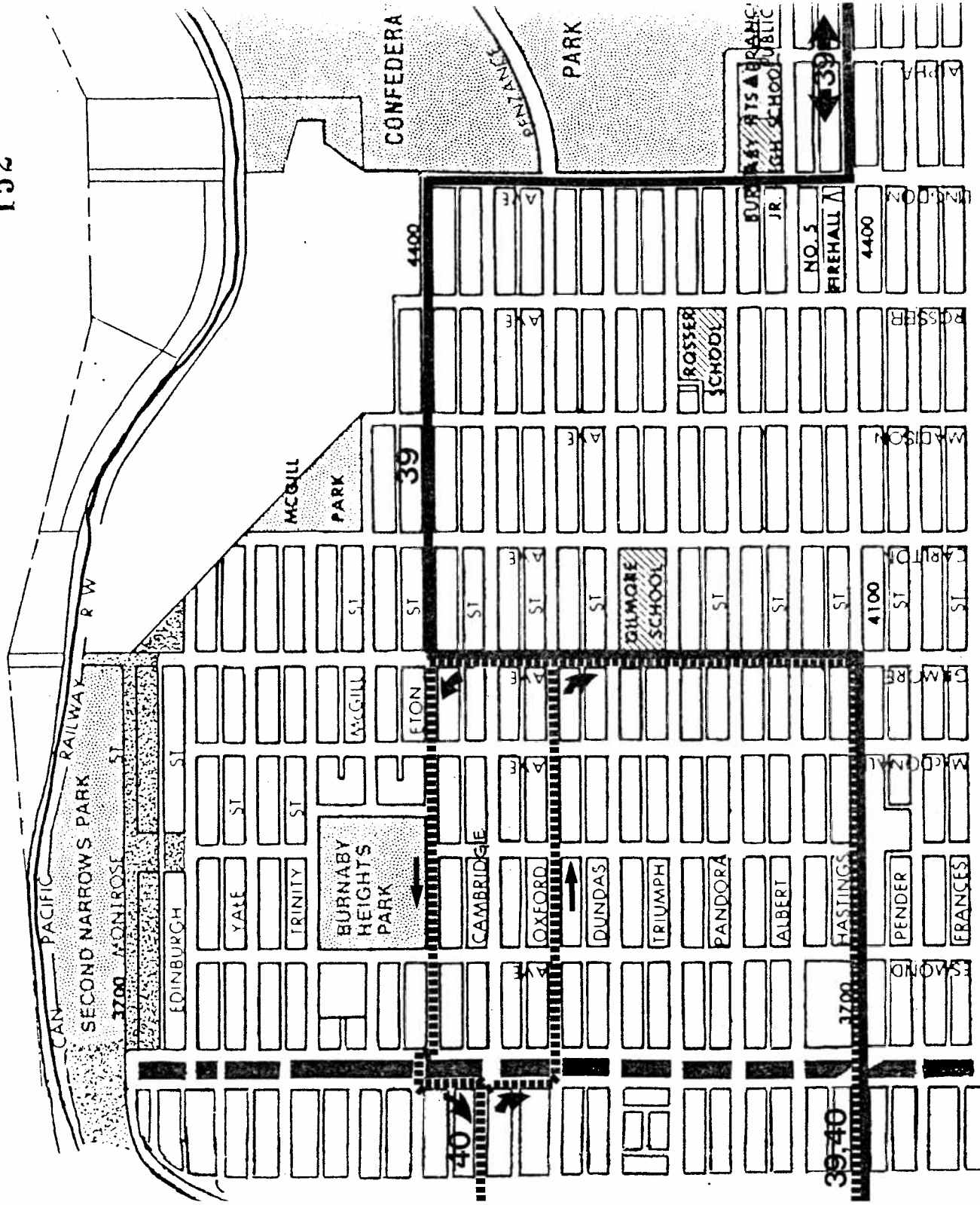
ITEM SUPPLEMENTARY 13
 MANAGER'S REPORT NO. 11
 COUNCIL MEETING 1983 02 14



CURRENT STREET HEIRARCHY

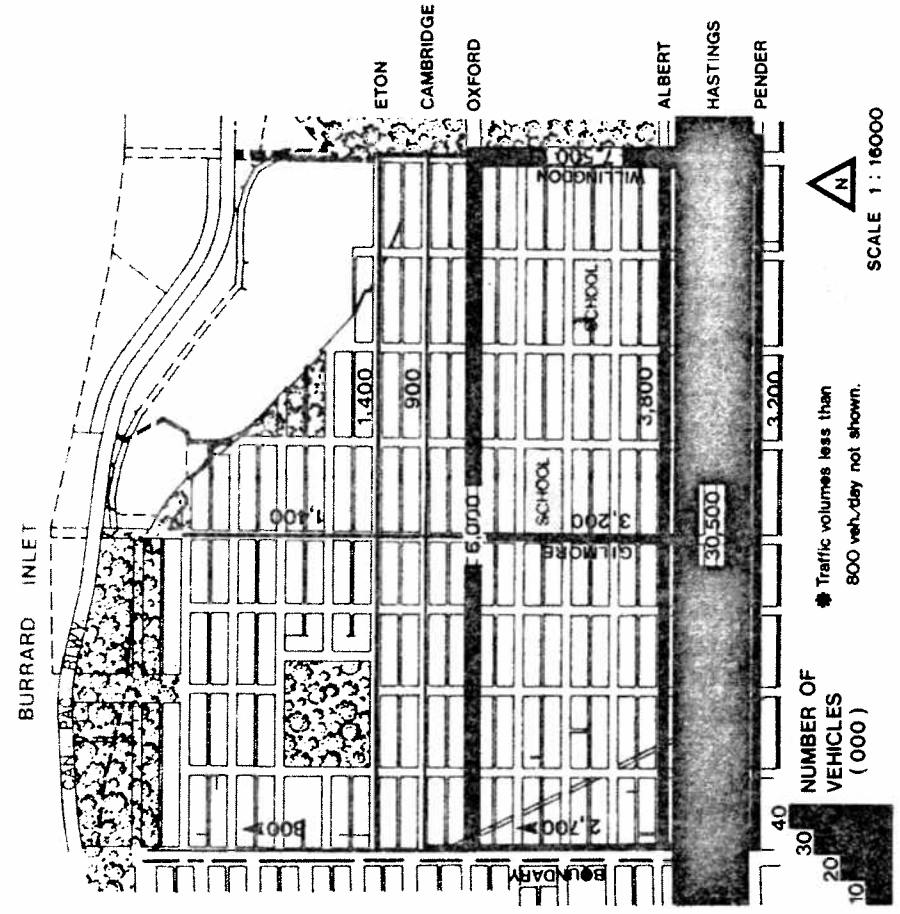
- ARTERIAL STREET
- COLLECTOR STREET
- TRAFFIC CONTROL "STOP" SIGN
- TRAFFIC SIGNAL
- PEDESTRIAN SIGNAL (P)

SKETCH 1



SKETCH 2
CURRENT BUS ROUTING

39 --DELTA
40 --ETON



AVEUE WEEKDAY TRAFFIC VOLUME

SCALE 1 : 16000

ITEM SUPPLEMENTARY 13
MANAGER'S REPORT NO. 11
COUNCIL MEETING 1983 02 14

THE CONCEPTUAL TRANSPORTATION PLAN

1. ROAD SYSTEM

As outlined in the report, Transportation Policies For Burnaby, the Committee considered it necessary that a hierarchical classification of roads be established as a basis for defining the functional, spacing and continuity aspects of a conceptual road plan for the Municipality. As a result of its further deliberations, and to help clarify the typical standards associated with the full range of roads in the hierarchy, the Committee has modified the original hierarchy as contained in the policy report to read as follows:

<u>Road Class</u>	<u>Typical Pavement Width</u>
Local	
residential (single family)	28' curb to curb
residential (multiple family)	36' curb to curb
industrial/commercial	46' curb to curb
Collector	
minor residential	36' curb to curb
major residential	36' curb to curb
major industrial/commercial	46' curb to curb
Arterial	
secondary	46' curb to curb
primary	60+' curb to curb
Freeway	according to design

The diagrammatic relationship of local and collector routes as they would generally relate to the arterial system is shown on Figure 2.

