Subject: Byrne Road and Marine Way Development Plan

Dear Sir/Madam:

Burnaby City Council, at the Open Council meeting held on 2002 May 13, gave consideration to the report of the Community Planning and Housing Committee dated 2002 January 07 regarding the Byrne Road and Marine Way Development Plan and adopted the following recommendations contained therein, AS AMENDED:

1. THAT Council adopt the amended Development Plan for the Byrne Road and Marine Way Commercial Precinct, as outlined in Appendix 1, subject to completion of the required OCP amendment process.

2. THAT Council authorize the distribution of this report and Appendices 1 and 2 for information purposes to property owners, businesses and residents within and adjacent to the subject Byrne Road and Marine Way Commercial Precinct, and to other parties that have provided comment through the public consultation process.

3. THAT Council authorize the City Solicitor to prepare the necessary amending bylaw for the Burnaby Official Community Plan (OCP) Bylaw No. 10709 for First Reading to recognize the proposed Commercial Precinct, as outlined in Appendix 1.

4. THAT, following First Reading of the amending bylaw for the Burnaby OCP Bylaw No. 10709, a copy of the adopted Development Plan for the subject Commercial Precinct and the subject amending bylaw be forwarded to the GVRD Board, the Land Reserve Commission and the cities of Vancouver, New Westminster and Richmond, for comment as required under the Local Government Act.

5. THAT, subject to completion of the referenced OCP bylaw amendment, staff be authorized to forward applications to the Land Reserve Commission for exclusion of City lands and private lands within the Commercial Precinct.

Continue.....p. 2
Council **AMENDED** Appendix 1 by increasing the landscaped setback area for the Meadowland Peat property adjacent to Meadow Avenue to 15 metres from the 9.0 metres currently proposed, and incorporating site planning considerations for the Meadowland Peat property for noise fencing, buffer landscaping, screening of loading area, control of light intrusion and compatible building design.

Sincerely,

[Signature]

Maryann Manuel  
DEPUTY CITY CLERK

MM/bz

Copy: Director Planning and Building  
Director Engineering  
Director Finance  
Director Parks, Recreation and Cultural Services  
City Solicitor
CITY OF BURNABY

COMMUNITY PLANNING & HOUSING COMMITTEE

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

RE: BYRNE ROAD AND MARINE WAY DEVELOPMENT PLAN

RECOMMENDATIONS:

1. THAT Council adopt the amended Development Plan for the Byrne Road and Marine Way Commercial Precinct, as outlined in Appendix 1, subject to completion of the required OCP amendment process.

2. THAT Council authorize the distribution of this report and Appendices 1 and 2 for information purposes to property owners, businesses and residents within and adjacent to the subject Byrne Road and Marine Way Commercial Precinct, and to other parties that have provided comment through the public consultation process.

3. THAT Council authorize the City Solicitor to prepare the necessary amending bylaw for the Burnaby Official Community Plan (OCP) Bylaw No.10709 for First Reading to recognize the proposed Commercial Precinct, as outlined in Appendix 1.

4. THAT, following First Reading of the amending bylaw for the Burnaby OCP Bylaw No.10709, a copy of the adopted Development Plan for the subject Commercial Precinct and the subject amending bylaw be forwarded to the G.V.R.D. Board, the Land Reserve Commission, and the cities of Vancouver, New Westminster and Richmond for comment as required under the Local Government Act.

5. THAT, subject to completion of the referenced OCP bylaw amendment, staff be authorized to forward applications to the Land Reserve Commission for exclusion of City lands and private lands within the Commercial Precinct.

COPY - CITY MANAGER
- DIRECTOR ENGINEERING
- DIRECTOR FINANCE
- DIR. PLNG. & BLDG.
- DIR. PARKS, REC. & CULT. SERV.
- CITY SOLICITOR
The Community Planning and Housing Committee, at its Open meeting held on 2001 December 18, received and adopted the *attached* report conveying the results of the public consultation process and preliminary infrastructure study for the proposed Byrne Road and Marine Way Commercial Precinct, and seeking adoption of the proposed amended Development Plan.

Respectfully submitted,

Councillor C. Redman
Chair

Councillor G. Begin
Member

Councillor D. Johnston
Member
TO: CHAIR AND MEMBERS  
COMMUNITY PLANNING AND  
HOUSING COMMITTEE  

FROM: DIRECTOR PLANNING AND BUILDING  

SUBJECT: BYRNE ROAD AND MARINE WAY DEVELOPMENT PLAN  

PURPOSE: To convey the results of the public consultation process and preliminary infrastructure study for the proposed Byrne Road and Marine Way Commercial Precinct, and to seek adoption of the amended Development Plan.

RECOMMENDATIONS:

1. THAT the Committee recommend to Council the following:

   a) THAT Council adopt the amended Development Plan for the Byrne Road and Marine Way Commercial Precinct, as outlined in Appendix 1, subject to completion of the required OCP amendment process.

   b) THAT Council authorize the distribution of this report and Appendices 1 and 2 for information purposes to property owners, businesses and residents within and adjacent to the subject Byrne Road and Marine Way Commercial Precinct, and to other parties that have provided comment through the public consultation process.

   c) THAT Council authorize the City Solicitor to prepare the necessary amending bylaw for the Burnaby Official Community Plan (OCP) Bylaw No. 10709 for First Reading to recognize the proposed Commercial Precinct, as outlined in Appendix 1.

   d) THAT, following First Reading of the amending bylaw for the Burnaby OCP Bylaw No. 10709, a copy of the adopted Development Plan for the subject Commercial Precinct and the subject amending bylaw be forwarded to the G.V.R.D. Board, the Land Reserve Commission, and the cities of Vancouver, New Westminster, and Richmond for comment as required under the Local Government Act.

   e) THAT, subject to completion of the referenced OCP bylaw amendment, staff be authorized to forward applications to the Land Reserve Commission for exclusion of City lands and private lands within the Commercial Precinct.

2001 DECEMBER 13  
OUR FILE: 15.901
1.0 INTRODUCTION

On 2000 September 18, Council endorsed draft development plan proposals for the Byrne Road and Marine Way Service Commercial Precinct as a basis for further review and public comment.

This report presents a summary of the issues raised through the public consultation process, and presents proposed amendments to the Development Plan. This report also seeks Committee and Council adoption of the amended Plan, as outlined in Appendix 1, subject to completion of the required Official Community Plan (OCP) amendment process. Appendix 2 provides more detailed discussion of issues raised through the public consultation. Due to the length of Appendices 1 and 2, these documents have been provided to members of the Committee and Council under separate cover, with copies available to the public in the Planning Department and Clerk’s Office.

2.0 PUBLIC REVIEW PROCESS

Following Council endorsement of the draft Development Plan on 2000 September 28, staff initiated the prescribed public consultation process to provide an opportunity for businesses, industrial property interests, and residents to review and comment on the draft Plan.

The draft Development Plan was sent to about 200 businesses, property owners and residents in the area. Public notices of the Open House were placed in the local newspapers, and the draft Plan and notice of the Open House was placed on the City web site. A total of about 70 people attended the scheduled Open House held at Glenwood Elementary School on 2000 October 26.

Planning and Engineering Staff and a member of Council also attended a meeting organized by residents of the Willard Street area on 2000 November 16 at the Kenneth Gordon School to receive comments on the proposed Plan. This meeting was attended by about 30 residents and property owners.

3.0 SUMMARY OF PUBLIC COMMENTS AND PROPOSED PLAN AMENDMENTS

Overall, comments on the proposed Plan indicate general support from industrial property owners within the subject area, and the development community, for the redevelopment of the area for the range of commercial uses defined in the draft Development Plan. Existing businesses in the Big Bend area also support the proposals for the provision of commercial services in the area to meet current and future needs of area employees. However, a significant expression of concern regarding perceived impacts of new development was received from residents and property owners from the adjacent Willard Street area.
The following summarizes and provides a brief response to the public comments received. It also outlines proposed amendments incorporated into the revised Development Plan, presented in Appendix 1, in response to public comments and information arising from the preliminary infrastructure servicing study undertaken for the area. A more detailed discussion of issues raised is provided in Appendix 2. In addition, a number of minor text, editorial and other changes have been incorporated into the finalized Development Plan document.

3.1 General Comments

Public Comment: A range of general comments were received expressing concern regarding the relationship and perceived impact of the proposed Commercial Precinct on adjacent and nearby agricultural and residential areas, shown on Figure 1 attached.

Response: The proposed Development Plan for the Byrne Road and Marine Way area supports the re-development of existing vacant, general industrial and heavy industrial properties to a mix of commercial and compatible suburban office/light industrial development. The re-development of this area would be undertaken to a finished urban standard in a manner reflective of the high quality of site planning, building design, and landscaping of the newer and emerging Business Centres in the Big Bend.

Overall, new development in accordance with the proposed amended Development Plan for the Byrne Road and Marine Way Commercial Precinct will result in significant improvements to the quality of development at this gateway location to the Big Bend, and an improved relationship with neighbouring uses, than currently exists or would otherwise likely occur through redevelopment under prevailing general and heavy industrial zoning designations. Should properties in the area seek to redevelop under prevailing zoning designations, however, in conflict with the objectives of the Plan, staff would explore the feasibility and advisability of employing a blanket CD rezoning approach to maintain the integrity of an adopted Plan.

3.2 Sanitary Sewers and Urban Infrastructure

Public Comment: Submissions received from residents of the Willard Street area indicate a desire for the extension of sanitary sewers and other urban infrastructure to the area in advance or as part of the re-development of the proposed Commercial Precinct.

Response: Through the development approval process for the proposed commercial precinct, new development will be required to provide for the extension of the sanitary sewer system and all other infrastructure improvements and services to properties undergoing redevelopment. New development will not, however, result in the direct extension of these services to properties within the Willard Street area.
The extension of sanitary sewer service to the Willard Street area is, however, within the scope of the City’s infrastructure improvement program, but is subject to availability of capital funding to provide for its implementation. This project has been included in previous funding applications under the Federal/Provincial/City infrastructure program, but has yet to receive priority for funding in relation to other civic projects.

3.3 Neighbourhood Issues

Public Comment: Some residents in the Willard Street area have expressed an interest in more formal local neighbourhood consultations to discuss and explore area development and land use issues. Issues identified relate to the preservation of the area’s rural character, requirements for flood proofing of individual properties, and improvements to the existing standard of infrastructure. In addition, concerns of some area residents extend beyond the immediate area to the form and nature of commercial and industrial development in the broader Big Bend area.

Response: Staff believe there is merit in further community / neighbourhood discussions to review and understand current local issues and to address concerns that may arise in the future. The form and nature of these discussions would need to be the subject of a further report to Council developed with community input and coordinated with the priorities of the Community Planning and Housing Committee. As such, it is proposed that the Community Planning and Housing Committee be requested to include within its current work program, an initiative to develop an approach to facilitate community dialogue on local issues in the Willard Street neighbourhood.

3.4 Pre-loading Requirements

Public Comment: Residents of the Willard Street area expressed concern regarding the potential impact of required pre-loading for new development on local drainage patterns and adjacent services and improvements.

Response: In response to resident concerns, and in keeping with current City requirements for pre-load and fill permits, developers of property in the subject area will be required to demonstrate, through qualified professionals, how each specific property can be prepared for development while seeking to protecting adjacent properties, and services from impacts of expected settlements arising from pre-loading prior to commencing work. As well, drainage generated from sites that undergo an engineered pre-load program for roads, services and buildings will be primarily directed into the Byrne Road storm system, away from Willard Street area. Where capacity of existing surface drainage systems is an issue, pre-loading can be undertaken in a series of smaller lifts to provide for more effective monitoring and the slower discharge of any displaced groundwater.
Development Plan
Re: Byrne Road and Marine Way Development Plan
2001 December 13 .................. Page 5

3.5 Control of Storm Water Runoff

Public Comment: Residents expressed a concern that, following new development, storm water from commercial sites and associated parking areas would contribute to peak flows of storm water through open drainage channels and watercourses.

Response: Currently, developed and/or filled industrial sites within the Commercial Precinct do not incorporate best management practices for the control and retention of storm water run-off. As properties in the subject Commercial Precinct are redeveloped, property developers will be required to incorporate best practices for on-site storm water management measures.

In addition, as part of the preliminary servicing review, an overall site grading and drainage plan is being developed for the Commercial Precinct to continue to direct the majority of surface drainage into the Byrne Road storm drain system, away from the agricultural and residential areas. As necessary, existing flows to the Jerry Rogers’ Creek system will be maintained to preserve protected riparian habitats in the Jerry Rogers’ Creek system.

3.6 Localized Flooding Concerns

Public Comment: Residents expressed concerns regarding general high water table levels in the neighbourhood, and periodic localized flooding of roads, yards, fields, cellars and crawl spaces.

Response: The residential and agricultural lands in the Willard Street area are located on the lowland area of the Fraser River flood plain. The area experiences the effects of a naturally high water table in the Big Bend and associated generally poor drainage characteristics due in large part to soil settlement and flat grades in the area. Ground water levels in the area are reflected in the water levels in adjacent road side ditches, and are typically well within 1 metre of the original natural ground surface, and are affected by precipitation. City crews are aware of local drainage problems, and have extended efforts to keep ditches operating to capacity and to keep local culverts clear of debris.

At the neighbourhood meeting held on 2000 November 16, City staff also offered to pursue approvals to undertake a drainage study for the lower lying residential/agricultural area with a view to developing a mitigation program for localized storm drainage and flooding concerns. Work on this drainage study for the Willard Street area has proceeded with a focus on improving peak storm drainage through the Jerry Rogers’ Creek system and the Willard Avenue / Spur Avenue drainage system through to the Meadow Avenue pump station at the Fraser River.
Once complete, the outcome of the drainage study and any arising remedial actions will be forwarded to Council for consideration and approval of any required capital expenditures. In response to previous submissions to Council on this subject, staff contacted area representatives to advise of the study being undertaken and that subsequent results would be conveyed. Following completion of the above noted study, as requested, staff will undertake to convey the results to representative area residents, property owners and agricultural operators, and to receive comment on the drainage plan prior to pursuing an approach for implementation.

3.7 Traffic Noise and Volumes

Public Comment: Residents in the Willard Street area currently experience significant truck and vehicle traffic noise generated from Marine Way. Residents expressed concerns related to current traffic noise levels and the potential for commercial development proposals to add to these levels given the lack of any noise protection measures on Marine Way.

Response: Noise attenuation measures were not undertaken when Marine Way was constructed by the Province. Current City standards provide for noise attenuation measures on expanded or new arterial roads built adjacent to residential areas. The proposed commercial development, while expected to contribute to increased traffic volumes on Marine Way, Byrne Road and Southridge Drive, is not expected to cause a marked increase to the existing traffic noise levels.

Current and future traffic noise impacts will, however, be mitigated through the installation of a noise attenuation fence adjacent to residential areas. The installation of noise fencing would be undertaken as part of any future expansion of Marine Way abutting the residential area.

3.8 Neighbourhood Traffic Patterns

Public Comment: Residents expressed concerns regarding the potential for new development to generate commercial traffic short cutting through the area from New Westminster via Trapp Road or Marine Drive into Meadow Avenue.

Response: The proposed Development Plan does not provide for access to the commercial development from Meadow Avenue in the Willard Street area. Direct vehicle access to proposed commercial sites is only provided for from Marine Way and from Byrne Road and therefore shortcutting through the area is not anticipated. However, should traffic be found to be short-cutting through the neighbourhood as a result of new development, a neighbourhood traffic management plan could be developed to address local concerns at that time.
3.9 Land Use Framework

Public Comment: Comments on the land use framework of the proposed Plan indicate strong support from industrial property owners within the subject area, and the development community, for the re-development of the area for the range of commercial uses defined in the draft Plan. Expressions of support were also received from existing industries and businesses in the Big Bend for the provision of commercial services in the area to meet current and future needs of area employees. The regional development community has identified the lack of supporting commercial service as a missing element in an otherwise highly attractive business development area.

A number of comments were received from residents in opposition to the proposed land use framework along with a stated preference to maintain the status quo, expand the suburban office component of the draft Plan, or to return the area to lower intensity agricultural and park uses. A strong lobby was also received from proponents for “general mechanize” retailers to broaden the categories of retail outlets envisioned to be accommodated in the designated Specialized Large Scale Retail area.

Response: The proposed land use designations for the subject area provide for the development of a mixed-use commercial centre to serve businesses and employees in the Big Bend. As well, opportunities are provided for a limited number and type of Specialized Medium and Large Scale Retail outlets. Figure 2, attached, shows the proposed land use designations for consolidated sites within the Commercial Precinct. Consolidated sites discussed below are shown on Figure 2 and have been labelled Site A thru I for ease of reference.

In order to further ensure the desired broad mix of retail outlets and uses on the proposed Primary Mixed-use Commercial Centre, and to maintain the viability of this centre in relation to market needs, it is proposed that the Development Plan be amended to increase the maximum grocery store size from 50,000 square feet to a maximum size (GFA) limit of 60,000 square feet for Site G. A single general retailer up to a maximum of 60,000 square feet is proposed to be permitted on Site H, subject to meeting other site development requirements. In addition, floor area for commercial developments would be limited to a maximum floor area ratio (FAR) of 0.50, with a maximum FAR of 1.0 for the Hotel and related uses. Actual floor area constructed is excepted to be considerably lower due to site needs for parking, landscaping and other features. As well, to support the overall viability of this proposed full service mixed-use commercial centre, it is proposed to include provision for a liquor store, and larger combination drug store / general merchandise outlets such as London Drugs on Site G, provided that the full range of retail services and restaurants are provided in relation to the subject site.
Within the draft Plan, three consolidated sites on the north side of Marine Way, Sites C, D, and E, are designated for the potential accommodation of large and medium scale specialized retail outlets. Specialized retailers to be accommodated here would include those that individually sell a single or specialized category of goods such as office furniture, equipment and supplies, home improvement and building supplies, home furnishings and appliances, and automobile parts and accessories.

Canadian Tire was listed as an illustrative example of a potential specialized retailer that could locate here given its traditional focus on automobile products and supplies. Costco was also included as an example wholesale club outlet for this area given that a significant component of its business was, and continues to be, the sale of large bulky items in volume packs for resale or consumer use. In light of industry comments on the changing nature of the retail industry, however, it is recognized that these outlets have adjusted or broadened the range of goods and services offered in response to market conditions.

Given that a Canadian Tire, could appropriately locate within the designated Primary Mixed-Use Commercial Centre on Site H, and to further clarify the type of specialised retail outlets envisioned for the designated medium and big box sites, it is proposed that Canadian Tire and wholesale clubs/Costco be removed from the specific illustrative list of specialized retail outlets to be accommodated on designated specialized retail sites.

The proposed Development Plan notes that specific proposals to adjust the designated mix of uses and GFA limits within individual consolidated sites in the area could be reviewed and pursued on a case by case basis within Council's discretion for approval of specific rezoning proposals.

3.10 Agricultural Land Reserve

Public Comment: A number of comments were received expressing concern related to possible impacts of new development on adjacent lands within the Agricultural Land Reserve (ALR). Requests where also received for the inclusion of designated ALR lands within the designated Commercial Precinct.

Response: An important objective of the Development Plan for this area is the protection of the agricultural viability of adjacent ALR lands. It is expected that the proposed commercial redevelopment of existing general industrial sites adjacent to designated agricultural lands will result in a significant improvement in the inter-relationship of these uses as specific measures are taken to improve and protect the viability of agricultural uses. As part of the Comprehensive Development (CD) approval process, existing industrial sites adjacent to ALR lands proposed for redevelopment to commercial uses will be required to demonstrate that site development plans protect the viability and productivity of adjacent agricultural land.
To reinforce objectives for protection of ALR properties, a specific reference is proposed for inclusion within the Development Plan to ensure that site planning, building design, landscaping, and storm water management requirements take into consideration the need to protect adjacent ALR lands from impacts related to building shading, artificial light intrusion, changes in drainage, property security, dust control, and other relevant issues.

3.11 City Lands - Kenneth Gordon School

Public Comment: A submission was received from the Board of Kenneth Gordon School in response to the draft Development Plan. The Board of the private school advise that they have no concerns with the proposed land uses for the Commercial Precinct. The school representatives, however, view the proposed development plan as an opportunity for improvements to area and school infrastructure and the existing inter-face with the adjacent Meadowland Peat property, shown as Site C on Figure 2.

Response: At the time of a potential future rezoning of the adjacent property (Site C), consistent with an adopted Development Plan, the City would work with the developer to ensure the creation of a landscape setback/buffer to the school property. The draft Development Plan provided for a 3 metre landscaped buffer along the school property line, and a 9 metre landscaped buffer along Meadow Avenue and other public streets.

In consideration of the schools request for a landscaped buffer between the school lands and the proposed commercial development, it is proposed that the width of the landscaped buffer between the property line of the school and the commercial development be increased from 3 metres to a minimum of 9 metres to be incorporated into a required 15 metre riparian setback from a water course on the school property, and that a secure fence be provided along the abutting commercial property line. Other minor adjustments to setback requirements in relation to flanking public streets have been incorporated into the proposed plan, including a distinction between property frontages on Marine Way and Byrne Road and those on proposed internal roads.

3.12 Environmental Issues

Storm Water Run-off: A concern regarding the impact of development on storm water run-off (e.g. from auto-oriented service commercial facilities) was received along with a suggestion that integrated storm water management plans and measures be used to protect downstream water bodies.

Response: The City recognizes the importance of storm water management in watercourse protection and has included key requirements within the plan. Within the proposed amended plan, storm water quality treatment criteria have been reworded for clarification. Proponents must provide storm water management plans at time of redevelopment to show how the
Development Plan
Re: Byrne Road and Marine Way Development Plan
2001 December 13 .......................... Page 10

development will meet storm water treatment criteria for water quality management. Promotion of ground water infiltration is not supported given the high water table conditions of the Big Bend area, and the objective to direct storm water into the Byrne Road storm system to protect the adjacent Willard Street neighbourhood.

Setbacks from Byrne Creek – A suggestion was received that the setback from Byrne Creek should be 30m as opposed to the 15m proposed. It was also noted that it would be desirable to record environmental baseline conditions of Byrne Creek, so that the City can monitor the ongoing health of the Creek during and after the development process.

Response: In determining setbacks from Byrne Creek, the Plan considers the ongoing rehabilitation and maintenance works associated with Byrne Creek, requirements for revegetation of setback areas, impacts of setbacks on development, and other environmental initiatives within the plan. City staff have worked closely with provincial and federal agencies through the joint Environmental Review Committee to identify key environmental issues in the Plan area, and develop appropriate environmental management strategies. The City also undertook to classify all other minor watercourses within the plan area as shown on Figure 3, attached. The results of the assessments, and the resulting prescriptions for treatment of watercourses in the Plan area, were reviewed and supported by provincial and federal ministries through the joint Environmental Review Committee.

The City is also continuing to work with fisheries agencies and stewardship groups to monitor environmental conditions within the Creek. The City conducted a watershed assessment in early 2001, and continues to liaise with stewardship groups to document fish returns to Byrne Creek.

4.0 PRELIMINARY INFRASTRUCTURE SERVICING STUDY

As referenced previously, a preliminary draft of the infrastructure servicing study for the proposed Commercial Precinct has been completed. Once finalized, this report will be available for review, and will assist in guiding servicing requirements for the Commercial Precinct. Some of the initial results of this study have been referenced above in providing responses to concerns raised through the public consultation process. The following provides a brief summary of the results of the study. As noted above, staff are also awaiting the results of the specific drainage study being undertaken for the Willard Street area.

4.1 Sanitary Sewer System

The Commercial Precinct is proposed to be served by a system of gravity and force mains that will convey sewage to a central sewage lift station to be located at Byrne Road and Wiggins Street. This lift station will pump sewage along Byrne Road to the GVRD interceptor sewer line at Hugh Drive. Each commercial site will construct its own private lift station to pump into the City force main located within road allowances.
4.2 Drainage System

A proposed storm drainage system was developed based on future build out of the Commercial Precinct. Using proposed road and site layouts and grades, catchment areas for the storm drainage system were determined. The system would convey storm water from commercial sites into the existing storm sewer on Byrne Road to the Fraser River. A portion of the site drainage from Sites B, C, and H, would continue to be conveyed through the Jerry Rogers’ system.

4.3 Water System

The area is currently well served by the existing water system network. Existing water mains area routed along Byrne Road and Wiggins Street. The proposed water main system will be routed along the proposed internal road system with connections to the existing main on Byrne Road. High density polyethylene water pipe is proposed to be used throughout the Commercial Precinct given expected longer term settlement of soils in the area.

4.4 Road Network

As part of the preliminary infrastructure study, a traffic study was undertaken to assess the proposed road network and to determine required travel lanes and intersection configurations to service the proposed commercial precinct. The results of the study confirmed expected requirements for intersection improvements at Byrne Road and Marine Way, a new intersection with Marine Way 340 metres east of Byrne Road, and an ultimate (2021) standard for 3 travel lanes in each direction on Marine Way extending from just east of North Fraser Way (Marshland) to just west of Byrne Road. As well, intersection improvements consisting of dedicated dual left turn lanes on Byrne Road at Marine Way are anticipated. The information provided by the traffic study on ultimate requirements for travel and turning lanes will be used as baseline information to assist in determining required road dedications from properties undergoing redevelopment within the Commercial Precinct. It will also assist in determining the phasing of required improvements to the road system as development proceeds and traffic volumes warrant. The findings of the traffic impact assessment and resulting prescriptions for roads and phasing of works related to new development have been reviewed by staff and revised and incorporated into the proposed amended plan provided in Appendix 1. One specific change given expected traffic patterns in the area is the redefinition of a proposed service/access right-of-way to a dedicated road standard between Sites G and J. Expected City capital contributions towards expansion of the major roads in the area, Byrne Road and Marine Way, would remain available to new development subject to Council approval of specific cost sharing proposals.
CONCLUDING COMMENTS AND NEXT STEPS

This report summarizes the input received in response to the draft Development Plan endorsed by Council on 2000 September 18. Appendix 1 presents the proposed amended Development Plan for Committee and Council consideration and adoption. Appendix 2 provides more detailed discussion and information in response to issues raised through the public consultation process.

The recommendations of this report seek Council adoption of the amended Development Plan subject to completion of the Council authorized amendment of the OCP to reflect the proposed commercial designation for the subject area. With Council adoption of the amended Development Plan, this report and Appendices 1 and 2 are also recommended to be distributed to property owners, business and residents in the subject area and the adjacent Willard Street neighbourhood for information. A further opportunity for public comment on the Plan will be available through the required Public Hearing for completion of the OCP amendment process.

With completion of the OCP amendment process, Council approval is also sought for the submission of the required Land Reserve Commission application for the exclusion of the referenced City and private lands from the Agricultural land Reserve. Council initiation of the OCP amendment process would also provide the basis for receipt and initial consideration of redevelopment applications within the Precinct, however, final approval of redevelopment applications would be subject the completion of the required OCP amendment process.

J.S. Belhouse, Director
PLANNING AND BUILDING

LP/sla/ca/sa
Attachments (3)

cc: City Manager
    Director Engineering
    Director Finance
    Director Parks, Recreation and Cultural Services
    City Solicitor
    City Clerk

Figure 1: Subject Area and Willard Street Area
Figure 2: Proposed Land Use Designations
Figure 3: Watercourses (within study)
Appendix 1: Proposed Development Plan
Byrne Road and Marine Way Commercial Precinct
Appendix 2: Summary of Public Comments and Discussion of Plan Amendments
Subject Area and Willard Street Area

- **Proposed Commercial Precinct**
- **Willard Street Neighbourhood (A2 District - Small Holdings)**
- **Agricultural Land Reserve (ALR) (A1 District)**
- **City Lands- P3 District**
- **Park / Open Space**

Figure 1
Figure 2
Land Use Designations
Figure 3
Watercourses (within study)

- Class A or Ao Watercourse (inhabited by salmonids or potentially inhabited with access improvements. Minimum 15 meter setback.)

- Class B Watercourse (Significant food and nutrient value. No fish present. 15 meter setback)

- Class C Watercourse (Insignificant food and nutrient value. No fish present. May be enclosed.)
Appendix 1

DEVELOPMENT PLAN
BYRNE ROAD AND MARINE WAY
SERVICE COMMERCIAL PRECINCT

2001 December 13
(Amended: 2002 May 13)

1.0 OVERVIEW

The subject mixed-use service commercial precinct is located at the Byrne Road and Marine Way intersection, within the Big Bend Development Plan area, as shown on Map 1. This location is central to the Big Bend business centre and industrial development areas. It is readily accessible from a local and regional perspective from Marine Way and Southridge Drive (Marine Way/Tenth Avenue Connector) which leads into Byrne Road. This high profile intersection is also Burnaby’s gateway to public amenities in the area including the Riverway Golf Course and the Fraser Foreshore Park, and to the developing business centres in the Big Bend.

The subject area was previously designated for general industrial use within the Big Bend Development Plan consistent with current uses and prevailing zoning designations as shown on Map 2. The development concept for the area requires the assembly of a number of properties to create appropriate sites for comprehensive development within an overall framework of consolidated properties and uses. Map 3 shows proposed site consolidations for new development which are labelled ‘Site A’ through ‘Site J’ for reference purposes.

Land use designations provide opportunities for the integrated development of a defined range of retail uses, suburban office and compatible light industrial uses. Infrastructure improvements are required as part of the redevelopment of this service commercial area. New development is to be of a high quality and aesthetic standard, reflective of other recent Business Centre development in the Big Bend. Development in the area is expected to protect Byrne Creek through riparian setbacks. Best management practices for storm water management will also be used to treat storm water entering the Byrne Road storm sewer system and Jerry Rogers’ Creek. New development is also expected to respect neighbouring agricultural and residential lands.
2.0 LAND USE DESIGNATIONS

2.1 Range of Permitted Uses

The land use designations for this area provide for the development of a service commercial precinct that includes a defined mixture of general retail, large scale specialized retail, auto oriented retail, integrated service stations, office, and other commercial uses. The range of appropriate retail uses would include those that would serve area business centre employees and businesses, as well as destination shopping trips for a limited range of goods. The area, however, is not intended to accommodate the full range and mix of entertainment, retail, business and residential services that would typically locate in, or require, a Town Centre location.

Collectively, the range of permitted uses for defined sites within the area includes suburban office, large scale retail outlets, pavilion restaurants, motor hotel, business and personal services, local commercial, recreation facilities, and compatible light industrial uses. A limited number and scale of general retail outlets, including a single medium-sized grocery store, are proposed within the designated Primary Mixed-use Commercial Centre to cater to employees in the Big Bend area. The remaining sites have been given single or mixed-use designations that involve differing combinations of office, light industrial, large/medium scale specialized retail, and motor hotel uses. Table 1, attached, provides an illustrative sample of the range of brand name retail outlets that could be accommodated in this precinct.

In terms of general land use organization, designated commercial sites on the south side of Marine Way would provide locations for a broad mix of local commercial, general retail, restaurants, and motor hotel and ancillary facilities to cater to the needs of area employees and businesses. Locations on the north side of Marine Way would generally provide locations for a limited range of destination, auto oriented shopping at specialized, single category, large and medium scale retail outlets that would take advantage of arterial routes in the area to serve a broader market.

Specific proposals to adjust the designated mix of uses within individual consolidated sites in the area could be reviewed and pursued on a case by case basis provided that the quality and desired level of integration of uses and adherence to the overall concept plan for the area could be achieved. The specific mix of permitted uses for each consolidated site would be determined through a Comprehensive Development (CD) Rezoning process to ensure that proposed uses are consistent with the expected role of this service commercial area and the guide plan directions. Additionally, covenants for approved uses and floor area restrictions would be used to ensure that replacement uses, over time, are consistent with the overall guide plan objectives in terms of the range, type and size of retail uses.
It is noted that specific proposals to adjust the designated mix of uses and GFA limits within individual consolidated sites in the area could be reviewed and pursued on a case by case basis within Council’s discretion for approval of specific rezoning proposals. The envisioned land use framework is shown on Map 4. A listing of land use designations for each consolidated site is also provided in Table 2. The following outlines the specific designated range and mix of uses for consolidated development sites within the Commercial Precinct.

2.2 Primary Mixed-Use Commercial Centre (Sites G & H)

The primary mixed-use commercial centre site is located on the south-east corner of the study area bounded by Marine Way, Byrne Road and the CPR line (labelled ‘Sites G and H’ on Map 4). These two consolidated sites are about 21 acres in size in total. Site development would involve the purchase and consolidation of a large part of three City-owned lots (13.5 acres) into the two consolidated sites. The remaining part of this City land would remain available for either consolidation with the adjacent light industrial property, commercial development, or as an alternative Fire Hall location.

Site G and H are intended to accommodate the full range of commercial and retail uses typical of a suburban shopping centre development. Ideally, these sites would be developed and serviced in an integrated manner incorporating common site design and architectural treatments.

Site G is intended to accommodate a full range of retail services referenced on Table 1, including a single medium size grocery store in the order of 50,000 - 60,000 square feet; drug store; general retailer(s); a number of small scale personal and business service establishments (typically 5,000 - 8,000 square feet in size) which could include a bank, liquor store, hair salon, drycleaner, florist, and business and professional offices. A variety of pavement restaurants integrated into the site would be expected to offer a range of dining experiences including fast food and casual dining. An integrated service station could also be accommodated.

Site H would accommodate complementary uses such as general retail outlets, restaurants and other services. Other primary uses which could be accommodated on this site could include a component of suburban office development. This range of uses for Site H and G would meet the full range of day-to-day shopping needs of the growing employment base in the Big Bend.

A single premise or outlet to a maximum size of 60,000 square feet is permitted on Site G (grocery store) and Site H (general merchandise outlet). In addition, floor area for commercial developments would be limited to a maximum floor area ratio (FAR) of 0.50. These limits will help to ensure the diverse range businesses needed to create a successful
full service commercial shopping centre in this location. Prior to approval of the grocery store use, the proponent would be required to commission a market study to confirm that this use would not adversely affect the viability of a similar sized grocery store desired for the Edmonds Town Centre area.

2.3 Motor Hotel and Ancillary Uses (Site F)

Motor hotel and ancillary uses are proposed for ‘Site F’, as shown on Map 4. This site is located on the south-west corner of Byrne Road and Marine Way, and covers an area of about 9 acres. This site is particularly well suited for development of a low profile Motor Hotel (4 - 5 storey maximum height), and a restaurant given its location adjacent Byrne Creek and the Riverway Golf Course, and its profile on the Marine Way frontage. Subject to required approval processes, the Motor Hotel development could include some ancillary liquor uses such as a neighbourhood pub and/or beer and wine store. A Motor Hotel development would not typically require the full 9 acre site area, as such the remaining portion of the site could be developed for some ancillary recreational uses, fitness club, or office uses with proper attention given to site development and integration issues. The maximum floor area for the Hotel and related uses is 1.0 (FAR).

2.4 Large Scale Specialized Retail (Site C)

Large and medium scale specialized retail uses are proposed for the site located between Meadow Avenue and Marine Way. This site is currently used for the Meadowland Peat soil mixing operation. Permitted outlets would include those that generally serve destination shopping needs for a single or specialized category of goods, provide for the purchase of items in large volumes, or handle larger size durable goods that require large areas for storage prior to sale. The type of large scale specialized retailers permitted would include those that individually sell a single or specialized category of goods such as office furniture, equipment and supplies, home improvement and building materials, home furnishings and appliances, automobile parts and accessories, or other similar specialized product lines. This site is of sufficient size (25 acres) and is intended to be reserved for a maximum of two specialized large scale retail outlets each occupying about 100,000 square feet of space, or a single large scale retail outlet together with other medium scale outlets.

2.5 Mixed Specialized Retail / Suburban Office (Sites D & E)

Two sites located on the north side of Marine Way at Byrne Road are designated for medium scale specialized retail use, and/or suburban office use. These sites are currently developed with a mix of older general industrial and vehicle sales operations. The established development pattern for these sites, and setback requirements from Byrne Creek for ‘Site E’.
may impact their marketability for redevelopment. The flexibility provided by the designation for single or mixed-use specialized retail and office development may assist in encouraging the timely consolidation and redevelopment of these properties consistent with the overall objectives of this sub-area plan.

These site, *(Sites C, D & E)* are not intended for the accommodation of general retail merchandise stores, clothing and fashion outlets, or convenience retail outlets. An appropriately located and integrated service station could also form a component of a comprehensive site development plan that also provided for the envisioned specialized retail uses.

### 2.6 Suburban Office (Sites A, B, I & J)

Four sites *(Sites A, B, I and J shown on Map 4)* are designated for suburban office or compatible light industrial development. These sites are located further away from the central commercial focus at Byrne Road and Marine Way. ‘Site B’ at Byrne Road and Meadow Avenue is currently fully developed with a newer, good quality light industrial use. ‘Site A’ contains a viable landscape supply facility, and ‘Sites I and J’ currently have building materials wholesale and film studio operations. As such, these sites would not be expected to redevelop in the foreseeable future. There is some potential for the expansion of the film studio operations within ‘Site J’ through an expansion onto the remainder of the City lands and/or the incorporation of the adjacent building supply operation.

### 2.7 Local Commercial

The frontage properties on Marine Drive west of Byrne Road would maintain the current local commercial designation, as per the current Big Bend Development Plan. Opportunities to consolidate some of the smaller properties on Marine Drive within a comprehensive office / light industrial development with the adjacent property on Byrne Road could also be considered along with the option of maintaining a local commercial Marine Drive frontage.

### 2.8 Public Institutional

A portion of the City site at the corner of Byrne Road and Wiggins Street is designated for a potential future fire hall site to extend service to the Big Bend and south slope area of Burnaby. This site has been held in reserve as a potential future fire hall for about 10 years. It will continue to be held on reserve pending further review of site and design options. The site meets minimum size requirements for a fire hall, covering an area of about 0.93 acres. There may also be a second site available for consideration as an alternative fire hall site on the remaining portions of City land arising from a finalized consolidation pattern for the creation of ‘Sites G and H’. This project is not presently in the City’s five year Capital Program, and would be subject to further evaluation in relation to other Capital funding priorities, and current review of fire service coverage.
3.0 TRANSPORTATION FRAMEWORK

3.1 Road Network

The proposed Byrne Road - Marine Way Service Commercial Centre is centrally located within Burnaby’s Big Bend area with direct access to Marine Way and Byrne Road. Byrne Road is a primary route into the Big Bend. Marine Way and Southridge Drive (Marine / 10th Connector) provide both regional and local access to the area.

Byrne Road is included in the City’s Capital Program for Major Roads, and is undergoing a phased program to improve the road to a Major Collector Primary standard. Current work involves property acquisition and the installation of a sanitary sewer line to serve this area. Final upgrading of the road would follow this work, the expected upgrading of the jet fuel line within the right-of-way by Trans Mountain Pipeline Ltd., and the completion of Southridge Drive (Marine / 10th Connector). Southridge Drive has been completed to an interim standard to Southpoint Drive. The current phase of work will extend 2 lanes through to 10th Avenue at 20th Street, followed by the future completion of the road to a four lane arterial standard.

Development of the Service Commercial Precinct will require a number of road improvements, and dedication and construction of new local road connections to service proposed new development. New internal roads serving commercial sites are to be constructed to a 14 m (46 foot) standard curb to curb width, including separated sidewalks and grass boulevards with street trees. Detailed parking and traffic studies will be required from the applicants for new development with particular emphasis given to access issues to individual development sites as part of the approval process for all new development proposals to finalize road improvement requirements.

Map 5, shows the proposed road and urban trail network in the study area. The provision of local road connections through the major development sites would be required to accommodate commercial access needs. A new fully signalized intersection on Marine Way at an intermediate location between Byrne Road and Meadow Avenue is proposed to serve the development. This signal is to be synchronized with the Byrne Road and Marine Way intersection signal in order to maintain the capacity of Marine Way. As well, Marine Way in this area will be constructed to provide three travel lanes in each direction with left turn lanes at the two intersections. As development proceeds, provision is made to accommodate dual left turn movements from Byrne Road onto Marine Way. Expected City capital contributions towards expansion of the major roads in the area, Byrne Road and Marine Way, would remain available to new development subject to Council approval of specific cost sharing proposals.

A phased approach to the required off-site road and intersection improvements will be developed in response to the particular application and sequencing of the subject development area.
It is expected that Marine Way will need to be constructed to a 3 lane standard in each direction from just west of Byrne Road to just east of North Fraser Way (Marshland) to accommodate expected through traffic movements by 2021. Road works on Marine Way would include provision for noise attenuation measures to protect the nearby Willard Street area consistent with established City policies. Of the noise attenuation options available, a continuous concrete fence would provide the best noise protection to the residential area adjacent to Marine Way. At a minimum, a future noise fence would likely need to extend from the City lands occupied by Kenneth Gordon School to the landscaped hedge near the intersection of Willard Street and Thorn Avenue. The fence would serve to intercept noise from vehicle and truck tires at ground level, and to partially intercept noise from truck exhaust stacks.

Meadow Avenue would maintain its current local road standard, and would not be used to provide access to the proposed commercial area. This would serve to maintain Jerry Rogers' Creek in an open condition within the Meadow Avenue right-of-way. As well, it would minimize the interaction of commercial uses with adjacent agricultural operations and the nearby residential area. Commercial traffic will utilize the main routes of Byrne Road and Marine Way to access the commercial precinct. While not anticipated, a neighbourhood traffic management plan would be developed to address any arising issues with commercial traffic short-cutting through local streets. Further, only a curb and gutter with no sidewalk would be required where local internal roads abut ALR lands or properties not undergoing redevelopment at that time.

3.2 Pedestrian and Bicycle Network

The City's Urban Trail system in the South Slope area is currently developed along the BC Parkway and adjacent to Byrne Creek Ravine Park through Edmonds Town Centre South. The proposed Urban Trail linkages in the study area would connect the Byrne Creek Ravine Park Urban Trail along Southridge Drive and Byrne Road to the proposed Urban Trail system on the east side of Byrne Creek on the dike access route. Urban Trail development is also proposed for the south side of Marine Way adjacent to the primary mixed-use centre extending eastward to the Canadian Pacific Railway (CPR) line. This frontage Urban Trail would extend east and west along Marine Way linking into the Big Bend Urban Trail network into the Glenlyon and Glenwood Business Centres. These Urban Trails would be constructed to the established 4 metre wide asphalt standard, with consideration given to an alternate standard in environmentally sensitive areas.

Byrne Road is to be finished to a final standard with provision for cyclists. Marine Way would also accommodate cyclists. A combination of separated sidewalks and Urban Trail facilities would be provided to accommodate pedestrian movements. A separated sidewalk and boulevard treatment would be provided on Byrne Road and the internal local roads
serving consolidated commercial sites. The north side of Marine Way would accommodate a separated sidewalk facility, while the south side would accommodate the Urban Trail along the commercial frontage. Bus stops and shelters remaining to be completed at the time of redevelopment for adjacent properties would also be provided through the redevelopment approval process. The Urban Trail and pedestrian network is shown on Map 5.

3.3 Transit Service

Convenient and reliable transit service to places of employment in the Big Bend has been an issue for major employers in the area. The current transit service to a limited part of the area is provided by an extension of the route No. 116 bus which operates from Metrotown to the residential area north of Marine Way and loops through the Big Bend on North Fraser Way and Glenlyon Parkway.

The planned extension of North Fraser Way through to Byrne Road is being completed by Canada Lands. This connection and Byrne Road improvements, once completed to a final standard, will present an opportunity to significantly improve transit service in the area. One option to utilize this new road connection would be the implementation of a new direct route between Metrotown and the 22nd Street Station via North Fraser Way and Byrne Road through the Big Bend. This new two-way service between 22nd Street Station and Metrotown would offer faster travel time to and from the Big Bend, increase transit coverage in the area, and offer a greater range of choice for existing and potential transit users. It would also provide direct transit access to the proposed service commercial precinct at Marine Way and Byrne Road for area employees and Burnaby residents.

With the construction of North Fraser Way through to Byrne Road and the upgrade of Byrne Road, staff would work with TransLink to implement this potential new route as part of a future area service plan review.

4.0 STANDARDS OF DEVELOPMENT

The Marine Way - Byrne Road intersection is one of the most high profile areas in the Big Bend. It is a major gateway to the new high quality business centre developments in the Big Bend and to significant public amenities such as Riverview Public Golf Course, Burnaby Fraser Foreshore Park, and to natural conservation areas associated the bog forest, Byrne Creek, and the Fraser River. The area is also adjacent or near protected agricultural lands, and residential and agricultural uses in the Willard Street area.

As such, it is important for all proposed developments to achieve a high level of quality in terms of site planning, environmental measures, architectural design and landscaping standards commensurate with those of existing and planned developments in the Big Bend, and be undertaken in a manner that respects adjacent and nearby agricultural and residential uses. The following outlines expected standards of development within the Commercial Service Precinct:
4.1 Site Planning

- Landscaped setbacks are to be provided on all development sites, between the property line and paved areas (parking, access ways, loading) and buildings. The minimum width of the landscaped setbacks is to be 9 m along the Marine Way and Byrne Road frontages, 6 m along internal public streets, and 3 m along other property lines.

- Site C is to incorporate a landscape buffer between the school lands and the commercial development site of a minimum width of 9 metres to be incorporated into the required riparian setback area, with a secure fence provided along the abutting property line. In addition, this site shall incorporate a 15 metre wide extensively landscape setback area adjacent to Meadow Avenue. This landscaped area will be designed to protect adjacent agricultural areas from any shading effects, and to provide for a pedestrian only access route into the Commercial Precinct from Meadow Avenue.

- To protect nearby and adjacent lands from potential development intrusions related to noise, lighting and use, the following development standards shall apply to Site C:
  
  - A 2.0 m high attractively finished concrete noise/security fence shall be provided between the commercial development the abutting Meadow Avenue frontage, and agricultural and school/park properties. The fence location shall be as follows:
    
    - setback 12.0m from the property line adjacent to Meadow Avenue within the required 15m landscaped area.
    - on the 15m riparian setback line within the landscaped area adjacent to the City school/park site.
    - adjacent to lands zoned to the A1 District within the Agricultural Land Reserve.

  - A commercial building, with attractive rear and side facades sympathetic to the agricultural character of the adjacent area, shall abut the required landscaped setback area adjacent to Meadow Avenue and the School/Park site. There shall be no parking, loading, driveways, storage and other active uses in the area between the building and Meadow Avenue and the City school/park lands.

  - Required loading bays shall incorporate high quality architectural screening and be sited to protect adjacent lands from noise and lighting impacts related to truck movements and loading activities. Loading bays are to be accommodated on the side or front of commercial buildings.
• Required lighting for the commercial site shall be engineered and designed to prevent light intrusion into adjacent areas.

• The Marine Way frontage is to incorporate on-site amenity water features similar to those at Marine Way and Glenlyon Parkway. On-site water features may also be designed to assist with or meet storm water management objectives.

• Main building facades and entries should be visually oriented towards public roads.

• Continuous pedestrian access routes (with concrete paving and at least 1.5 m wide) are to be provided throughout and between developments linking building entries with public streets, sidewalks, Urban Trails and rights of way.

• Loading, garbage and recycling facilities, and other service areas are to be screened from public view by building elements, structural screens or solid hedge landscaping.

4.2 Building Design Approach

• A high quality of architectural design commensurate with a business park setting is expected. This might suggest a “high-tech village” design approach compatible with new development in the Glenlyon Business Park.

• Use of high quality and durable materials is expected; plain stucco boxes are not an acceptable nor supportable design approach.

• Facade articulation, with well defined main entries and covering canopies is encouraged, as well as the incorporation of small commercial shops within larger building fronts.

4.3 Landscaping Standards

• All required setbacks from property lines to paved areas (parking, access ways, loading) and buildings are to be fully landscaped with trees and native shrubs, and should also incorporate water features on the Marine Way frontage for storm water management, wildlife or aesthetic purposes. Landscaping should make maximum use of native ground cover in place of grass.

• All landscaping should meet the most recent edition of B C. Landscape Architects and B.C. Nursery Trades Association landscape standards.
• Rows of trees spaced 7 m to 9 m apart should be planted within setbacks along streets (forming a double row of street trees) and wherever drive aisles, parking or service areas abut the setback.

• Groupings of coniferous trees in front yards are encouraged to reinforce the desired landscape character year round.

• Foundation planting is to be provided along building facades.

• Landscaped islands and deciduous trees should be provided to visually break-up parking lots. Trees are to be generally provided to an equivalent density of a 15 m to 15 m grid layout throughout the parking lot.

• Landscaping should emphasize native planting and IPM (Integrated Pest Management) principles.

4.4 Site Preparation

Subsurface soil conditions within the proposed Commercial Precinct generally consist of highly compressible peat which will impact the design, construction approach and cost of roads, services, buildings foundations and site preparation. Treatment is typically achieved by filling and preloading to compress the underlying subsurface soils to achieve stable foundation conditions. Due to the variable nature of subsurface soil conditions and previous peat extraction and filling activities, a specific approach is required for each property considered for development.

The services of qualified geotechnical engineers are to be employed in all site development, servicing and building pre-loading programs in the Commercial Precinct. Site specific geotechnical investigation, performance and design is undertaken for each development to establish stable foundation conditions for buildings and services, and to protect adjacent properties and services from unintended impacts.

The placement of fill required for pre-loading and flood proofing of sites within the proposed Commercial Precinct is also to be managed to control drainage to protect adjacent property. Groundwater generated from sites that undergo an engineered pre-load program for roads, services and buildings, is to be primarily directed into the Byrne Road storm system, away from Willard Street area. Where capacity of existing surface drainage systems is an issue, pre-loading can be undertaken in a series of smaller lifts to provide for more effective monitoring and the slower discharge of any displaced groundwater.
As part of City requirements for pre-load and fill permits, developers of property in the subject area will be required to demonstrate, through qualified professionals, how each specific property can be prepared for development while seeking to protecting adjacent properties, and services from impacts of expected settlements arising from pre-loading and flood proofing requirements prior to commencing work.

4.5 **Relationship Agricultural Lands**

To re-enforce objectives for protection of ALR properties, site planning, building design, landscaping, storm water management requirements, and site preparation work for *Sites B, C and D* are to take into consideration the need to protect adjacent ALR lands from impacts related to building shading, artificial light intrusion, changes in drainage, property security, dust control, and other relevant issues.

4.6 **Infrastructure Servicing**

All services and supporting infrastructure in the Commercial Precinct will be provided in accordance with the Subdivision Control Bylaw to the approval of the Director Engineering and the Subdivision Approving Officer.

The Commercial Precinct is to be served by a system of gravity and force mains that will convey sewage to a central sewage lift station to be located at Byrne Road and Wiggins Street. This lift station will pump sewage along Byrne Road to the GVRD interceptor sewer line on Hugh Drive. Each commercial site will construct its own private lift station to pump into the City force main located within road allowances.

The storm drainage system will convey stormwater from commercial sites into the existing storm sewer on Byrne Road to the Fraser River. A portion of the storm drainage from *Sites B, C and H* is conveyed through the Jerry Rogers’ system.

The area is currently well served by the existing water system network. Existing water mains area routed along Byrne Road and Wiggins Street. The proposed water main system will be routed along the proposed internal road system with connections to the existing main on Byrne Road.

5.0 **ENVIRONMENTAL CONSIDERATIONS**

The subject area is located in the flat low lying floodplain of the Fraser River. Pre-development, the area was bog, covered with lowland shrubs and trees. At the turn of the 20th century, landowners dug a series of ditches to drain the land, and cleared native vegetation, to develop the land for agriculture and industrial development.
Watercourses in the subject area are shown on Map 6. The subject area contains three Class A/Ao watercourses (ie. currently or potentially inhabited by salmonids year-round) - Byrne Creek, its tributary John Matthews Creek and a smaller tributary parallel to Byrne Creek in the same location. The City, stewardship groups, and landowners have spent considerable time and effort restoring the natural values of these creeks, including stream clean-ups, fish stocking, pollution control, and habitat rehabilitation. Future development activities and flood control measures will be sensitively managed to maintain or improve fish habitat.

Byrne Creek is a high value salmonid stream, supporting coho salmon, cutthroat trout, and rainbow trout. The Byrne Creek watershed encompasses a significant portion of Burnaby's south slope area. In 1997, the City commissioned a fish habitat assessment of Byrne Creek (Envirowest 1997). The assessment noted that salmonids use the Creek reaches within the subject area for spawning, rearing, and overwintering habitat.

Byrne Creek once flowed eastwards through the Big Bend Bog, but was re-routed in 1893 as a ditch along Byrne Road. In the 1980s, the City relocated the Creek into a new channel within a park corridor northwest of Byrne Road. The channel meanders within flood control dykes. This project improved salmonid and wildlife habitat, as well as providing better flood control and recreational trails. Recent works related to Southridge Drive (Marine / 10th Connector) have added further value and diversity to the stream through the creation of spawning channels and riparian habitat near Byrne Road and Southridge Drive.

John Matthew’s Creek is a tributary to Byrne Creek, and supports cutthroat trout. Coho salmon could potentially access John Matthews Creek from Byrne Creek, but habitat is limited due to small flows and gradient barriers.

The subject area is crossed by a series of ditches, that drain this former peat bog. In 2000 and 2001, the City conducted field assessments of these ditches to determine their downstream fisheries value. Testing for flow and fish presence, the studies identified only one Class B watercourse adjacent to Meadowland Peat on the City school lands - providing significant food and nutrient to downstream fisheries (Map 6). All other ditches in the subject area are Class C - providing insignificant food and nutrient value to downstream areas. Currently, Jerry Rogers’ Creek in the adjacent area is unclassified.

With the construction of the Byrne Road stormdrain infrastructure, the City redirected most of the drainage in the subject area away from Byrne Creek, and into a stormdrain that empties directly into the Fraser River. Storm water management issues for the plan area therefore primarily relate to the improving quality of storm water destined directly for the Fraser River.

The following section outlines requirements for new development to protect habitat and environmental values. These requirements have been reviewed and supported by the Ministry of Environment, Lands, and Parks (MELP), and the Department of Fisheries and Oceans...
(DFO). The riparian setbacks outlined in this plan are therefore a formal agreement, as per Sections 3 and 6 of the Streamside Protection Regulation of the Fish Protection Act.

5.1 Riparian Setbacks

Riparian vegetation has many ecological benefits, including stabilizing stream banks, moderating stream temperature, providing nutrient inputs into the stream, and providing habitat for wildlife species. At the time of development, the following measures will be used to protect and restore riparian vegetation:

- All new development (including structures and hard surfaces) will be set back at least 15m from the top of Byrne Creek, John Matthews Creek and the small tributary in this area. This relaxation from the Streamside Protection Regulations has been supported due to the City’s intensive restoration work and long-term planning on the Creeks within the subject area since the 1980s.

- All new development (including structures and hard surfaces) will be set back at least 15m from the top of the Class B stream (the open water course located on City school lands adjacent to Site C).

- The leave areas described above will be no-disturbance zones for conservation purposes, and will be protected by restrictive covenants. All existing structures and hard-surfaces will be removed from the leave areas, and the leave area will be revegetated in accordance with Ministry of Environment, Lands and Parks (MELP) guidelines. Planting plans should select vegetation that can provide shade to the stream and diversity of habitat, while not compromising the integrity of dyke structures.

- The Urban Trail proposed along the Byrne Creek alignment south of Marine Way will be developed in an environmentally sensitive manner, in keeping with DFO and MELP’s Access to Aquatic Areas guidelines. Detailed siting and routing plans for the Urban Trail will seek to protect aquatic habitat, while providing opportunities for users to experience the natural environment. The detailed trail design will be reviewed by DFO and MELP.

5.2 Storm Water Management

Storm water in the subject area has been redirected away from Byrne Creek into the Byrne Road stormdrain system. All sites, except for portions of Site B, Site C and Site H drain into the Byrne Road Stormdrain, which flows directly into the Fraser River. The eastern portion of Sites B, C and H drain into Jerry Rogers Creek.

The key storm water concern for the area is protecting water quality flowing into the Fraser River. Existing water quality issues in the area include storm water run-off from roads and paved surfaces, and run-off from agricultural, industrial and commercial land uses. The utility and infrastructure upgrades required to service new the development will help address some
of these issues. As well, required compliance with Provincial Contaminated Site legislation, at the time of development, will help protect the quality of storm water run-off.

Proposed new development in the subject area may increase the amount of impervious surfaces, particularly through the development of off-street parking to service commercial and other new developments. These surfaces are potential sources of contaminants such as suspended sediment, oils, grease, and metals. These impacts will be mitigated through the following measures:

- Site redevelopment should seek to make efficient use of new impervious area, as feasible, through such measures as shared parking facilities, and multi-storied buildings.

- Site development applications will be accompanied by a storm water management concept plan. This plan will show how storm water management features and best management practices (BMPs) will be incorporated on site. BMPs may include, but not be limited to containment, and treatment, and recycling and reuse of greywater. Pursuit of storm water infiltration is not generally encouraged given the historical land filling activities in the area, the naturally high water table in the area, and the objective to reduce contributions to ground water to lessen impacts on lower lying adjacent and nearby agricultural and residential properties.

- Site development will include installation of storm water management facilities onsite, to treat storm water, and where possible improve, water quality leaving the site. Parking lots and loading areas should be drained to storm interceptors and biofiltration facilities. Biofiltration facilities should have a sufficient detention period of up to 10 days for a 1:10 year return period of a 1 hour event, to ensure effective removal of metals, total suspended sediments, and nutrients. The design of the facility must set out parameters and targets that the system will achieve. Targets must be accepted by the City and senior government agencies.

- Site development plans will include a covenant agreement providing for the installation, operation, and maintenance of the storm water management systems by the property owner, in compliance with the approved plans during the effective life of the project.

- On-site water features should be designed to assist with storm water management objectives. For example, the Plan envisages water features along the Marine Way frontage. These water features should also function as biofiltration ponds.

- Site development plans will seek to maximize opportunities for vegetative interception and evaporation of rainwater by:
  - incorporating and retaining existing vegetation into site landscaping and development plans, wherever possible;
• planting trees within and around parking areas to intercept rain falling on impervious surfaces; and
• using vegetative best management practices such as swales to transport surface water.

5.3 Building Design

The anticipated area redevelopment presents an opportunity to incorporate environmentally friendly building materials, systems, and programs into the overall building and site design. Specific initiatives to be pursued include:

• encouraging the incorporation of energy efficient building and urban design, and employing alternative energy sources, and the use of environmentally responsible and appropriate building products.

• on-site recycling facilities to reduce the contribution to the wastestream from business activities.

• incorporating the City’s Integrated Pest Management principles and guidelines into private development. These principles promote an ecological approach to vegetation and pest management by encouraging the use of native, drought tolerant, wildlife attracting vegetation species in required landscaped areas, which also reduce maintenance and energy consumption.

5.4 Alternative transportation

The proposed development in the Byrne Road and Marine Way commercial precinct is primarily car-oriented. Employees and customers will mainly access the area by car via Marine Way, Byrne Road and Southridge Drive. It is recognized, however, that automobile use is the primary source of smog and air pollution in the region. As such, new development should support use of alternative forms of transportation for both employees and customers, to lessen reliance on the car. Proposals to assist with this goal include:

• development of the urban trail through the area, to link with other destinations in the City.

• requesting businesses to develop and incorporate alternative transportation programs within the work place, such as bicycle facilities and showers, ride sharing, and transit incentives.

• pursue improvements to transit services to the area.

• provision of sidewalk and other pedestrian connections throughout the area and to transit stops.
6.0 IMPLEMENTATION

Implementation of this Development Plan is subject to completion of a Council authorized amendment of the OCP to reflect the proposed commercial designation for the subject area. With completion of the OCP amendment process, Council approval would be sought for the submission of the required Land Reserve Commission application for the exclusion of the referenced City and private lands from the Agricultural land Reserve. Council initiation of the OCP amendment process would also provide the basis for amendment of the Big Bend Development Plan and receipt and initial consideration of redevelopment applications within the Precinct, however, final approval of redevelopment applications would be subject the completion of the required OCP amendment process.

In terms of the phasing development, there is a preference for new development to occur within the immediate vicinity of the Byrne Road and Marine Way intersection to enhance this gateway location. In particular, development of Sites G and H would be expected to advance first given the requirement to extend sanitary sewer, water and drainage infrastructure to the area from Byrne Road. At the same time, however, the development plan for the whole area has been structured to enable sites to proceed through the development approval process independent of the redevelopment of adjacent sites.
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### Table 1: Illustrative Examples of “Permitted” Retail Uses

<table>
<thead>
<tr>
<th>“PERMITTED” RETAIL USES (Category of Use/Typical Store Names)</th>
<th>STORE SIZE (Gross Floor Area - GFA)</th>
<th>LOCATION (Sites)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Retail</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Commercial Stores (Liquor Store, Bank, Florist, etc.)</td>
<td>(Square Feet) 5,000 to 8,000</td>
<td>(Permitted Location) Sites G, H</td>
</tr>
<tr>
<td>General Merchandise Retailers (London Drugs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavilion Restaurants</td>
<td>2,500 to 5,000</td>
<td></td>
</tr>
<tr>
<td>Shoppers Drug/Pharmasave</td>
<td>5,000 to 8,000</td>
<td></td>
</tr>
<tr>
<td>Business and Professional Offices</td>
<td>2,500 to 8,000</td>
<td></td>
</tr>
<tr>
<td>General Merchandise Retailers (Canadian Tire)</td>
<td>up to 60,000</td>
<td>Site H only</td>
</tr>
<tr>
<td><strong>Specialized Retailers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lordco, Parts Plus, Schucks Auto Supply</td>
<td>10,000 to 15,000</td>
<td>Sites C, D, E</td>
</tr>
<tr>
<td>Petcetera, Petmart, Superpet</td>
<td>15,000 to 20,000</td>
<td></td>
</tr>
<tr>
<td>End of the Roll, Jordans Floor Covering</td>
<td>20,000 to 30,000</td>
<td></td>
</tr>
<tr>
<td>Office Depot, Staples Office, Future Shop</td>
<td>25,000 to 30,000</td>
<td></td>
</tr>
<tr>
<td>The Brick, United Furniture</td>
<td>40,000 to 60,000</td>
<td></td>
</tr>
<tr>
<td>Home Depot, Revy</td>
<td>110,000 to 120,000</td>
<td></td>
</tr>
<tr>
<td><strong>Grocery Store (1 Only)</strong></td>
<td>(Square Feet) 30,000 to 60,000</td>
<td>(Permitted Location) Site G only</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td>(Permitted Location) Site F</td>
</tr>
</tbody>
</table>
Table 2: Listing of Proposed Land Use Designations for Consolidated Sites

<table>
<thead>
<tr>
<th>CONSOLIDATED SITES</th>
<th>ACRES</th>
<th>PROPOSED LAND USE DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>3.4</td>
<td>Suburban Office, Compatible Light Industrial</td>
</tr>
<tr>
<td>Site B</td>
<td>9.7</td>
<td>Suburban Office, Compatible Light Industrial</td>
</tr>
<tr>
<td>Site C</td>
<td>22.9</td>
<td>Large/Medium Scale Specialized Retail</td>
</tr>
<tr>
<td>Site D</td>
<td>11.7</td>
<td>Large/Medium Scale Specialized Retail, Suburban Office</td>
</tr>
<tr>
<td>Site E</td>
<td>7.6</td>
<td>Medium Scale Specialized Retail, Suburban Office</td>
</tr>
<tr>
<td>Site F</td>
<td>9.1</td>
<td>Motor Hotel and Ancillary Uses, Suburban Office</td>
</tr>
<tr>
<td>Site G</td>
<td>13.8</td>
<td>Primary Mixed-use Commercial Centre</td>
</tr>
<tr>
<td>Site H</td>
<td>7.3</td>
<td>Primary Mixed-use Commercial Centre, Suburban Office</td>
</tr>
<tr>
<td>Site I</td>
<td>6</td>
<td>Suburban Office, Compatible Light Industrial</td>
</tr>
<tr>
<td>Site J</td>
<td>10.2</td>
<td>Film Studio, Suburban Office, Compatible Light Industrial</td>
</tr>
</tbody>
</table>
Map 2
Existing Zoning, Uses and Development Pattern and ALR Exclusion

- Agricultural Land Reserve (ALR)
- Proposed ALR Exclusion
- Study Area
Map 4
Land Use Designations

- Site A (3.4 acres)
- Site B (9.7 acres)
- Site C (22.9 acres)
- Site D (11.4 acres)
- Site E (7.6 acres)
- Site F (9.1 acres)
- Site G (13.8 acres)
- Site H (6.0 acres)
- Site J (10.2 acres)
- Site K (7.3 acres)

Legend:
- Primary Mixed Use Commercial Centre
- Large Scale Retail
- Suburban Office/Compatible Light Industrial
- Local Commercial
- Mixed Large/Medium Scale Retail/Suburban Office
- Motor Hotel/Ancillary Uses/Suburban Office
- Civic Use (Potential Fire Hall)
Map 6
Watercourses (within study)

- Class A or Ao Watercourse (inhabited by salmonids or potentially inhabited with access improvements. Minimum 15 meter setback.)

- Class B Watercourse (Significant food and nutrient value. No fish present. 15 meter setback)

- Class C Watercourse (Insignificant food and nutrient value. No fish present. May be enclosed.)
SUMMARY OF PUBLIC COMMENTS
AND DISCUSSION OF PLAN AMENDMENTS

PROPOSED BYRNE ROAD AND MARINE WAY
SERVICE COMMERCIAL PRECINCT
2001 December 13

1.0 PUBLIC REVIEW PROCESS

On 2000 September 18, Council endorsed draft development plan proposals for the Byrne Road and Marine Way Service Commercial Precinct as a basis for further review and public comment.

This document provides a more detail summary and discussion of the results of the public consultation process, and resulting proposed amendments to the Development Plan.

The draft Development Plan for the Byrne Road and Marine Way Commercial Precinct was endorsed by Council as a basis for further review and public comment. Following Council endorsement of the proposed Development Plan on 2000 September 28, staff initiated the prescribed public consultation process to provide opportunities for area businesses, industrial property interests, and Burnaby residents to review and comment on the draft Plan. The process for public review of the draft Plan included:

- the distribution of the draft Development Plan to businesses, residents and property owners in and abutting the subject area through Canada Post. This distribution also advertised the scheduled public open house event held on 2000 October 26 at Glenwood Elementary School.

- placement of public notices in the local newspapers advising of the open house event, and of the availability of the draft Plan for review from the Planning Department and on the City’s web site.

- an open house event held at Glenwood Elementary School on 2000 October 26. Staff were available at the open house to outline the components of the draft Plan and to respond to individual questions and information requests.
Appendix 2
Re: Byrne Road and Marine Way Development Plan
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- the opportunity for submission of comments in person at the open house, by telephone, e-mail, mail, fax or in person to City staff.

The draft Development Plan was sent to about 200 businesses, property owners and residents in the area. A total of about 70 people attended the Open House. Planning and Engineering Staff and a member of Council also attended a meeting organized by residents of the Willard Street area on 2000 November 16 at the Kenneth Gordon School to receive comments on the proposed Plan. This meeting was attended by about 30 residents and property owners.

2.0 DISCUSSION OF ISSUES AND PROPOSED PLAN AMENDMENTS

Overall, comments on the proposed Plan indicate general support from industrial property owners within the subject area, and the development community, for the re-development of the area for the range of commercial uses defined in the draft Development Plan. Existing businesses in the Big Bend area support the proposals for the provision of commercial services in the area to meet current and future needs of area employees. However, a significant expression of concern regarding perceived impacts of new development was received from residents and property owners from the adjacent Willard Street area.

The following provides a summary of the primary concerns and issues identified through the public consultation process. Specific proposals for amendment of the draft Development Plan, as appropriate, are also provided. Proposed amendments have been incorporated into the revised Development Plan. In addition to a number of specific amendments, a number of text, editorial and minor changes have been incorporated into the proposed finalized Development Plan document, contained in Appendix 1.

2.1 Willard Street Area – “The Flats”

Through the consultation process for the proposed Byrne Road and Marine Way Commercial Precinct, a range of comments were received from residents and property owners from the adjacent Willard Street area. Concerns raised by residents primarily relate to the character of the area, perceived impacts of new development on the area, and the existing standard of area infrastructure. Figure 1, attached, shows the location of the Willard Street area in relation to the proposed Commercial Precinct.

The Willard Street residential and agricultural area is located on the lowland area of the Fraser River flood plain just east of the subject area. The area is bounded by Marine Drive to the north, the New Westminster / Burnaby border to the east, Marine Way to the south, and agricultural (ALR) and industrial lands to Byrne Road on the west. The area is characterized by larger residential/agricultural lots accommodating a range of residential, agricultural, and other lower intensity uses consistent with the prevailing A2 (Small Holdings)
District zoning designation. The current standard of infrastructure improvement in this residential area is reflective of the small holdings designation and its historical development pattern with open ditches providing for storm water drainage, individual septic tanks and field systems for sewage disposal, and narrow pavement caps on local streets constructed to an interim standard.

The Willard Street area is known historically as the “Flats”. The Flats neighbourhood began its development in 1862 as a 200 acre “District Lot 173” surveyed by the Royal Engineers. The first owner to acquire title from the Crown was rancher John Woodward who developed “Rosehill”, a small farm beside the North Arm Trail (Marine Drive). In the 1890's, he was well known for the operation of a dairy farm and the production of root and hay crops. Woodward leased much of his excess land to Chinese farmers who farmed along Holland Road and below Trapp Avenue on the Fraser River.

About 1906, John Woodward drew up an agreement with a real estate syndicate to subdivide the District Lot into twelve blocks each with 10 - 20 lots for sale. By the 1920s, the lots began to be developed by resident owners. The large parcels of affordable arable land appealed to many new immigrants as they could easily accommodate small family run farms. A unique community developed that included a group of Scandinavian families who had fish boats moored on the North Arm of the Fraser River at the Byrne Creek Slough; families from the Ukraine and Russia; and Chinese families who pioneered the agricultural production of the Flats on leased property.

During the Great Depression, the agricultural production of the area increased sharply as families turned to the land to grow food and raise animals for survival. By the 1940's, the population of the Flats more than doubled with over 100 homes and soon the neighbourhood banded together to create services for the community by lobbying for the creation of park and school sites. The area was hard hit by the 1948 flood which closed tram service and roads in the area. The potential for flooding was one reason that the area was designated for heavy industrial zoning in the 1946 Burnaby land use plan, however, the area’s prevailing character was reinforced with the residential/agricultural/small holdings A2 District zoning established by the 1965 Burnaby Zoning By-law.

The A2 District accommodates single family residential use and also allows for a range of rural uses including farming, truck gardening, greenhouses, kennels and the keeping farm animals for domestic or commercial purposes. These A2 District lands, south of the 14th Avenue right-of-way, are not within the Agricultural Land Reserve (ALR). The A2 District provides for large lots of a minimum size of 0.4 ha (0.9884 acres) and a width of not less than 37 m (121.39 ft.).

The following provides a brief summary and discussion of concerns raised by residents of the Willard Street area in response to the draft Commercial Precinct Development Plan.
2.1.1 General Comments

**Public Comment:** A range of comments were received expressing concern regarding the relationship of the adjacent and nearby agricultural and residential areas with the proposed Commercial Precinct at Byrne Road and Marine Way. General concerns related broadly to impacts arising from commercial land uses and anticipated increases in vehicle traffic and exhaust, surface parking, noise, crime, and other general impacts on area quality of life.

**Response:** The subject area proposed for the Commercial Precinct is currently designated for general industrial use within the Big Bend Development Plan. The prevailing general and heavy industrial zoning designations for most of the properties in the subject area allow for development of a wide range of industrial uses without the benefit of the full range of development controls provided for through the Comprehensive Development (CD) rezoning approval process. Current zoning designations permit the development of large industrial buildings up to 4 storeys in height with front yard setbacks of 6 metres (19.69 ft.), and rear and side yard setbacks of 3 metres (9.84 ft.).

The proposed Development Plan for the Byrne Road and Marine Way area supports the re-development of existing vacant, general industrial and heavy industrial properties to a mix of commercial and suburban office development. The re-development of this area would be undertaken to a finished urban standard in a manner reflective of the high quality of site planning, building design, and landscaping of the newer and emerging Business Centres in the Big Bend. The results of the Comprehensive Development (CD) approval process required to accommodate proposed commercial uses will provide for significant benefits in terms of quality of development, site planning, landscaping, environmental measures, and road and pedestrian improvements. Benefits that can be achieved through CD approval processes under an adopted Development Plan include:

- upgrade of infrastructure serving new development
- control of storm water and application of best management practices
- provision for pedestrian and cycling facilities
- increased landscaped development setbacks
- higher quality of building design
- incorporation of environmental considerations

Overall, new development in accordance with the proposed amended Development Plan for the Byrne Road and Marine Way Commercial Precinct will result in significant improvements to the quality of development at this gateway location to the Big Bend than would otherwise likely occur through redevelopment under prevailing zoning designations.
2.1.2 Sanitary Sewers and Urban Infrastructure

Public Comment: Many submissions received from residents of the Willard Street area indicate a desire for the extension of sanitary sewers and other urban infrastructure to the area in advance or as part of the re-development of the proposed Commercial Precinct. Another position was also expressed by some residents in the area that the rural character of the area, as built on the lowland bog, should be preserved. The Willard Street area is not currently served by sanitary sewer. Residential properties rely on individual septic tanks and field systems for sewage disposal.

Response: Through the development approval process for the proposed commercial precinct, new development will be required to provide for the extension of the sanitary sewer system and all other infrastructure improvements and services to properties undergoing redevelopment. New development will not, however, result in the direct extension of these services to properties south of 14th Avenue within the Willard Street area.

The preliminary infrastructure study undertaken in reference to the draft Development Plan outlines the likely routing of the sanitary sewer lines through the subject commercial area. The preferred alignment would bring the sanitary line along Byrne Road from Hugh Drive with a pump station at Wiggins Street and Byrne Road. The line would then extend up Byrne to Marine Way with connections into the Commercial Precinct along the proposed internal public roads. Each commercial development would connect to a force main by way of private lift stations to convey sewage to the proposed lift station on Wiggins Street.

A specific program to extend the sanitary sewer system to the adjacent residential and agricultural area would use a future proposed lift station to be located at Marine Way and North Fraser Way (Marshland). The forcemain sewer line is being extended to this location from Wiggins Street and North Fraser Way as part of the Glenwood Industrial Estates development proposal. The extension of sanitary sewer to the Willard Street area would require a City capital expenditure program, or a comprehensive redevelopment program for the Willard Street area.

The most recent estimated costs for extension of the sanitary sewer system to the approximate 100 lots in this area is in the order of $4.5 million ($45,000 per lot), excluding individual on-site connection costs for adjacent property owners. This estimate is based on a sanitary sewer system designed to accommodate current development density in the area permitted under the prevailing zoning district, and would not support the subdivision of existing 1 acre or smaller lots. To reduce costs, the sewer lines and electrical service for area pump stations where not proposed to be pre-loaded to a standard to support future construction of finished roads and sidewalks without impacting on an installed sanitary sewer system.
This project has been included in previous funding applications under the Federal/Provincial/City infrastructure program, but has yet to receive priority for funding in relation to other civic projects. The extension of sanitary sewer service to the Willard Street area is within the scope of the City's infrastructure improvement program, but is subject to availability of capital funding to provide for its implementation.

The alternative option for provision of urban services (sanitary sewer, enclosed storm drainage, finished roads, sidewalks) to the Willard Street area is through the comprehensive redevelopment of area. This approach would involve the pre-loading and flood proofing of property, roads and utilities on a comprehensive and consolidated lot basis, similar to what is anticipated in the Commercial Precinct. However, the prevailing historical subdivision and ownership patterns in the area would largely frustrate the redevelopment of this area on the comprehensive basis. As such, the required lot consolidation and re-subdivision needed to support investment in new infrastructure, and to provide for the required pre-loading and flood proofing of roads and property, would likely not be successfully achieved on a comprehensive and financially prudent basis.

2.1.3 Neighbourhood Issues

Public Comment: Some residents in the Willard Street area have expressed an interest in more formal local neighbourhood consultations to discuss and explore area development and land use issues. Issues identified relate to the preservation of the area’s rural character, requirements for flood proofing of individual properties, and improvements to the existing standard of infrastructure. In addition, concerns of some area residents extend beyond the immediate area to the form and nature of commercial and industrial development in the broader Big Bend area.

Response: Staff believe there is merit in further community / neighbourhood discussions to review and understand current local issues and to address concerns that may arise in the future. The form and nature of these discussions would need to be the subject of a further report to Council developed with community input and coordinated with the priorities of the Community Planning and Housing Committee.

As such, it is proposed that the Community Planning and Housing Committee be requested to include within its current work program, an initiative to develop an approach to facilitate community dialogue on local issues in the Willard Street neighbourhood.

2.1.4 Drainage and Flooding

The residential and agricultural lands in the Willard Street area are located on the lowland area of the Fraser River flood plain. The area experiences the effects of a naturally high water table in the Big Bend combined with the influences of area ditches and culverts. City crews are aware of local drainage problems, and have extended efforts to keep ditches operating to capacity and to keep local culverts clear of debris.
Residents of the Willard Street area expressed concern with the potential impact of new development on local drainage patterns. Residents anticipate that any new development in the nearby area will further impact the current poor drainage characteristics of the area. Areas of concern for residents relate to:

- **Pre-loaded Sites**

  **Public Comment:** Residents anticipate that sites prepared for development, through the placement of fill material to meet pre-loading for building footprints and flood proofing requirements, will direct ground and storm water drainage into the area. Anticipated sources of this drainage include rainfall run-off from development sites, and the displacement of groundwater. Residents also expressed concerns that pre-loading of properties for development will result in damage to adjacent properties and infrastructure resulting from the shifting of the underlying peat and soils.

  **Response:** The preliminary geotechnical assessment undertaken for the proposed Commercial Precinct, as part of the overall infrastructure study, confirm the presence of generally poor soil conditions, particularly highly compressible peat, underlying the study area. This soil condition is typical of much of the central area of the Big Bend. As such, pre-loading is the recommended approach to reduce post construction settlement of new roads, buildings and buried services. Further, it is expected that some building footprints and associated infrastructure may need additional support through the use of driven piles.

Most of the property in the subject commercial precinct has been previously filled and/or developed to an industrial standard, save for portions of Sites H and I shown on Figure 2. The closest site to the Willard Street area, the Meadowland Peat property (Site C), has also been pre-loaded in a more informal manner, and is currently under some pre-load, by virtue of the soil mixing operation currently conducted on site. The proposed Commercial Precinct area continues to settle as a result of current fill and load conditions on industrial sites, and would be expected to settle further as a result of required pre-loading to limit post construction settlements of roads, services and buildings.

The placement of fill required for pre-loading and flood proofing of sites within the proposed Commercial Precinct will be managed to control drainage and protect adjacent infrastructure and property. Groundwater generated from sites that undergo an engineered pre-load program for roads, services and buildings, will be primarily directed into the Byrne Road storm system, away from Willard Street area. Where capacity of existing surface drainage systems is an issue, pre-loading can be undertaken in a series of smaller lifts to provide for more effective monitoring and the slower discharge of any displaced groundwater.
In response to resident concerns, and in keeping with current City requirements for pre-load and fill permits, developers of property in the subject area will be required to demonstrate, through qualified professionals, how each specific property can be prepared for development while seeking to protecting adjacent properties, and services from impacts of expected settlements arising from pre-loading prior to commencing work.

- **Control of Storm Water Runoff**

  **Public Comment:** Residents also expressed a concern that, following new development, storm water from commercial sites and associated parking areas would contribute to peak flows of storm water through the open drainage channels and watercourses.

  **Response:** As properties in the subject Commercial Precinct are redeveloped, property developers will be required to incorporate best practices for on-site storm water management measures with storm water collected from roof and surface parking areas for release to the storm drain system.

As part of the preliminary servicing review, an overall site grading and drainage plan is being developed for the Commercial Precinct to continue to direct the majority of surface drainage into the Byrne Road storm drain system, away from the agricultural and residential areas. As necessary, base flows to the Jerry Rogers’ Creek system will be maintained to preserve protected riparian habitats by retaining the existing drainage from about 50% of the Meadowland Peat site and existing drainage from *Site B*, shown on Figure 2, which currently flows to the Jerry Rogers’ Creek system. South of Marine Way, *Site H* also contributes drainage to the Jerry Rogers’ Creek system.

Currently, developed and/or filled industrial sites, such as Meadowland Peat and other heavy industrial properties, do not incorporate best management practices for the control and retention of storm water run-off. New development on the Meadowland Peat site will seek to moderate the impact of peak flows from development sites on the Jerry Rogers’ Creek system through use of best management practices.

- **Localized Flooding Concerns**

  **Public Comment:** Residents also expressed concerns regarding general high water table levels in the neighbourhood, and periodic localized flooding of roads, yards, fields, cellars and crawl spaces.

  **Response:** As noted above, the residential and agricultural lands in the Willard Street area are located on the low lying area of the Fraser River Flood Plain. The area
experiences the effects of a naturally high water table in the Big Bend and associated generally poor drainage characteristics due in large part to soil settlement and flat grades in the area. Ground water levels in the area are reflected in the water levels in adjacent road side ditches, and are typically well within 1 metre of the original natural ground surface, and are affected by precipitation.

Given that most of the Big Bend and the Willard Street area is located within the low lying Fraser River Flood Plain, buildings, and other structures and improvements, subject to damage by flood waters are required to be constructed above flood plain elevations. This typically involves the filling of properties intended for residential or other uses to meet minimum elevations to protect improvements from flood water damage. In established areas, such as the Willard Street neighbourhood, this typically means the filling of sites areas intended for building footprints and septic tanks and fields. As well, related yard areas may be filled to enhance their utility in the wetter seasons. The raising of yard and site grades by filling improves drainage on site and offers protection from flood waters, although groundwater levels typically mound within fills bringing groundwater closer to the surface in adjacent unfilled areas.

At the neighbourhood meeting held on 2000 November 16, City staff offered to pursue approvals to undertake a drainage study for the lower lying residential/agricultural area with a view to developing a mitigation program for localized drainage and flooding concerns. Work on this drainage study for the Willard Street area has proceeded with a focus on improving peak storm drainage through the Jerry Rogers’ Creek system and the Willard Avenue / Spur Avenue drainage system through to the Meadow Avenue pump station at the Fraser River.

Initial results indicate that under sized culverts on the Meadow Avenue alignment of the Jerry Rogers’ Creek system are contributing to the localized flooding by restricting the flow of storm water from the Willard Street area through to the Meadow Avenue pump station on the Fraser River. The Glenwood Industrial Estates development proposal, currently being considered by Council, would result in the installation of a larger culvert at Trapp Avenue related to works for the relocation of the Creek within the development site. As well, this development proposal, would redirect about 50% of the drainage entering the Jerry Rogers’ Creek system from the Glenwood site to a new gravity outfall to the Fraser River recently approved by the Fraser River Estuary Management Program (FREMP) for servicing of industrial property at 5600 Riverbend Drive. Other remaining works identified to improve the drainage system would be pursued through the City’s capital program or other means.

Once complete, the outcome of the drainage study and any arising remedial actions will be forwarded to Council for consideration and approval of any required capital expenditures. In response to previous submissions to Council on this subject, staff
contacted area representatives to advise of the study being undertaken and that subsequent results would be conveyed. Following completion of the above noted study, as requested, staff will undertake to convey the results to representative area residents, property owners and agricultural operators, and to receive comment on the drainage plan prior to pursuing an approach for implementation.

2.1.5 Traffic Noise and Volumes

**Public Comment:** Residents in the Willard Street area currently experience significant truck and vehicle traffic noise generated from Marine Way. Residents expressed concerns related to current traffic noise levels and the potential for commercial development proposals to add to these levels given the lack of any noise protection measures on Marine Way.

**Response:** Noise attenuation measures were not undertaken when Marine Way was constructed by the Province. Current City standards provide for noise attenuation measures on expanded or new arterial roads built adjacent to residential area. The proposed commercial development, while expected to contribute to increased traffic volumes on Marine Way and Southridge Drive, is not expected to cause a marked increase to existing traffic noise levels. It is noted that generally, a perceived increase in base traffic noise only occurs with a doubling of traffic volumes. The traffic study completed for the area indicates that current peak hour traffic volumes on Marine Way are 1,790 vehicles westbound, and 2,586 vehicles eastbound. By 2021, the peak hour traffic volumes arising from a combination of new development and annual increases in regional traffic are expected to result in 2,860 vehicles westbound and 4,250 vehicles eastbound, about a two-thirds increase over a 20 year period.

Current and future traffic noise impacts will, however, be mitigated through the installation of a noise attenuation fence adjacent to the residential area. The installation of noise fencing would be undertaken as part of any future expansion of Marine Way. Of the noise attenuation options available, a continuous concrete fence would provide the best noise protection to the residential area adjacent to Marine Way. At a minimum, a future noise fence would likely need to extend from the City lands occupied by Kenneth Gordon School to the landscaped hedge near the intersection of Willard Street and Thorn Avenue. The fence would serve to intercept noise from vehicle and truck tires at ground level, and to partially intercept noise from some truck exhaust stacks.

2.1.6 Neighbourhood Traffic Patterns

**Public Comment:** Residents expressed concerns regarding the potential for new development to generate commercial traffic short cutting through the area from New Westminster via Trapp Road or Marine Drive into Meadow Avenue.
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**Response:** The proposed Development Plan does not provide for access to the commercial development from Meadow Avenue in the Willard Street area. Direct vehicle access to proposed commercial sites is only provided for from Marine Way and from Byrne Road. The implementation of the proposed Development Plan for the Commercial Precinct would result in the closure of the existing access to Meadow Avenue from the Meadowland Peat soil mixing operation. As such, commercial and truck traffic is expected to use these main routes to access the commercial precinct. After development of the Commercial Precinct, should commercial traffic be found to be short-cutting through the neighbourhood, a neighbourhood traffic management plan could be developed to address local concerns at that time.

2.1.7 **Public Consultation Process**

**Public Comment:** Through the efforts of residents in the Willard Street area, a second neighbourhood meeting was organized for and by local residents on 2000 November 16 at Kenneth Gordon School. This meeting was attended by Planning and Engineering staff and a member of Council. Staff received both verbal and written comments from residents at this meeting which have been included with other input received in response to the draft Plan.

At this neighbourhood meeting, residents expressed concerns regarding the approach used to solicit public comments on the draft Development Plan for the proposed Commercial Precinct. In particular, not all residents in the Willard Street area received a direct mailing of a copy of the draft Development Plan. The draft Development Plan and a notice of the public open house was delivered through Canada Post to those residents in closest proximity to the subject plan area - utilizing Willard Street as the eastern extent for the mailing. The placement of ads in the two local newspapers, and a notice on the City’s web page, were also used to advertise the open house to the broader community. Residents east of Willard Street, however, reported at the neighbourhood meeting that they did not become aware of the draft Development Plan and the open house event through these media.

**Response:** In future, staff would propose that the boundaries for the general distribution of information to the public related to the subject area include all households and property owners in the adjacent Willard Street area.

3.0 **OTHER COMMUNITY AND INDUSTRY COMMENTS**

In addition to the concerns raised by residents of the Willard Street area, outlined above, staff also received comments and views on the draft Development Plan from businesses, and other residents and interests. The following summarizes these comments under a number of broader categories, and suggests amendments to the proposed Plan as appropriate.
3.1 Land Use Framework

Public Comment: Comments on the land use framework of the proposed Plan indicate strong support from industrial property owners within the subject area, and the development community, for the re-development of the area for the range of commercial uses defined in the draft Plan. Expressions of support were also received from existing industries and businesses in the Big Bend for the provision of commercial services in the area to meet current and future needs of area employees. A number of comments were received from residents in opposition to the proposed land use framework along with a stated preference to maintain the status quo, expand the suburban office component of the draft Plan, or to return the area to lower intensity agricultural and park uses. A strong lobby was also received from proponents for “general merchandise” retailers to broaden the categories of retail outlets envisioned to be accommodated in the area.

Response: The proposed land use designations for the subject area provide for the development of a mixed-use commercial centre to serve business and employees in the Big Bend. As well, opportunities are provided for a limited number and type of specialized medium and larger scale retail outlets. Approximately one-third of the subject area is designated for suburban office or compatible light industrial uses. The proposed mix of land uses meets the overall objectives of the Official Community Plan (OCP) to provide a service commercial centre for the Big Bend, and to provide a limited opportunity for the location of defined specialized large scale retail outlets. Efforts to clearly define the range and type of retail outlets for this Commercial Precinct also seek to support the central role defined for the City’s Town Centres for the accommodation of the broader range of retail, business and commercial services.

Staff have received a number of submissions from a proponent seeking amendments to the proposed Development Plan to allow for the inclusion of “general merchandise retailers”, such as Wal-mart, Great Canadian Superstore, Sears, and Zellers, within the areas designated for specialized medium and big box retail outlets.

The draft Plan provides for the accommodation a broad range of general retail uses (general merchandise, grocery, pharmacy, banking, restaurant, and personal and business service outlets) on two sites designated for “Primary Mixed-Use Commercial Centre” use – Sites G and H shown on Figure 2. These two consolidated sites are located in the south-east corner of the study area, and cover an area of about 21 acres. This area is intended to be a convenience commercial node to meet the needs of employees and businesses in the Big Bend area by accommodating the full range of retail uses, including general retailers, as part of a comprehensive mix of uses. The broad range of retail and service commercial uses anticipated for this area include a grocery store, a drug store/pharmacy, general retail outlet(s), a variety of pavilion restaurants, and smaller personal and business service establishments.
In order to further ensure the desired broad mix of retail outlets and uses on the proposed Primary Mixed-use Commercial Centre, it is proposed that the Development Plan be amended to include an increased maximum size (GFA) limit of 60,000 square feet for the permitted grocery store on Site G, and a general merchandise on Site H, within the designated Primary Mixed-use Commercial Centre. In addition, floor area for commercial developments would be limited to a maximum floor area ratio (FAR) of 3.0, with a maximum FAR of 1.0 for the hotel and related uses. As well, to support the overall viability of the proposed full service mixed-use commercial centre, it is proposed to include provision for a liquor store, and larger combination drug store / general merchandise outlets such as London Drugs, provided that the full range of anticipated retail, personal and business services, and restaurants are also provided for across Sites G and H.

Within the draft Plan, three consolidated sites on the north side of Marine Way are designated for the potential accommodation of large and medium scale specialized retail outlets. Retail outlets envisioned for this area include those that individually offer a single or specialized category of goods, provide for the purchase of goods in larger volumes, or handle larger sized durable items. Specialized retailers to be accommodated here would include those that individually sell a single or specialized category of goods such as office furniture, equipment and supplies, home improvement and building supplies, home furnishings and appliances, and automobile parts and accessories.

This area is explicitly not intended to accommodate general retail merchandise, entertainment, department store, or fashion and clothing outlets. Sufficient provision for these uses have been provided for within the City’s commercial hierarchy in Town Centre and Urban Village locations, and within the Primary Mixed-Use Commercial Centre designated for the south side of Marine Way in the Development Plan. Further, this distinction between the range of retail uses permitted within the Commercial Precinct will serve to enhance and support the market viability of various specific uses defined for the consolidated parcels within the Plan area.

Within the draft Development Plan, Canadian Tire was listed as an illustrative example of a potential specialized retailer given its traditional focus on automobile products and supplies. Costco was also included as an example wholesale club outlet for this area given that a significant component of its business was, and continues to be, the sale of large bulky items in volume packs for resale or consumer use. In light of industry comments on the changing nature of the retail industry, however, it is recognized that these outlets have adjusted or broadened the range of goods and services offered in response to market conditions. While Canadian Tire and Costco, in our view, can not be wholly depicted or classified as general merchandisers, the emerging retail concept for these outlets may lead to challenges from “general retail merchandisers” for inclusion within the list of appropriate retail users for the designated specialized (medium and large scale) retail sites in the Development Plan.
Given that a Canadian Tire, could appropriately locate within the designated Primary Mixed-Use Commercial Centre, and to further clarify the type of specialised retail outlets envisioned for the designated medium and big box sites, it is proposed that Canadian Tire and wholesale clubs/Costco be removed from the illustrative list of specialized retail outlets to be accommodated on designated specialized retail sites.

The proposed Development Plan notes that specific proposals to adjust the designated mix of uses and GFA limits within individual consolidated sites in the area could be reviewed and pursued on a case by case basis within Council’s discretion for approval of specific rezoning proposals.

3.2 Agricultural Land Reserve

Public Comment: A number of comments were received expressing concern related to possible impacts of new development on adjacent lands within the Agricultural Land Reserve (ALR). Requests where also received for the inclusion of designated ALR lands located between the Meadowland Peat site and Meadow Avenue within the designated Commercial Precinct.

Response: An important objective of the Development Plan for this area is the protection of the agricultural viability of adjacent ALR lands. It is expected that the proposed commercial redevelopment of existing general industrial sites adjacent to designated agricultural lands will result in a significant improvement in the inter-relationship of these uses as specific measures are taken to improve and protect the viability of agricultural uses. Under prevailing industrial zoning designations, available regulatory controls are not sufficient to fully protect adjacent agricultural lands from potential impacts arising from currently permitted industrial uses and site development options. As part of the Comprehensive Development (CD) approval process, existing industrial sites adjacent to ALR lands proposed for redevelopment to commercial uses will be required to demonstrate that site development plans protect the viability and productivity of adjacent agricultural land.

Staff have conveyed information to the Land Reserve Commission (LRC) office on the specific proposals for the subject area. City and Commission staff have reviewed the past history of properties identified for exclusion, and the relationship of the proposed Commercial Precinct to remaining adjacent agriculturally viable lands within the ALR. Commission staff have not expressed any significant concerns or reservations in relation to the Development Plan proposals. It is expected that the Commission will undertake to provide formal comment on the development concept as part of the required process for amendment of the OCP.

To reinforce objectives for protection of ALR properties, a specific reference is proposed for inclusion within the Development Plan to ensure that site planning, building design, landscaping, and storm water management requirements take into consideration the need to protect adjacent ALR lands from impacts related to building shading, artificial light intrusion, changes in drainage, property security, dust control, and other relevant issues.
3.3 City Lands - Kenneth Gordon School

Public Comment: A submission was received from the Board of Kenneth Gordon School in response to the draft Development Plan. Kenneth Gordon is a private school which provides alternative programs for children with specific learning disabilities. The school is located on City owned lands made available to the Burnaby School District for school use. These City lands are located adjacent to the Meadowland Peat site – Site C shown on Figure 2. No change in the current P3 Park and Public Use Zoning District is proposed for these lands in the proposed Development Plan.

The Board of the private school advise that they have no concerns with the proposed land uses for the Commercial Precinct. The school representatives view the proposed development plan as an opportunity for improvements to area and school infrastructure and the existing inter-face with the adjacent Meadowland Peat property. In particular, the school would like to see improvements to the drainage characteristics of the school fields, removal of any fill encroaching on City property, and the development of a landscape buffer between the school and commercial development to preserve the ambience of the school and playing fields.

Response: At the time of a potential future rezoning of the Meadowland Peat property, consistent with an adopted Development Plan, the City would work with the developer to ensure the creation of a landscape setback/buffer to the school property. As well, site development will address issues related to site drainage and potential fill encroachment from current Meadowland Peat operation. The draft Development Plan provided for a 3 metre landscaped buffer along the school property line, and a 9 metre landscaped buffer along Meadow Avenue and other public streets.

A review of stream setback requirements for open watercourses in the area was undertaken by staff in consultation with the Ministry of Water, Land and Air Protection (WLAP) and the Federal Department of Fisheries and Oceans (DFO) through the City’s Environmental Review Committee. A required riparian setback of 15 metres was established from the top of bank of the open watercourse located on City school lands adjacent to the Meadowland Peat property.

In consideration of the schools request for a landscaped buffer between the school lands and the proposed commercial development, it is proposed that the width of the landscaped buffer between the property line of the school and the commercial development be increased from 3 metres to a minimum of 9 metres to be incorporated into the above noted 15 metre riparian setback, and that a secure fence be provided along the abutting commercial property line.
In response to general neighbourhood concerns regarding sight lines to the commercial development, it is noted that the required 9 metre setback area adjacent to the Meadow Avenue frontage will be extensively landscaped to screen the development. This landscaped area will also need to be designed to protect adjacent agricultural areas from any shading effects, and to provide for a pedestrian only access route into the Commercial Precinct from Meadow Avenue.

The school also expressed an interest in the extension of infrastructure improvements (sanitary sewer service, road, sidewalk and street lighting) to the school property through redevelopment of the adjacent proposed commercial site. As noted earlier in this report, while a future proposed lift station to be located at Marine Way and North Fraser Way will bring a capability for sanitary sewer closer to the school and the Willard Street area, it will not directly result in the extension of this or other infrastructure improvements to adjacent properties that are not undergoing redevelopment.

3.4 Environmental Issues

Public Comment: Arising from the public review of the draft Plan, the following issues were raised in relation to the environmental sections of the Plan:

Storm Water Run-off – A concern regarding the impact of development on storm water run-off (e.g. from auto-oriented service commercial facilities) was received along with a suggestion that integrated storm water management plans and measures be used to protect downstream water bodies.

Response: The City recognizes the importance of storm water management in watercourse protection and has included key requirements within the plan. Within the proposed amended plan, storm water quality treatment criteria have been reworded for clarification. Proponents must provide storm water management plans at time of redevelopment to show how the development will meet storm water treatment criteria for water quality management. Promotion of ground water infiltration is not supported given the high water table conditions of the Big Bend area, and the objective to direct storm water into the Byrne Road storm system.

Setbacks from Byrne Creek – A suggestion was received that the setback from Byrne Creek should be 30m as opposed to the 15m proposed. It was also noted that it would be desirable to record environmental baseline conditions of Byrne Creek, so that the City can monitor the ongoing health of the Creek during and after the development process.

Response: Twenty years ago, the section of Byrne Creek within the plan area ran as a roadside ditch along Byrne Road. Water quality concerns were high. Over the past two decades, the City has worked to improve the flood control, water quality, and habitat features
of the watercourse. In determining setbacks from Byrne Creek, the Plan considers the ongoing rehabilitation and maintenance works associated with the Creek, requirements for revegetation of setback areas, impacts of setbacks on development, and other environmental initiatives within the plan.

The provincial Streamside Protection Regulations outline recommended development setbacks from streams. Sections 3 and 6 of the Regulation also allows local governments to develop agreements with the provincial and federal governments to determine setbacks for a particular local area. In developing the Area Plan, City staff worked closely with provincial and federal agencies through the joint Environmental Review Committee to identify key environmental issues in the Plan area, and develop appropriate environmental management strategies. The plan therefore includes sections on not only riparian setbacks and revegetation, but also storm water management, building design, and alternative transportation.

The City also undertook to classify all other minor watercourses within the plan area, shown on Figure 3, attached. The results of the assessments included in the overall servicing study, and the resulting prescriptions for treatment of watercourses in the Plan area, were reviewed and supported by provincial and federal ministries through the joint Environmental Review Committee.

Considering the plan as a whole, the Environmental Review Committee supported the development setback of 15m from Byrne Creek. The setback requirements protect existing vegetation, and will mean that some existing paved surfaces will be returned to a vegetated riparian condition. The City is also continuing to work with fisheries agencies and stewardship groups to monitor environmental conditions within the Creek. The City conducted a watershed assessment in early 2001, and continues to liaise with stewardship groups to document fish returns to Byrne Creek.

4.0 PRELIMINARY INFRASTRUCTURE SERVICING STUDY

Associated Engineering has completed a preliminary draft of the infrastructure servicing study for the proposed Commercial Precinct. Once finalized, a copy of this report will be made available for public review. Some of the results of this study have been referenced above in providing responses to concerns raised through the public consultation process. The following provides a brief summary of the results of the study. As noted above, staff are also awaiting the results of the specific drainage study being undertaken for the Willard Street area.

4.1 Sanitary Sewer System

As noted previously, the Commercial Precinct is proposed to be served by a system of gravity and force mains that will convey sewage to a central sewage lift station to be located at Byrne Road and Wiggins Street. This lift station will pump sewage along Byrne Road to the GVRD interceptor sewer line on Hugh Drive. Each commercial site will construct its own private lift station to pump into the City force main located within road allowances.
4.2 Drainage System

A proposed storm drainage system was developed based on future build out of the Commercial Precinct. Using proposed road and site layouts and grades, catchment areas for the storm drainage system were determined. The system would convey storm water from commercial sites into the existing storm sewer on Byrne Road to the Fraser River. A portion of the site drainage from Sites B, C, and H, which includes the Meadowland Peat site, would continue to be conveyed through the Jerry Rogers’ system.

4.3 Water System

The area is currently well served by the existing water system network. Existing water mains area routed along Byrne Road and Wiggins Street. The proposed water main system will be routed along the proposed internal road system with connections to the existing main on Byrne Road. High density polyethylene water pipe is proposed to be used throughout the Commercial Precinct given expected longer term settlement of soils in the area.

4.4 Road Network

A traffic study was undertaken for the commercial precinct to assess the proposed road network and to determine required travel lanes and intersection configurations to service the proposed commercial precinct. The results of the study confirmed expected requirements for intersection improvements at Byrne Road and Marine Way, a new intersection with Marine Way 340 metres east of Byrne Road, and an ultimate (2021) standard for 3 travel lanes in each direction on Marine Way extending from just east of North Fraser Way (Marshland) to just west of Byrne Road. As well, longer term intersection improvements consisting of dedicated dual left turn lanes on Byrne Road at Marine Way are anticipated.

The information provided by the traffic study on ultimate requirements for travel and turning lanes will be used as baseline information to assist in determining required dedications for road from properties undergoing redevelopment within the Commercial Precinct. It will also assist in determining the phasing of required improvements to the road system as development proceeds and traffic volumes warrant. The findings of the traffic impact assessment and resulting prescriptions for roads and phasing of works related to new development have been reviewed by staff and revised and incorporated into the proposed amended plan. Expected City capital contributions towards expansion of the major roads in the area, Byrne Road and Marine Way, would remain available to new development subject to Council approval of specific cost sharing proposals.
Appendix 2
Re: Byrne Road and Marine Way Development Plan
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Figure 1: Subject Area and Willard Street Area
Figure 2: Land Use Framework
Figure 3: Watercourse Map

Appendix 1: Proposed Development Plan
Byrne Road and Marine Way Commercial Precinct

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Subject Area and Willard Street Area

- Proposed Commercial Precinct
- Willard Street Neighbourhood (A2 District - Small Holdings)
- Agricultural Land Reserve (ALR) (A1 District)
- City Lands- P3 District
- Park / Open Space

Figure 1
Figure 3
Watercourses (within study)

- Class A or Ao Watercourse (Inhabited by salmonids or potentially inhabited with access improvements. Minimum 15 meter setback.)
- Class B Watercourse (Significant food and nutrient value. No fish present. 15 meter setback)
- Class C Watercourse (Insufficient food and nutrient value. No fish present. May be enclosed.)