KING GEORGE HIGHWAY CORRIDOR

LAND USE/DEVELOPMENT CONCEPT PLAN

DECEMBER 1995

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KING GEORGE HIGHWAY CORRIDOR DEVELOPMENT CONCEPT PLAN

1.0 STUDY AREA

The King George Highway Corridor study area is bounded by Highway 99 to the east, the Nicomekl River to the north, the Nicowynd Golf Course, the Semiahmoo Trail, the areas adjacent to the Peninsula Village Shopping Centre and the sites abutting the east side of King George Highway to the west and the 8 Avenue interchange to the south. The corridor is approximately 7 km long and encompasses the land between the two highways, and part of the land between King George Highway and the Semiahmoo Trail.

2.0 PURPOSE OF THE STUDY

At the request of Council, the Planning & Development Department has carried out a brief review of land uses along the King George Highway corridor between the Nicomekl River and 8 Avenue, and makes recommendations for future development. The purposes of the study are:

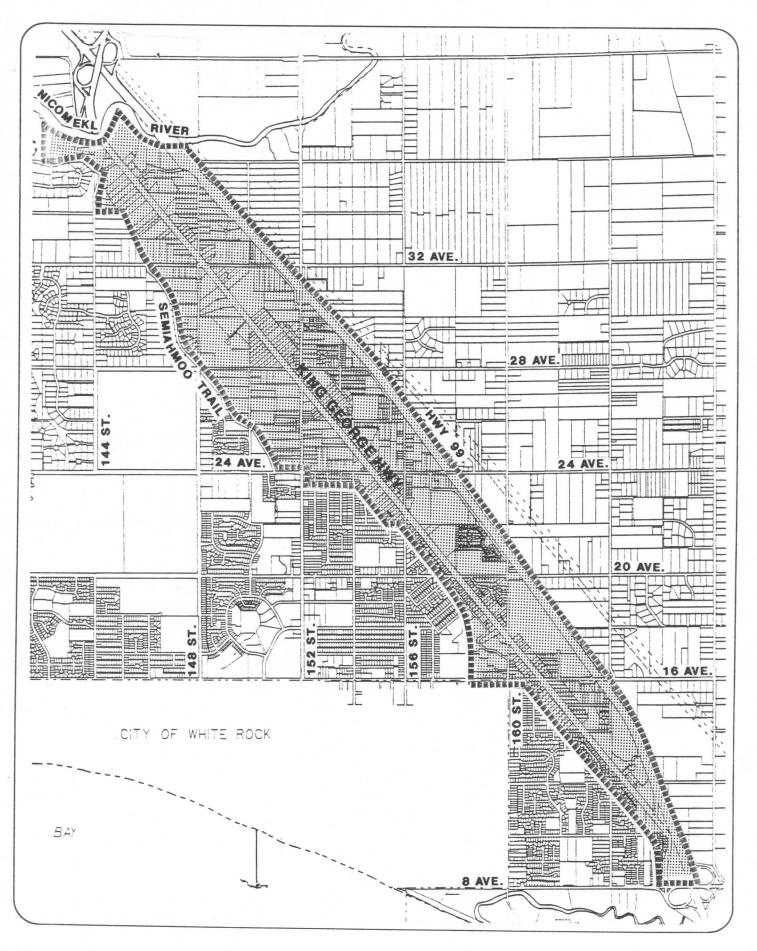
- (a) to establish a direction for Council, staff and the development industry about how future development within the corridor should take place;
- (b) to rationalize the land use plan for the area in response to recently approved development proposals, the recommendations of the Central Semiahmoo Peninsula Study and recent changes to the transportation network in the Peninsula; and
- (c) to define potential development areas along the corridor that, with careful planning and design, can enhance the present character of the King George Highway in South Surrey.

The existing situation is examined with respect to opportunities and constraints to achieve these purposes. Recommendations are then made regarding land uses and treatment of the King George Highway right-of-way to reinforce its natural character.

3.0 ROLE AND FUNCTION OF THE KING GEORGE HIGHWAY

With the construction of the freeway the role and function of the King George Highway changed. It was no longer required to provide regional access to the border. Its role devolved to being the main access to the Peninsula from the north and west. Traffic volumes are greatest at the north end and decrease markedly at 152 Street, where traffic turns southward to go into the Semiahmoo Town Centre area and at 24 Avenue where traffic turns eastward to Grandview Heights. The direction and volume of this traffic is reflected in the traffic volume recorded by Engineering/Transportation in 1986 (Appendix I), 1988 (Appendix II) and 1991 (Appendix III).

Peak hour congestion under current OCP land uses require the construction of additional freeway interchanges, a new bridge over the Nicomekl River, as well as the completion of the new connection between the King George Highway and the 140 Street/34 Avenue arterial road.



4.1 Commercial Nodes

Apart from a few scattered commercial uses along the King George Highway there are two main identifiable commercial nodes. The node at 32 Avenue is a combination of automobile sales and other highway commercial uses. The node at 24 Avenue is a combination of retail and highway commercial uses. Small manufacturing-office operations are also found in most of the warehouse buildings in the area.

Together with the local commercial node at 16 Avenue, these nodes are located at the three main east-west links to Grandview Heights and are expected to serve the needs of Grandview Heights in the short term.

4.2 Highway Character

In between 32 and 24 Avenues, there are areas of underdeveloped deep lots where the buildings are not necessarily in good condition. These circumstances provide excellent opportunities for comprehensive redevelopment in a manner that preserves and enhances the existing natural vegetation. Some of these areas, particularly around 152 Street, are under pressure for commercial development. Acquiescence to such pressure would result in a commercial strip extending between the two commercial nodes.

4.3 Road Network

The freeway is a substantial barrier on the east side of the corridor. Any connection between the corridor and lands east of the freeway (Grandview Heights) is severely constricted to the three cross-streets (152 Street, 24 and 16 Avenues) and a pedestrian overpass at the eastern end of 28 Avenue. In addition, the King George Highway itself is a barrier which, to some degree, isolates the lands lying between it and the freeway from the rest of the Semiahmoo Peninsula. The volume of traffic on King George Highway makes crossing hazardous, particularly for pedestrians. The land between the two highways is, therefore, not the most appropriate location for family-oriented residential uses or residential areas that are not self-contained.

4.4. Use of the Right-of-Way

The width of the King George Highway, at 150 feet, provides the opportunity for bike paths, sidewalks and considerable buffering and landscaping treatments along its length. Presently some commercial uses make unauthorized use of the right-of-way to advertise their products or services. Ministry of Transportation & Highways do not include provision of bike paths, sidewalks, buffering and landscaping treatments in their design standards. Discussions should continue with the Ministry of Transportation & Highways to implement these objectives.

MAP A

Opportunities & Constraints See pocket in back

5.0 PLANNING OBJECTIVES FOR THE CORRIDOR

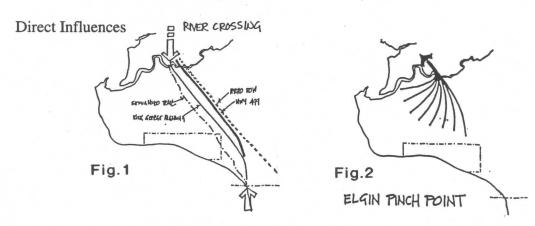
The future development of the King George Highway corridor is focused on the following planning objectives:

- (a) Definition of land uses along the corridor which reflect and are compatible with the local role of King George Highway as a major arterial road in the Semiahmoo Peninsula;
- (b) Preservation of the mature trees and other natural landscape features of the corridor through the Semiahmoo Peninsula while capitalizing on the development opportunities provided by the existence of underdeveloped lands and/or the subdivision pattern along the right-of-way; and
- (c) Respond to the development pressures and land use changes originated from the realignment of 32 Avenue at King George Highway and the future 152 Street/ Highway 99 interchange.

The development of the lands along the corridor should make use of every opportunity available to establish well defined, self-contained small residential pockets. Park areas, local commercial, recreational, and community services can constitute the focus of these residential pockets. The intention is to avoid developing areas of higher intensity commercial and residential uses that are not self-contained or fail to become an integral part of the social/urban context of an existing community.

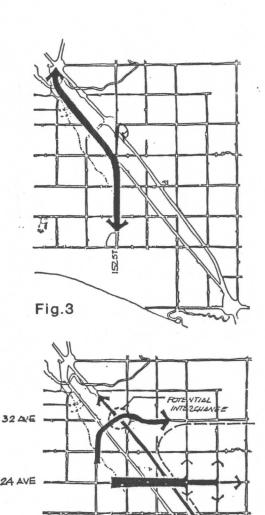
6.0 TRANSPORTATION ISSUES

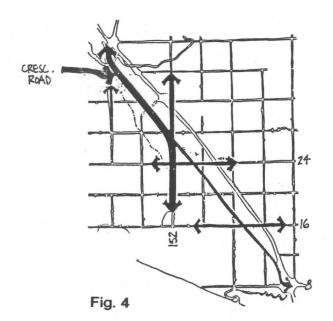
Significant local transportation-related issues, including future options and regional pressures on the road system of the Semiahmoo Peninsula affect land uses along the King George Highway. These are as follows:

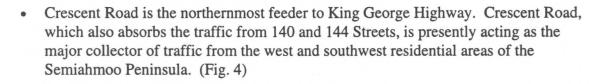


- Freeway as the regional diagonal between the Nicomekl River crossing and the U.S./ Canadian border. (Fig. 1)
- King George Highway as the local diagonal providing access to the Peninsula's grid system. (Fig. 1)
- The bottleneck at the river crossing point (the Elgin Pinch Point). (Fig. 2)

 152 Street as the primary feeder to the King George Highway from the south of the Semiahmoo Peninsula and as an alternate route to the north of Surrey.
 152 Street will also provide access to Highway 99 in the future (Fig. 3)







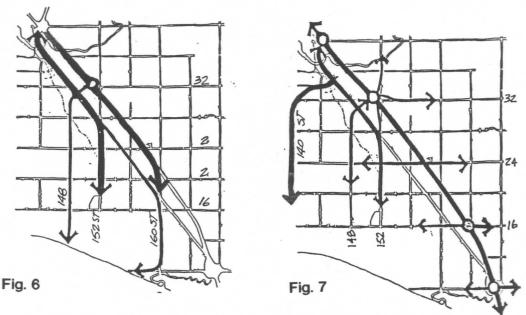
IG AVE

Fig. 5

- 148 Street/32 Avenue realignment is the other feeder to King George Highway north of 152 Street. This will also be the feeder to Highway 99 in the near future. (Fig. 5)
- 24 and 16 Avenues as the east-west corridors into Grandview Heights. 32 Avenue is expected to be another link to the east in the near future. (Fig. 5)
- Traffic volumes on King George Highway, south of 152 Street, do not justify its highway classification (presently functioning as an arterial road for the southeast corner of the Peninsula).

• The realignment of 34 Avenue/140 Street will relieve the pressure on Crescent Road in the future and help to preserve its natural character. (Crescent Road was designated as a Heritage site by Council in 1984.)

Indirect Influences



- Need for access to the beach areas of White Rock from the freeway and/or King George Highway. (Regional and local attraction of the area.) (Fig. 6)
- Freeway interchanges to provide alternate access to the Peninsula and Grandview Heights. (Interchanges evaluated on the basis of the overall development of South Surrey.) (Fig. 7)

6.1 Possible Changes to Road Network

The plan proposes a number of changes to the road network subject to further evaluation and analysis. The proposed changes are as follows:

(a) Downgrade King George Highway South of 152 Street

King George Highway is proposed to take the role of a major arterial south of 152 Street. King George Highway functions very differently south of 152 Street where traffic turn southward to go into Semiahmoo Town Centre. This may allow for different design and access approaches.

It should be noted that the City would have to take over the maintenance of the King George Highway and, therefore, inherit additional costs to Surrey. A traffic study, cost analysis, and discussions with Ministry of Transportation & Highways should be carried out before a firm position is taken in this regard.

This is a long term proposal. The necessary studies and discussions with Ministry of Transportation & Highways will have to be completed before activating the implementation of this recommendation.

(b) Highway 99 Ramp Connection to 160 Street

One option to address the City of White Rock's concern over beach access traffic is the possibility of a Highway 99 ramp connection to 160 Street.

It is possible however, that such a ramp connection would run into problems regarding Ministry of Transportation & Highways' spacing standards and/or compromise spacing for a possible Highway 99/16 Avenue interchange in the future. The impact of additional traffic in the area would only be felt in a short section of 160 Street (between the two highways). 160 Street is already used as access to the beach areas of White Rock from King George Highway.

(c) Discontinuation of 144 Street at 34 Avenue

While the realignment of 34 Avenue/140 Street will relieve pressure on Crescent Road in the future and help to preserve its natural character and heritage status, other road network options should be considered and evaluated to further implement these planning objectives.

The closure of 144 Street at its intersection with 34 Avenue to discourage the use of the eastern end of Crescent Road by north-bound community traffic is one option which should be evaluated (Map B). The portion of 144 Street from 34 Avenue to Crescent Road could be converted to a pedestrian/bicycle path which will converge with the Semiahmoo Trail at the site of the old Elgin School.

m CHANGES TO 144 STREET

KING GEORGE HIGHWAY CORRIDOR

General Recommendations

The following are recommendations aimed to discourage the development of a commercial strip, and rationalize land uses which are responsive to the presence of the two highways and to maintain and reinforce the existing trees and natural features of the King George Highway corridor:

- (a) Acknowledge the local role of the King George Highway as a major arterial road which provides access to the Semiahmoo Peninsula and the Semiahmoo Town Centre. Therefore, Highway Commercial uses should not extend beyond the present nodes at 32 and 24 Avenues.
- (b) Limit the commercial uses to the nodes at 32 Avenue (auto related, home improvement and other associated uses), 24 Avenue (a combination of local commercial, shopping centre and highway commercial uses) and 16 Avenue (local commercial uses).
- (c) Cap the potential for linear expansion of the commercial uses along the King George Highway by encouraging the consolidation of large parcels suitable for the comprehensive development of residential areas in-between the commercial nodes.
- (d) Allow for an overall increase in residential densities along the corridor to cap and discourage the attraction for development of a commercial strip. The following are suggested overall densities:
 - 15 to 45 u.p.a in the areas between the 24 Avenue and the 32 Avenue commercial nodes.
 - Clustering of up to 8 u.p.a. density in the areas between the 32 Avenue /
 148 Street commercial node and the Nicomekl River where the edges of the
 Semiahmoo Trail and ravines are protected and enhanced, significant trees are
 retained and the Semiahmoo Trail is dedicated and preserved as a heritage
 trail.
 - Densities up to 15 u.p.a. in the proximity of the 16 Avenue commercial node.
- (e) The edges of the Semiahmoo Trail and ravines in the Corridor should be protected and enhanced. Residential densities and type of development immediately abutting both sides of the Semiahmoo Trail should be consistent, therefore, oversized lots (1/2 acre gross), in combination with an 15.0m undisturbed area along the Trail and/or creek/ravines should be maintained to reinforce the character of these natural features.

(f) All new residential developments along the King George Highway should consider the retention and protection of a 15 m wide, undisturbed area of existing mature vegetation along both sides of the right-of-way as a visual and noise protection buffer. Clustering of the residential density is recommended to the interior of the development site.

Where there is no mature vegetation to be considered as part of the buffer, dense tree and shrub planting (sometimes in combination with a low berm) should be considered in the proposed development to create and achieve the continuity of this green edge along the Highway.

- (g) Any development along the Highway should ensure protection of the existing oak trees within the King George Highway right-of-way. These trees were planted to commemorate the occasion of the completion of the Highway to the U.S. border. Oak trees which were removed as a result of development in the area should be replanted.
- (h) Implementation of a tree and shrub planting program is recommended to fill the discontinuity of landscaping and re-establish the green edges of the King George Highway right-of-way south of 24 Avenue.
- (i) Landscaped medians should be considered at major intersections where a left turning lane is required.
- (j) In concert with the Ministry of Transportation and Highways, continue to discuss and develop a preferred access policy for lots fronting on the King George Highway.

Specific Area Recommendations

Recommendations on land use and density for specific areas of the King George Highway Corridor are as follows:

Area A

A pedestrian-oriented residential/commercial mixed use area at an overall residential density of 8 u.p.a. is proposed for development as a Heritage Village at the intersection of Elgin and Crescent Roads, between Elgin Creek and the Nicowynd Golf Course.

Development of this area should take advantage of its proximity to the river, the end of the Semiahmoo Trail and its ravine and mature trees.

The proposed mixed use area constitutes the gateway to the Riverside parks and multi-use pathways systems which extend west to Crescent Beach. It also defines the northern end of the Semiahmoo Trail and provides the opportunity for public access to the Nicomekl River.

Area B

The area bounded by 34 Avenue, King George Highway, Crescent Road and 144 Street is recommended for a comprehensive development focused on the Semiahmoo Trail and the old Elgin School. Clustering of single-family residential densities (8 u.p.a.) at the centre of the site diminishing to 2 u.p.a. at the western and southern edges is proposed for the comprehensive redevelopment of this area.

Development based on the principle of clustering of density would consider the density over the total area of the site but construction would be limited to the central portion of the site to facilitate the retention of major tree stands at the periphery of the development area and preserve the natural state of ravines. The density and open space concept is similar to the concept of density transfer in the gross density residential zones.

Area C

Because of its visibility and its frontage on the Nicomekl River, the area on the north side of Winter Crescent could be put to a comprehensive development that combines tourist commercial/recreational and residential uses with a form similar to the Nicowynd Golf Course development. Clustering of single family density (8 u.p.a.) should take place along Winter Crescent.

The south side of Winter Crescent, bounded by the ravine, is proposed for clustering of residential development at the interior of the site at 8 u.p.a. density. This type of development is also proposed for the redevelopment of the lands presently occupied by the existing trailer park/campground.

Area D

The area on both sides of 148 Street, between King George Highway and Highway 99, provides good locational opportunities for self-contained residential land uses which can be developed under a comprehensive design at single-family residential densities. Clustering of 8 u.p.a. residential density at the centre of the blocks, to preserve mature tree stands is also recommended for this area (density transfer concept).

Because of its proximity to the Highway Commercial node and the expected impact of the future interchange at 152 Street/32 Avenue, the lands fronting on 32 Avenue between the two highways and the existing undeveloped 1-acre lot subdivision to the north are recommended for townhouses. A small neighbourhood commercial node to serve the residential area between Highway 99 and the Semiahmoo Trail is proposed at the northern end of the 32 Avenue Highway Commercial Node.

Area E

The node at 32 Avenue is entirely highway commercial in nature and should not be viewed as the focus of higher density residential development. In response to the expected impact of Highway Commercial uses over the surrounding suburban residential area, it is recommended that residential densities up to 8 u.p.a. be considered for the areas extending north of 32 Avenue, between the Semiahmoo Trail and 148 Street/King George Highway. This residential density should be clustered at the center of the block to preserve the streams, the Semiahmoo Trail, and the stands of mature trees.

Half-acre gross densities are recommended along the Semiahmoo Trail to maintain consistency of land uses and density on areas immediately abutting both sides of the Trail.

Area F

Given the pressure for commercial development between 28 and 32 Avenues, a mix of apartments, garden apartments, and townhouses is proposed as a reasonable alternative for this portion of the highway. This would avoid the consolidation of a commercial strip along the King George Highway. Townhouses on the west side of the King George Highway, north of 28 Avenue, would reinforce the emerging redevelopment area extending between the King George Highway/152 Street and the cemetery/Semiahmoo Trail.

Garden apartments are proposed on the east side of King George Highway, with increased densities and apartment form of development towards the triangle defined by the intersection of King George Highway and 152 Street.

A Business park area is proposed south of the 32 Avenue diversion and west of Highway 99, in combination with the B.C. Transit Park and Ride, to take advantage of the proximity to the future 32 Avenue/152 Street interchange. The size of the parcel allocated for these uses is expected to restrict the type of operations to businesses which are compatible with the adjacent residential area.

Area G

The existing commercial node at 24 Avenue contains retail uses that could be built upon to provide a focus for higher intensity residential development around it. Accordingly, it would be appropriate to consider developing a combination of apartments and garden apartments fronting on the King George Highway, in proximity to the commercial node. Subdivision pattern in the areas north of the Peninsula Village Shopping Centre provide good redevelopment opportunities for this purpose. On the east side of the King George Highway an adequate form and density transition should be considered at the interface between the redevelopment areas and the existing single family neighbourhood in the proximity of the Sunnyside park.

A new, small, mobile home park area is proposed on the south side of 24 Avenue, between 156 Street and Highway 99. This will complete the character of the residential area south of 24 Avenue and will provide the opportunity for a different housing type in the proximity of the commercial node.

Area H

The residential areas at the south end of the King George Highway corridor are served by a small strip mall at 160 Street as its commercial focus. This secondary commercial node serves the single family residential, townhouse and mobile-home community already well established in the area.

A short strip of low-density multiple residential uses (10 u.p.a.) in the form of duplex or fourplex is proposed to the north of the commercial node, fronting on the King George Highway. This type of residential development is also proposed on the east side of the Highway, between 160 Street and 16 Avenue.

Detached single family units are considered appropriate between 161B Street and the Highway, while the area on the east side of King George Highway, south of 16 Avenue, is expected to consolidate its townhouse character.

MAP C

Proposed Land Use/ Development Concept

See pocket in back

8.0 PARK RELATED ISSUES

The following are the comments and issues related to parks:

Existing Parks

Existing parks in the study area include Sunnyside Park located at 154 Street and 26 Avenue; Jesse Lee School/Park located at 154 Street and 20 Avenue; and Alderwood Park located off Lilac Drive at 17 Avenue. In addition, there is a designated park site located south of the Sunnyside Cemetery at 150 Street and 25A Avenue.

Future Park Needs

Parks and Recreation advise that the active component of neighbourhood parks needs for the King George Highway Corridor will be addressed within the context of the overall parks needs for the Semiahmoo Peninsula as a whole. This will be reviewed through the Parks and Recreation Master Plan currently underway.

Notwithstanding the above, Parks & Recreation have identified a number of opportunities which should be taken advantage of in future parks and open space planning for the King George Highway corridor. These include:

- Further public access to the Nicomekl River and the Riverside Pedestrian Trail.
- Further acquisition of the Semiahmoo Trail linear park system.
- Fergus Creek located south of 14 Avenue on the east side of King George Highway.
- Clustering of residential densities to the centre of development sites north of 28 Avenue provide opportunities for passive neighbourhood needs.

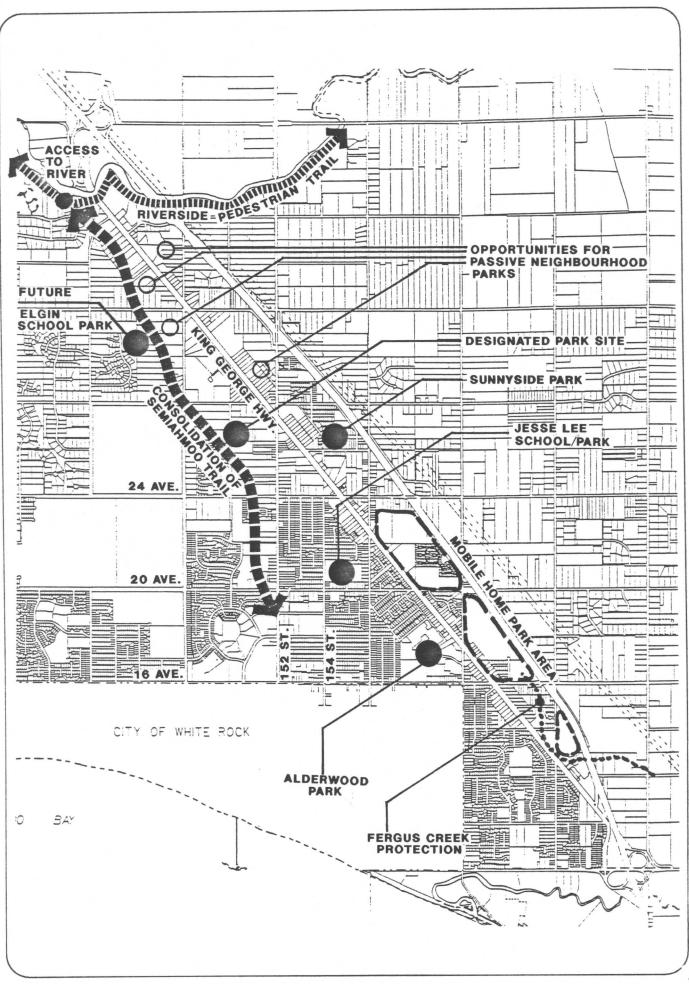
9.0 SCHOOL RELATED ISSUES

The following are comments and issues related to schools in the study area:

Impact of Arterial Roads

School Board District No. 36 advise that the study area is one of the worst in Surrey in terms of attempting to match residential areas with major roads and elementary schools.

The area is fragmented by 20 Avenue, 24 Avenue, King George Highway, Highway 99, 140 Street, 144 Street and 152 Street. It is also affected by the extension of 148 Street north of 28 Avenue to King George Highway (and its future extension to Highway 99 and 152 Street).



Sunnyside Elementary School

The majority of the area around King George Highway is served by Sunnyside School. In the longer term, the school will serve the eastern portion of its existing catchment area while a proposed new school on the edge of the Elgin Estates subdivision will serve the western portion. (Present and future school catchment area boundaries can be found in Appendix IV. a, b).

The proposal to downgrade King George Highway south of 152 Street would facilitate students from the proposed developments adjacent to the Peninsula Village commercial centre to have safer access to Sunnyside School if pedestrian safety features are incorporated into the design of new developments in the area.

Proposed Elgin Estates Elementary School

Due to the low density of development west of 148 Street and north of 24 Avenue, the proposed Elgin Estates Elementary School will serve a broad area. 144 Street, currently designated a major collector, runs right through the middle of the subdivision. This will be a major obstacle for children and a safety concern when the proposed elementary school is constructed and in operation.

The School Board analysis put in question the need for three north/south arterials roads in an area designated suburban (140 Street, 144 Street, 148 Street).

The School Board has requested that consideration be given to 144 Street being redesigned so as not to be a through major collector road between 24 Avenue and Crescent Road/King George Highway. The proposed diagonal realignment of 140 Street between 140 Street/32 Avenue and 144 Street/34 Avenue and the resulting adjustments to the road network in the area will respond to the concerns raised by the School Board, especially in regard to the function of 144 Street as an arterial road at the middle of the proposed Elgin Estates Elementary School catchment area. 144 Street is proposed to end at 34 Avenue in order for this street to really permit its role to a local collector service to the half-acre residential areas extending between 24 and 34 Avenues. The role of 144 Street as a through major collector road is also expected to diminish as the extension and realignment of 148 Street to King George Highway is now in operation.

Other Problems Areas

One is the residential area bounded by 24 Avenue/148 Street/28 Avenue/152 Street. Currently, students can access Sunnyside School via the King George Highway pedestrian overpass. However, the overpass is poorly designed for bicycles. It may be necessary to relocate students of this area to the proposed Elgin Estates School if a necessary minimum amount of students are not generated from the one-acre and half-acre subdivision. A controlled crossing operates in conjunctions with the Semiahmoo Trail pedestrian crossing of 148 Street to provide a safe pedestrian controlled access from this area to the proposed Elgin Estates area elementary school.

The other area of concern is the residential area north of the auto mall, between King George Highway and Highway 99. A safe crossing point on King George Highway will be required if this area develops as family oriented residential area.

The need for a safe crossing point on King George Highway to allow students to attend the proposed Elgin Estates School is to be assessed when the residential land uses in the area north of 32 Avenue, between Highway 99 and the King George Highway, are developed.

In general, most of the concerns of the School Board will be resolved by the proposed changes to the road network and the land uses recommended for the north end of the King George Highway. These land uses and realignments are consistent and compatible with the options suggested by the School Board.

10.0 CONCLUSIONS

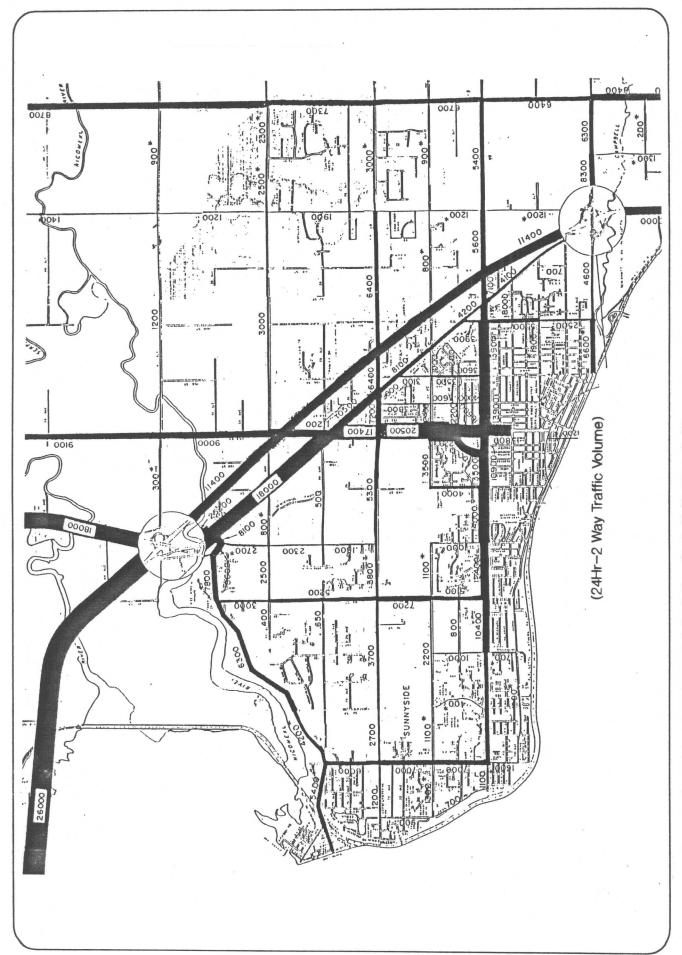
There is great potential for the development of King George Highway as a unique access route to the Semiahmoo Peninsula.

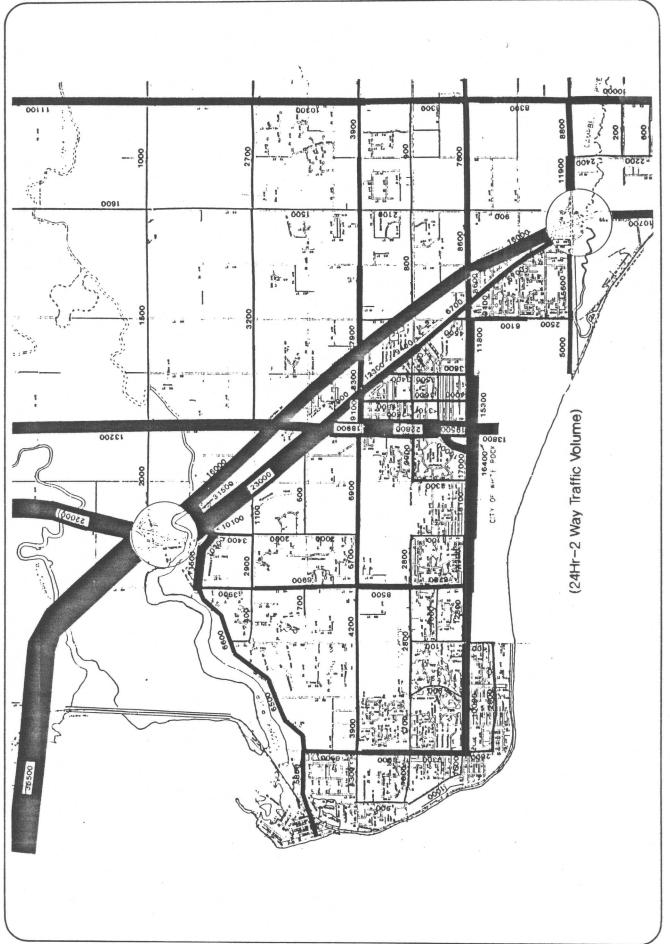
The nodal commercial development concept is possible if residential development is encouraged in between the nodes to cap potential lineal expansion of the commercial uses along King George Highway. To achieve this long terms objective, it will be necessary to allow redevelopment at higher residential densities or clustering of densities on the large, deep lots existing on both sides of the King George Highway north of 24 Avenue.

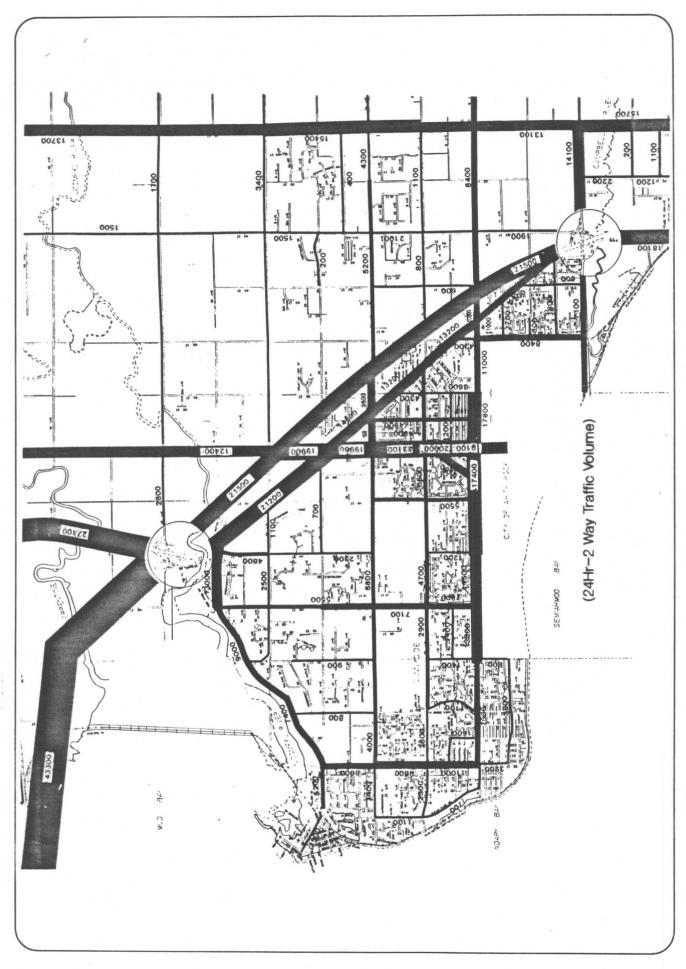
Opportunities for identifying the entrance to the Semiahmoo Peninsula exist at the north end of the corridor with the potential development of Elgin Heritage Village, the gateway to the Semiahmoo Town Centre at King George Highway and 152 Street, and the tourist-related node at its south end, in the proximity of the 8 Avenue freeway interchange.

Attainment of most of the above mentioned objectives, mostly dealing with the ambiance, role and physical character of the different portions of the King George Highway, will require the establishment of a Development Permit Area for the corridor, and implementation of the related design guidelines.

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March 12, 1991

Commercial/Industrial

Multi-Family

Schools/ School Sites

Park/Urban Forest 3

Cemetary

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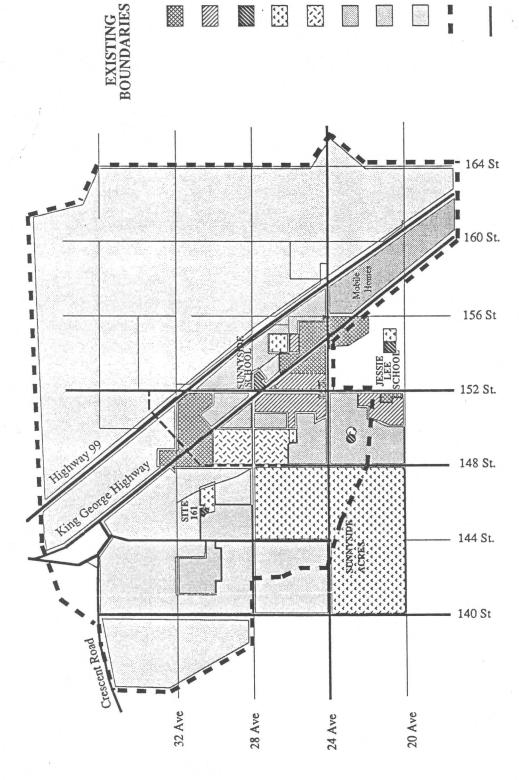
Single Family (RF-R)

One Acre

Half Acre - Gross

Existing Sunnyside Catchment area

Arterial Roads/ Provincial Highways



IVb

PLANNING March 12, 1991

POSSIBLE FUTURE BOUNDARIES

Commercial/Industrial

ESTA

No Through Arternal

28 Ave

24 Ave

No hrough

32 Ave

Crescent Road

Multi-Family

Schools/ School Sites

Park/Urban Forest

3 恣

Arterial Roads/ Provincial Highways

164 St

160 St.

156 St

152 St.

148 St.

144 St.

140 St

APPENDIX

20 Ave

Possible Future Catchment areas

One Acre

JESSIE LEE SCHOOL

Cemetary

Single Family (RF-R)

Half Acre - Gross