

Coquitlam

For Committee

March 24, 2017

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To: City Manager

From: General Manager Planning and Development

Subject: **Burquitlam-Lougheed Servicing Assessment**

For: **Council-in-Committee**

Recommendation:

That Council-in-Committee receive the report dated March 24, 2017 of the General Manager Planning and Development entitled "Burquitlam-Lougheed Servicing Assessment" for information.

Report Purpose:

This report provides an overview of the Burquitlam-Lougheed Servicing Assessment as a companion document to the Burquitlam-Lougheed Neighbourhood Plan, for Council-in-Committee's information and feedback.

Strategic Goal:

This report supports the strategic goal of achieving excellence in governance and corporate objectives to strengthen neighbourhoods and enhance the sustainability of City services, transportation systems and infrastructure.

Background:

Similar to previously endorsed servicing assessment for the Partington Creek and Maillardville Neighbourhoods, a high level Servicing Assessment (Attachment 1) has been prepared for the Burquitlam-Lougheed Neighbourhood Plan (BLNP) area to identify and summarize required infrastructure improvements (transportation, utility, parks) to support anticipated development of the BLNP area, including estimated infrastructure improvement costs and funding sources (such as Development Cost Charges or DCC's). These servicing improvements are based on the projected 9,000-10,000 new dwelling units anticipated for the neighbourhood over the next 20 to 25 years.

This 'snapshot' Assessment is an integral companion document to the BLNP and will support neighbourhood plan development and implementation. The Assessment clearly identifies the capital servicing needs and costs and is a key document to guide cost-effective development and assist Council in planning capital project priorities, both in the BLNP and Citywide.

This report provides an overview of key Assessment elements and next steps regarding the Assessment and future financing initiatives. The Assessment was jointly prepared by Engineering and Public Works, Parks, Recreation and Culture, Strategic Initiatives, and Planning and Development staff.

Discussion/Analysis:

Estimated Costs and Funding Sources

The Assessment identifies approximately \$162 million in overall costs, of that \$128 million are DCC eligible and \$34 million are non-DCC eligible. Similar to previous servicing assessments, the Assessment identifies capital costs only and does not include operating and maintenance costs which are evaluated and funded by the Engineering and Public Works and Parks, Recreation and Culture, and Finance Departments as part of the City's annual capital budget process.

The Assessment also contains maps that graphically illustrate and detail the conceptual location and area of all major capital infrastructure and servicing works (transportation, utilities and parks) needed to support the BLNP.

DCC Eligible Costs and Funding

As noted above, the total estimated DCC eligible costs to service the BLNP area are approximately \$128 million. Based on development projections for the BLNP area, an estimated \$113 million in DCC funds will be collected from the Burquitlam and Lougheed neighbourhoods, depending on the amount of development that occurs over the life of the plan (20 to 25 years).

The City uses a Citywide DCC program, which applies the same DCC rates to new development across the City, to fund the capital cost of all DCC-eligible capital projects in Coquitlam. Over the long-term, it is anticipated that the \$15 million difference between the projected DCC revenue (\$113 M) generated in the BLNP area and the estimated DCC costs (\$128 M) for the BLNP area will be generated through projected DCC revenue collected on a Citywide basis. Prioritization of funding for construction of new infrastructure in the BLNP area will be considered as part of the Five Year Financial Plan and broader Council priorities.

Staff also note that some of the infrastructure improvements planned for the BLNP area support adjacent neighbourhoods. Additionally, planned infrastructure works in other areas of Southwest Coquitlam directly or indirectly benefit new development in the Burquitlam and Lougheed neighbourhoods.

Non-DCC Eligible Costs and Funding

As noted in the Assessment, the development of some of the transportation improvements, utility infrastructure, and park improvements are not eligible for funding through the City's DCC program and will require separate funding of approximately \$34 million.

The non-DCC eligible transportation improvements (\$3.9 M) will be funded from a combination of funding sources, including funding from other levels of government. The non-DCC eligible utility improvements (\$1.95 M) will be funded through the City's Sewer and Drainage Utility. The scope and program of non-DCC eligible park improvements (\$3.1 M) will be established through a future planning and prioritization process with Council.

Discussion/Analysis cont'd/

Non-DCC Eligible Costs and Funding cont'd/

These non-DCC eligible costs noted above may be funded through a combination of sources, including private sector development, capital funding, capital borrowing, utility fees, Community Amenity Contributions (CACs), density bonus funding, and contributions from other levels of governments. Staff will work with Council to identify appropriate funding options as development proceeds.

As report previously, the Coquitlam Family YMCA facility and mixed-use residential development is planned in partnership with the City, YMCA of Metro Vancouver, and Concert Properties. The City's estimated budget for this project is \$25 million to be primarily funded from CACs collected from a previously defined area in the Burquitlam and Lougheed neighbourhoods.

Infrastructure Development and Timing

The Assessment summarizes infrastructure improvements to be completed during the build-out of the neighbourhood over the next 20 to 25 years. It is also important to note the timing of specific capital infrastructure improvements is variable, and the City will optimize DCC funds to maximize opportunities to fund BLNP infrastructure while ensuring DCC funded projects in other parts of the City also proceed.

The estimated timing of capital projects over the short term are identified in the City's Five-Year Financial Plan; however, the exact timing of these projects will be based on:

- Council's capital project priorities (i.e., capital projects in the BLNP relative to projects elsewhere in the City);
- DCC revenue collection;
- the general housing market;
- the actual pace of development within the BLNP area; and
- the utilization of developer-funding revenue tools (latecomer agreements, DCC front-ender agreements, density bonus funding, CACs, etc.).

Next Steps:

Based on any feedback received from Committee, the Assessment will be refined and brought back to Council for endorsement in conjunction with consideration of fourth and final reading of the draft BLNP into the Citywide Official Community Plan.

DCC-eligible items noted in this Assessment that are not currently included in the DCC program are proposed to be added during future DCC program update(s).

Financial Implications:

The attached Assessment details an estimated \$162 million in capital costs, of that \$128 million are DCC eligible costs, and a projected \$34 million are non-DCC eligible. The Assessment also provides an overview of projected \$113 million in DCC revenue that will be generated to support construction of these services from the Burquitlam and Lougheed neighbourhoods depending on the level of development.

Financial Implications cont'd/

While this leaves a funding gap of DCC revenue generated within the Burquitlam and Lougheed neighbourhoods, adequate DCC revenue is projected to be raised on a Citywide basis, to fund infrastructure projects in the BLNP area based on Council's capital project priorities.

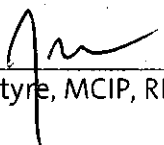
As noted above, non-DCC eligible items will be funded through a variety of means, including private sector development, capital funding, capital borrowing, utility fees, CACs, density bonus funding, and contributions from other levels of governments.

Conclusion:

The Burquitlam-Lougheed Servicing Assessment (Attachment 1) provides a high-level 'snapshot' summary of estimated costs and proposed funding sources for the servicing works that are needed to support the build-out of the BLNP. Estimated DCC eligible costs are approximately \$128 million, plus approximately \$34 million in non-DCC eligible costs for an estimated total of \$162 million.

It is anticipated that \$113 million of DCC revenue will be collected from the neighbourhood over the long term; it is also anticipated that adequate DCC revenue will be collected on a Citywide bases to support the required projects overtime, and non-DCC eligible projects will require separate funding sources which will be determined at the time of development of those projects.

Dependent on any feedback received from Committee, staff will report back to Council with a finalized Assessment for Council endorsement, in conjunction with consideration of fourth and final reading of the BLNP OCP amendment bylaw.

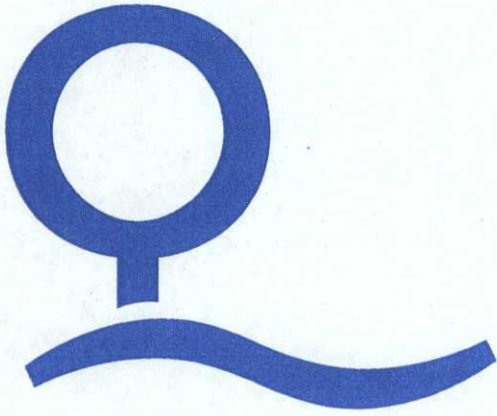


J.L. McIntyre, MCIP, RPP
AP/ss

Attachment:

1. Burquitlam-Lougheed Servicing Assessment (Doc. #2565469)

- This report was prepared by Allison Pickrell, Community Planner with input from Engineering & Public Works, Parks, Recreation & Culture, Finance, and Strategic Initiative staff; and reviewed by Carl Johannsen, Manager Community Planning.



DRAFT

Burquitlam-Lougheed Servicing Assessment

City of Coquitlam

March 23, 2017

Coquitlam

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The Burquitlam-Lougheed Servicing Assessment was developed by a multi-disciplinary team of Coquitlam staff, led by Community Planning and including Engineering and Public Works, Parks, Recreation and Culture, Strategic Initiatives, and Planning and Development staff.

1.0 INTRODUCTION

1.1 Context

The Burquitlam-Lougheed Servicing Assessment is a high-level summary of estimated costs (both DCC and non-DCC) and proposed funding sources for servicing requirements (infrastructure works including transportation and utility improvements, and parks) that are needed to support the build-out of the Burquitlam-Lougheed Neighbourhood Plan ('BLNP' or the 'Plan').

These servicing requirements are based on the projected increase of 9,000-10,000 dwelling units (approximately 15,000 – 20,000 people) anticipated to be developed within the BLNP area over the next 20-25 years (in addition to the 2011 area population of approximately 20,000 residents and 14,000 dwelling units). Some of these servicing elements also support the wider Southwest Coquitlam community.

As a companion document to the BLNP, this Assessment is based on the key outcomes of detailed servicing, phasing and financial plans that aim to facilitate redevelopment in Burquitlam-Lougheed. While much of the servicing and infrastructure in Southwest Coquitlam is interlinked and improvements in one area help to support adjacent neighbourhoods, this Assessment only includes capital costs for improvements within the BLNP boundary and does not include the operating and maintenance costs associated with these projects.

More specifically, the Development Cost Charge (DCC) eligible capital costs noted in this Assessment are incorporated into the City-wide DCC program through periodic DCC bylaw updates. Non-DCC eligible capital improvements will be funded through a combination of sources, including private sector development, the City's capital budget, utility fees and contributions from other levels of governments. Project specific details are provided in Sections 2.0 – 4.0. The needs identified in this Servicing Assessment are used by the Finance Department to prepare future Five Year Financial Plans and assist in the determination of the City-wide DCC program, for approval by Council in the future to support the BLNP and the City as a whole.

This Servicing Assessment was jointly prepared by Engineering and Public Works, Parks, Recreation and Culture, Planning and Development, and Strategic Initiatives staff. This Assessment should be used in conjunction with the City's Five Year Financial Plan, *Official Community Plan, Burquitlam-Lougheed Neighbourhood Plan, Subdivision and Development Servicing Bylaw, Development Cost Charge (DCC) Bylaw, Community Amenity Contribution (CAC) Policy, and the Parks Prioritization Plan* in setting capital funding priorities.

1.2 Funding and Costs Summary

Transportation, utility, and park improvements in the BLNP area will be implemented through a combination of funding sources, including private sector development, the City's capital and Development Cost Charge (DCC) reserves, density bonus funds, utility fees and potential contributions from other levels of governments. The City will determine the optimal funding source in balance with other City funding priorities in order to support future growth.

1.2 Funding and Costs Summary cont'd/

The majority of DCC-eligible infrastructure works required to support full build-out of the Plan are already included in the City's DCC program. Works that are not currently included will be reviewed and are anticipated to be added to the DCC program during the next DCC bylaw review.

1.2.1 Estimated DCC Revenue

The City uses a Citywide DCC program, which applies the same DCC rates to developments across the City to fund the cost of all DCC-eligible capital projects in Coquitlam. Based on the development projections for the BLNP area, it is estimated that up to approximately \$113 million of DCCs (Table 1) will be collected from development within the BLNP area over the next 20-25 years, depending on actual development activity and market cycles.

1.2.2 Estimated Costs

The total estimated cost of DCC projects listed in the BLNP Servicing Assessment is approximately \$128 million (Table 1). Non-DCC eligible costs are approximately \$34 million (Table 2).

Table 1 – Estimated DCC revenues and costs generated from BLNP by 2046¹

	Transportation DCCs	Water DCCs	Sanitary DCCs	Drainage DCCs	Parkland Acquisition DCCs	Parkland Improvement DCCs	Total
Estimated DCC Revenue ²	\$26.8 M	\$8.3 M	\$2.8 M	\$10.2 M	\$47.8 M	\$17.2 M	\$113.2 M
Estimated DCC Costs ³	\$1.9 M	\$12.95 M	\$0.65 M	\$1.54 M	\$97.5 M	\$13.8 M	\$128.34 M

Coquitlam's DCC program is citywide and revenue and spending is not tracked on a neighbourhood level basis. DCC revenue generated from development within Burquitlam-Lougheed will go towards funding DCC-eligible infrastructure improvements across Coquitlam as prioritized by Council. Given the interconnected nature of infrastructure, some of the improvements in Burquitlam-Lougheed will directly or indirectly benefit other areas of Southwest Coquitlam and vice versa.

¹ The DCC Revenue includes an estimate of 80,000 m² (861,000 sq. ft.) of commercial floor space. Estimated dwelling unit projections are set out in Section 5.0.

² All revenue estimates are based on the City's 2015 DCC Bylaw and are in 2016 dollars.

³ All cost estimates are at current market value and are based on conceptual design concepts which are subject to change at the time of functional design, site development, and land acquisition.

1.2.2 Estimated Costs cont'd/

The proposed land uses in Burquitlam-Lougheed have a long-term infrastructure benefit in that less new infrastructure is required to support redevelopment (i.e., greater number of dwelling units in the same service area). Additionally, the increased density can help reduce the on-going maintenance burden. The Assessment does not include operating and maintenance cost estimates.

In addition, there are a number of identified infrastructure upgrades and new facilities in the BLNP area that cannot be funded through DCCs and will require a separate funding source of approximately \$34 million, bringing the total DCC eligible and non-eligible servicing costs for the BLNP to approximately \$162 million (Table 2). Further details on these costs are contained in the following sections. Non DCC-eligible items will be funded through a variety of means, including private sector development, capital funding, capital borrowing, utility fees, Community Amenity Contributions (CACs), density bonus funding, and contributions from other levels of government.

Table 2 – Estimated Cost Breakdown

DCC Eligible Project Categories	Estimated Cost	Currently Funded in DCC Program	Unfunded in DCC Program
Transportation DCC Eligible	\$1.9 M	\$1.9 M	
Water DCC Eligible	\$12.95 M	\$12.95 M	
Sanitary DCC Eligible	\$0.65 M	\$0.65 M	
Drainage DCC Eligible	\$1.54 M	-	\$1.54 M
Park Acquisition DCC Eligible	\$97.5 M	\$97.5 M	
Park Improvement DCC Eligible	\$13.8 M	\$13.8 M	
Total Cost DCC Eligible Projects	\$128.34 M	\$126.8 M	\$1.54 M
Non-DCC Eligible Project Categories	Estimated Cost		
Transportation Non-DCC Eligible	\$3.9 M	-	-
Drainage Non-DCC Eligible	\$1.95 M	-	-
Park Improvement Non-DCC Eligible	\$3.1 M	-	-
Community Recreation Facility	\$25 M	-	-
Total Cost Non-DCC Eligible Projects	\$33.95 M	-	-
TOTAL ESTIMATED COSTS	\$162.29 M	\$126.8 M	\$1.54 M

1.3 Infrastructure Development Timing and Coordination

This assessment summarizes infrastructure improvements to be completed to support the build-out of the neighbourhood over the next 20-25 years, but it is important to note the timing of specific capital infrastructure improvements is variable. It is recognized that this Assessment will need to be coordinated with citywide capital planning and funding.

1.3 Infrastructure Development Timing and Coordination cont'd/

The estimated timing of capital projects over the short term are identified in the City's Five Year Financial Plan. The exact timing of these projects will be based on Council's capital project priorities (i.e., capital projects in the BLNP area relative to projects elsewhere in the City), DCC revenue collection, the housing market, the actual pace of development within the BLNP area and the utilization of developer-funding revenue tools.

Where appropriate, the City will coordinate infrastructure improvements in the BLNP area with other infrastructure upgrade requirements in adjacent neighbourhoods and throughout Southwest Coquitlam.

2.0 TRANSPORTATION

The Evergreen SkyTrain Extension is a significant, long-term rapid transit investment for Coquitlam that will improve transportation choice for residents and help shape transit-oriented growth over the long term.

The City has recently completed a number of improvements along the North and Clarke Road corridor, and Como Lake Avenue and Clarke Road intersection in parallel to the construction of the SkyTrain Extension. Further improvements to this corridor will occur incrementally as redevelopment occurs in the area.

The BLNP proposes several City funded transportation improvements to support growth in Burquitlam-Lougheed. The remaining transportation improvements are the responsibility of private development or other levels of government. The location of these improvements are shown on Appendix A.

2.1 Arterial Streets

North Road, Clarke Road, Como Lake Avenue, Austin Avenue, Blue Mountain Street and Lougheed Highway are designated Arterial Streets in the BLNP area. Improvements to arterial streets in the neighbourhood will be funded through the City's DCC program as well as through private development.

The City will work with the Province and TransLink to improve multimodal access along the Evergreen Line corridor, along existing and future transit routes, and within station core and shoulder areas (generally within 400-800 metres of a station or a 5-10 minute walking distance). Through these improvements, the City also seeks to minimize vehicle congestion along arterial routes and minimize vehicle conflicts. Improvements to the North and Clarke Road corridors as well as the Como Lake Avenue and Clarke Road intersection have recently been implemented as part of Evergreen Line construction.

- **The North Road Corridor Enhancements** – the City of Coquitlam and City of Burnaby contributed to the following works along the corridor: median enhancements (e.g., rain water infiltration, enhanced landscaping with irrigation, trellis in select locations); planted curb bulges at Cochrane Avenue, Cameron Street and Foster Avenue to provide opportunity for tree planting, introduce parking/bus stop lanes, shorten pedestrian crossing distance of North Road and improve intersection safety efficiency; and gateway features proposed near Gatineau Place and at the intersection of North Road and Clarke Road; nodal plaza/enhanced gateway areas, as well as boulevard and sidewalk enhancements delivered through redevelopment.
- **Clarke Road Corridor Enhancements** – intersection improvements at Como Lake Avenue and Smith Avenue, as well as a new signalized intersection for improved mall access; station plaza area and frontage improvements consisting of wider sidewalks, plantings, furnishings, and improved lighting; guideway accent lighting; future multi-use pathway along the west side of Clarke Road from Como Lake Avenue to Kemsley Avenue complete with pedestrian scale lighting and tree planting to improve connectivity of local neighbourhoods and enhance aesthetics.

2.1 Arterial Streets cont'd/

There are constraints along the corridor that preclude widening of sidewalks and boulevards along the entire North Road and Clarke Road frontages. Additional walking and cycling accommodation, tree planting, underground hydro, or other street furnishings will be considered in conjunction with the BLNP update and as redevelopment opportunities arise.

Through redevelopment, the City will be requesting road dedication by development applicants. Developers will be responsible for any required improvements for the frontages along North and Clarke Road. This dedication will be used to provide wider sidewalks/boulevards and street furniture areas.

In addition, as part of redevelopment the City will also request road dedication along the east side of North Road for a third northbound lane between Austin Avenue and Highway 1.

2.2 Citywide Greenways

Based on the Strategic Transportation Plan, the Burquitlam-Lougheed Neighbourhood Plan identifies four Citywide Greenways as shown on Appendix A:

1. Clarke Citywide Greenway (Burquitlam Station to Kemsley Avenue)
2. Regan Citywide Greenway (Burquitlam Station to Coquitlam Central Station)
3. Fairview – Dogwood Citywide Greenway (Austin Avenue to Morrison Avenue)
4. Off-Austin Citywide Greenway (North Road to King Albert Avenue)

The *Strategic Transportation Plan* has identified these Greenways as key corridors for multi-modal connectivity and this Assessment provides greater clarification with respect to the alignments and costs. These greenway routes will feature frontage improvements such as wider sidewalks and planted boulevards, mid-block pedestrian crossings (where appropriate), and corner parkettes. Specific features will be explored in conjunction with private development. The design requirements for frontage improvements are described in the *Burquitlam-Lougheed Streetscape Guidelines*.

Citywide Greenways are implemented and funded from a combination of funding sources, including City DCC reserves and sources from other levels of government, as available. Developers are responsible for standard frontage improvements as per the *Subdivision and Development Servicing Bylaw* for development sites along corridors designated as Citywide Greenways and the City will fund incremental upgrades to the standard frontage improvements. Phasing of the Citywide Greenways will depend on the pace of development, adjacent frontage improvements and the capital budgeting process.

The Fairview-Dogwood and Regan Citywide Greenways are anticipated to be built within the next five years, and the portion of the Fairview-Dogwood Greenway, from Brookmere Avenue to north of Como Lake Avenue, will be built in 2017. The Off-Austin Citywide Greenway is projected to be built beyond the current Five Year Financial Plan.

2.2 Citywide Greenways cont'd/

As mentioned previously, the Clarke Road corridor enhancements include a multi-use path on the west side of Clarke Road as part of the Clarke Citywide Greenway slated for implementation in 2016-2017. The estimated costs for Citywide Greenways are summarized in Table 4.

Table 4 – BLNP Area Citywide Greenway Projects

	Project Description	Estimated Cost DCC Eligible (44%)	Estimated Cost Non-DCC Eligible (56%)	Other Funding Sources	Total Estimated Cost ⁴
1	Clarke Greenway (Burquitlam Stn. - Kemsley Ave)	\$218,000	\$282,000		\$500,000
2	Regan Greenway (Burquitlam Stn. - Blue Mountain St)	\$72,000	\$93,000	\$620,000	\$785,000
3	Fairview-Dogwood Greenway (Austin Ave - Morrison Ave)	\$174,000	\$226,000	\$760,000	\$1.2 M
4	Off-Austin Greenway (North Rd - Blue Mountain St) ⁵	\$1.4 M	\$1.9 M		\$3.3 M
	TOTAL ESTIMATED COST	\$1.9 M	\$2.5 M	\$1.4 M	\$5.75 M

2.3 Other Supporting Projects

There are other transportation improvements, not funded by the City, that are planned to be completed in order to support full build-out of the Plan and will be the responsibility of private development. The location of these improvements is shown on Appendix B.

2.3.1 Neighbourhood Greenways

Neighbourhood Greenways will be implemented and funded through private development, and coordinated through development servicing requirements for each application. A summary of all Neighbourhood Greenway projects is presented in Table 5 and shown on Appendix B.

These Greenway routes will feature frontage improvements such as wider sidewalks and planted boulevards, mid-block pedestrian crossings, and corner parkettes where appropriate, as required by the *Subdivision and Development Servicing Bylaw*. Specific features will be explored in conjunction with private development. The design requirements for frontage improvements are described in the *Burquitlam-Lougheed Streetscape Guidelines*.

⁴ These cost estimates are based on preliminary design and are subject to change. Any utility network upgrades or repairs, property requirements for road widening, ornamental furniture, street trees and structural soils are not included in the costs estimates. For development projects fronting Citywide Greenways, the developer will be responsible for standard frontage improvements and the City will cover the incremental cost to upgrade standard frontage improvements to Citywide Greenway standards.

⁵ The off-Austin Greenway connects North Road and Mariner Road – the cost provided in Table 4 is for the portion in the BLNP area between North Road and Blue Mountain Street.

2.3.1 Neighbourhood Greenways cont'd/*Table 5 – BLNP Area Neighbourhood Greenways (funded by development)*

Project Number	Project Description
A	Oakdale Greenway (Gardena Drive to Port Moody)
B	Morrison-Miller Greenway (Dogwood Street to Miller Park)
C	Farrow-Clarke Greenway (Farrow Street to Clarke Road)
D	Langside Greenway (Burquitlam Park to Breslay Street)
E	Whiting Way Greenway (Smith Avenue to Foster Avenue)
F	Emerson Greenway (Burquitlam Park to Foster Avenue)
G	Cottonwood Park Greenway (Cottonwood Avenue to Foster Avenue)
H	Appian Greenway (Denton Street to North Road)
I	Dansey Greenway (Guilby Street to North Road)
J	Lougheed Neighbourhood Centre Greenway (Delestre Avenue to North Road)
K	Delestre Greenway (North Road to Arrow Lane)
L	Guilby Greenway (Austin Avenue to Lougheed Highway)
M	Lower Lougheed Greenway (Lougheed Highway to Guilby Street to Gauthier Avenue)

2.3.2 New Street Extensions

There are a number of street and laneway extensions proposed for the BLNP area to provide improved access to the newly redeveloped areas and to enhance the road network for all users. Construction of these street and laneway extensions will be funded through private development and will occur when the property (or adjacent property) redevelops. The timing of these improvements will depend on the pace of redevelopment.

Refer to Appendix B for the location of planned new streets and lanes based on current land use development. This list may not be exhaustive, and is subject to change in accordance with the development review process.

2.3.3 Intersection Improvements

The below traffic signals will be installed when they are warranted and may be pedestrian signals, bike signals, or full traffic signals and will depend on technical reviews, crossing gap opportunities and safety factors. Construction is proposed at seven intersections within the BLNP area (refer to Appendix A and B):

1. Intersection of Como Lake Avenue and Dogwood Street – new traffic signal installed at existing intersection (City funded project⁶ – Appendix A);
2. Intersection of Smith Avenue and New N-S Road – new signalized intersection (developer funded project – Appendix B);
3. Intersection of Cottonwood Avenue and New N-S Road – new signalized intersection (developer funded project – Appendix B);

⁶The new traffic signal at Como Lake Avenue and Dogwood Street will be funded as part of the Fairview-Dogwood Citywide Greenway.

2.3.3 Intersection Improvements cont'd/

4. Intersection of Foster Avenue and Whiting Way – new traffic signal installed at existing intersection (developer funded project – Appendix B);
5. Intersection of Ebert Street extension and North Road – new pedestrian crossing (developer funded project – Appendix B)
6. Intersection of New E-W Connector and Lougheed Highway – new traffic signal and intersection reconfiguration (developer funded project – Appendix B).
7. Intersection of New E-W Connector and North Road – new traffic signal, relocated from Delestre Avenue (Developer funded project – Appendix B)

2.3.4 Streetscape Guidelines

Streetscape and other public realm improvements will be implemented and completed through new development in Burquitlam-Lougheed and coordinated with other City projects in the neighbourhood.

These improvements will be guided by the *Burquitlam-Lougheed Streetscape Guidelines*, which identifies street lighting, street furniture, pavement finishes, street trees and other public realm finishes for the neighbourhood. Refer to the *Burquitlam-Lougheed Streetscape Guidelines* for details regarding the specific guidelines for each area.

2.3.5 Access Control

Several properties along North Road, Clarke Road, Como Lake Avenue, Austin Avenue, Blue Mountain Street, and Lougheed Highway have direct vehicular access to these arterial streets, which is not consistent with the *Subdivision and Development Servicing Bylaw*. Accordingly, alternative access needs to be facilitated or provided when these properties are redeveloped.

Some properties may need to be consolidated (except where the neighbourhood plan calls for the preservation of the existing subdivision pattern), or a new rear lane may need to be developed to provide alternate access. Where consolidation or a new rear lane is not feasible, joint-access or shared-access agreements should be secured to provide appropriate access. The best access solutions will be determined at the time of redevelopment.

Refer to Appendix B for local roads and lanes intended to improve pedestrian permeability throughout the BLNP area.

3.0 UTILITIES

Planned growth in Burquitlam-Lougheed will require upgrades to the City's water, sewer and drainage systems. Future servicing must satisfy the demand created by new development while considering potential environmental impacts and the storm water management requirements of the *Austin/Rochester Creek Integrated Watershed Management Plan (IWMP)*, the *Stoney Creek IWMP* and the *Chines IWMP*.

A hydraulic analysis of the water, sewer and drainage system was completed using population projections to determine required system upgrades. Specific improvements are presented in the following sections. Appendix C shows the locations of Burquitlam-Lougheed specific improvements relative to planned improvements in the rest of Southwest Coquitlam.

Funding for completion of utility improvements will come from a variety of sources including:

- Frontage improvements constructed as part of the site servicing requirements of individual developments;
- DCC funded capital works to support growth; and
- The City's Water Utility, and Sewer & Drainage Utility for capital replacement of infrastructure.

Other government agencies and organizations like the Pacific Salmon Foundation may also contribute grants to improve the storm water system and aquatic habitat.

As some of these infrastructure improvements provide benefits within adjacent neighbourhoods and upstream or downstream areas, not all improvements will be 100% funded from development within a particular neighbourhood. Non-DCC eligible costs will be recovered from the Sewer and Drainage Utility and will be determined through the annual capital budget process and reflected in future Five Year Financial Plans.

3.1 Water System Improvements

The water system in Southwest Coquitlam is supplied by the GVWD Burnaby Mountain tank and Cape Horn reservoir, and distributed through a robust grid of City feeder mains and pump stations. To support anticipated growth in Southwest Coquitlam, a water servicing strategy was developed with planned improvements as shown in Appendix C.

An analysis of the City water system identified additional improvements needed to accommodate future planned development. Appendix C shows the upgrades required in Southwest Coquitlam while Table 7 lists the upgrades required to support growth within the Burquitlam-Lougheed area.

Phasing of the water system improvements will depend on the pace of development and will be determined through the annual capital project priority-setting and budgeting process.

3.1 Water System Improvements cont'd/

Table 7 – Water System Improvements in Burquitlam-Lougheed

	Project Description	Estimated Cost DCC Eligible (44%)		Estimated Cost Non-DCC Eligible (56%)	Total Estimated Cost
		Funded	Unfunded		
A	Foster Pump Station Expansion	\$4.8M	-	-	\$4.8M
B	Foster Reservoir Expansion	\$7.1M	-	-	\$7.1M
C	Foster Ave Watermain Upgrade 2-300	\$0.108M	-	-	\$0.108M
D	North Road Watermain Upgrade	\$0.94M	-	-	\$0.94M
	TOTAL ESTIMATED COST	\$12.95M	-	-	\$12.95M

Watermains fronting individual development sites, mainly in commercial and high density areas, may also need to be upsized to ensure fire flows can be delivered to the site. Costs for these improvements will be the responsibility of developers as part of their site servicing requirements.

3.2 Sanitary Sewer System Improvements

Sewage from the Burquitlam-Lougheed area flows south to the GVS&DD North Road Interceptor.

An analysis of the City sewage collection system identified additional improvements needed to accommodate future planned development. Appendix C shows the upgrades required in Southwest Coquitlam while Table 8 lists the upgrades identified for the Burquitlam-Lougheed Neighbourhood Plan area. The identified sanitary sewer system improvements are currently funded in the DCC program.

Phasing of the improvements will depend on the pace of development and will be determined through the annual capital project priority-setting and budgeting process.

Table 8 – Sanitary Sewer System Improvements in Burquitlam-Lougheed

	Project Description	Estimated Cost DCC Eligible (44%)		Estimated Cost Non-DCC Eligible (56%)	Total Estimated Cost
		Funded	Unfunded		
E	Burquitlam East Sewer Upgrade	\$0.65 M		-	\$0.65 M
	TOTAL ESTIMATED COST	\$0.65 M		-	\$0.65 M

3.3 Drainage System Improvements

The Burquitlam-Lougheed Neighbourhood is located within the Austin Creek, Rochester Creek, Stoney Creek, and Chines watersheds. These creeks are the main drainage channels to safely convey rainwater runoff to the Brunette and Fraser Rivers and to the Burrard Inlet. Integrated Watershed Management Plans have been completed for all watersheds in the Plan area; however, the Stoney Creek IWMP is planned for an update. As such, the City's Rainwater Management Requirements should apply to development in that area, with the same capture criteria used in the neighbouring Austin/Rochester watersheds, until the Stoney IWMP update has been completed.

Historically, urban development has tended to degrade stream water quality, reducing summer base flows and increasing the intensity of runoff, which can result in eroding stream channels and impacting environmental health. The IWMPs set out policies and guidelines to manage rainwater in a way that protects aquatic habitat and provides flood protection. Specific strategies identified by these plans to mitigate these impacts and prevent further degradation, include:

- Protect Austin and Rochester Creeks and the lower reaches of the system (Lost Creek, Holmes Creek and Brunette River);
- Protect Stoney Creek, Schoolhouse Creek and Burrard Inlet;
- Preserve or improve water quality, food and nutrients;
- Divert high flows to protect stream channels;
- Infiltrate rainwater runoff into the ground to mimic the natural watershed hydrology and preserve stream base flows (using City's Rainwater Management guidelines); and
- Protect and enhance natural habitat along streams.

An analysis of the drainage system shows that sections of the storm sewers may need to be upsized to accommodate both the projected flows and diversion of high flows from local watercourses. Diverting high flows away from the creeks will prevent channel erosion and improve aquatic habitat.

Table 9 and Appendix C show the proposed pipe upsizing that will be partially funded by drainage DCC's; 44% of costs are funded by DCC's while the remaining 56% is funded from the Sewer and Drainage Utility as part of its capital program to replace aging infrastructure. Currently, these costs are not included in the DCC program but will be added during the next DCC update. Phasing of drainage system improvements will depend on the pace of development and will be determined through the capital budgeting process.

In addition to the above listed measures, developers will be required to implement the City's *Rainwater Management Guidelines* on a site by site basis. Drainage pipes fronting individual developments may also need to be upsized as part of the site servicing requirements.

3.3 Drainage System Improvements cont'd/

Table 9 – Storm Sewer System Improvements in Burquitlam-Lougheed

	Project Description	Estimated Cost DCC Eligible (44%)		Estimated Cost Non-DCC Eligible (56%) ⁷	Total Estimated Cost
		Funded	Unfunded		
F	Austin Creek Diversion Pipe	-	\$1.33 M	\$1.69 M	\$3.02M
G	Rochester Creek Diversion Pipe	-	\$0.21 M	\$0.26 M	\$0.47M
	TOTAL ESTIMATED COST	-	\$1.54 M	\$1.95 M	\$3.49 M

3.4 Other Contributing Capital Projects

Other utility improvements in Southwest Coquitlam that support growth in Burquitlam-Lougheed and surrounding neighbourhoods, have been either completed or are planned to be completed by outside agencies:

- a) Metro Vancouver plans to upgrade the Greater Vancouver Water District (GVWD) Burnaby Mountain pump station and tank in 2020 to improve water supply reliability.
- b) Metro Vancouver plans to upgrade the North Road Trunk Sanitary sewer. Phase 1 (from the Coquitlam/New West border to Austin Avenue) is scheduled for 2017. Phase 2 (Austin Avenue to Clarke Road) is currently outside the five year plan.

⁷ Funded from the City's Sewer and Drainage Utility.

4.0 PARKS

The Burquitlam-Lougheed neighbourhood currently contains 11.9 hectares (29.43 acres) of park space. The BLNP proposes the acquisition of 9.3 hectares (20.7 acres) of additional park land to support projected population growth. The neighbourhood is further served by the proposed Citywide and Neighbourhood Greenway network. This approach reflects the existing level of park provision within Burquitlam-Lougheed and adjacent neighbourhoods and is informed by the *Parks, Recreation and Culture (PRC) Master Plan*.

The City also recently completed a \$1.2 million update and renovation of Hartley Field at Mountainview Park, with improvements funded through a variety of sources including DCCs, general revenue, grants and the infrastructure reserve fund. The revitalized Hartley Field at Mountainview Park both serves the existing community and provides new amenities for a growing neighbourhood.

4.1 Park Acquisition

As needed, to support future growth and development in Burquitlam-Lougheed, the City seeks to acquire a minimum of 9.3 hectares (20.3 acres) of new park land over the next 20-25 years.

Appendix D and Table 10 presents the new park space intended to be acquired over the life of the Plan, which will be funded by Park Acquisition DCC's. Park acquisition costs are currently funded in the DCC program.

Table 10 – Park Acquisition Project in the BLNP Area

	Project Description	Estimated Cost DCC Eligible ⁸		Total Estimated Cost
		Funded	Unfunded	
A	Miller Park (1.6 ha/4 ac)	\$300,000	-	\$300,000
B	Oakdale Park (0.4 ha/1 ac)	\$5.5 M	-	\$5.5 M
C	Cottonwood Park (1.9 ha/4.7ac) ⁹	\$31.2 M	-	\$31.2 M
D	Community Garden (0.2 ha/0.5 ac)	\$2.75 M	-	\$2.75 M
E	Guilby Park (1.4 ha/3.5 ac)	\$19.25 M	-	\$19.25 M
F	Lower Lougheed Park (0.4 ha/1 acre)	\$5.5 M	-	\$5.5 M
G	Gauthier - Hart Park (0.8 ha/2 ac)	\$11.0 M	-	\$11.0 M
H	Future Burquitlam Parkland (1.6 ha/4 ac)	\$22.0 M	-	\$22.0 M
	TOTAL ESTIMATED COST to be secured through DCC's	\$97.5 M	-	\$97.5 M

⁸ Estimated land costs are based on the City's 2015 DCC Bylaw. Current property values may vary from 2015 estimates.

⁹ Estimated DCC costs for Cottonwood Park accounts for the portion of land the City has identified for acquisition with DCC Funds and does not include 1.03 hectares (2.55 acres) proposed to be transferred to the City as part of the YMCA project.

4.2 Park Improvements

As noted in the BLNP, improvements will need to be made to both existing and to future acquired park space. Table 11 identifies the estimated cost of improvements to both existing and new parkland and Appendix D shows the location of planned park improvements. Park improvement costs are currently funded in the DCC program.

Table 11 – Park Improvement Projects in the BLNP Area

	Project Description	Estimated Cost DCC Eligible ¹⁰		Estimated Cost Non-DCC Eligible	Total Estimated Cost
		Funded	Unfunded		
A	Miller Park	\$342,000	-		\$342,000
B	Oakdale Park	\$600,000	-	\$106,000	\$706,000
C	Cottonwood Park (new development)	\$5.7 M	-	\$1.0 M	\$6.7 M
C	Cottonwood Park phase (redevelopment)	\$580,000	-	\$968,000	\$1.5 M
D	Community Garden	\$284,000	-		\$284,000
E	Guilby Park	\$2.1 M	-	\$369,000	\$2.47 M
F	Lower Lougheed Park	\$567,000	-		\$567,000
G	Gauthier - Hart Park	\$1.2 M	-	\$211,000	\$1.4 M
H	Future Burquitlam Parkland	\$2.4 M	-	\$422,000	\$2.8 M
	TOTAL ESTIMATED COST	\$13.8 M	-	\$3.1 M	\$16.9 M

There are a number of park improvement amenities that are not eligible to be funded through DCCs (tennis courts, water play parks, sport courts, lighting, etc.). Additional funding source(s) will need to be identified for these non-eligible park amenities and may include, but are not limited to: capital funding, grants from other levels of government, CAC's, density bonus funding, developer contributions, and public-private partnerships¹¹. Staff will work with Council to identify appropriate funding options as development of the neighbourhood proceeds. The phasing of the improvements will depend on the pace of development and the capital project priority setting and budgeting process.

There are several other planned improvements to existing parks which will help to support the vision of the BLNP:

- a) At Brookmere Park, improved northern access, park circulation, and a new play area are planned for 2017 with construction to occur in 2018. This project is funded in part through development, and previously approved DCC funding.

¹⁰Estimated costs are based on the City's 2015 DCC Bylaw. Current construction costs reflect a 20-30% escalation.

¹¹ Refer to the *Parks, Recreation and Culture Master Plan Implementation Strategy* for further information.

4.2 Park Improvements cont'd/

- b) Improvements to Hartley Field at Mountainview Park were completed in 2016. Planning and design for Mountainview Park improvements are scheduled for 2017 with construction to occur in 2018. The cost of eligible improvements including new play area, seating, picnic and games area, will be funded with approved DCC funding and density bonus funds. Upgrades to the existing washroom facility are not DCC eligible and will be funded through facility replacement funding, grants and/or other alternate sources.
- c) Cottonwood Park expansion and improvements are planned for 2018 based on a recently approved master plan. Detailed design is to be completed in 2017 with procurement and construction of the first segment for phase one in early 2018.

4.3 Coquitlam Family YMCA

Pending approval of related rezoning and development permit applications, the Coquitlam Family YMCA facility and mixed-use residential development is planned in partnership with the City, YMCA of Metro Vancouver, and Concert Properties. The City's estimated budget for this project is \$25M to be primarily funded from Community Amenity Contributions (CAC).

The mixed-use community facility will be developed on a portion of the existing Burquitlam Park site. Subsequently the remaining portion of Burquitlam Park will be redeveloped in conjunction with the development of the community facility to provide enhanced and complementary park amenities to a revitalized Burquitlam Neighbourhood Centre. The balance of the Burquitlam Park that is to be occupied by the YMCA will be provided at the expanded Cottonwood Park site.

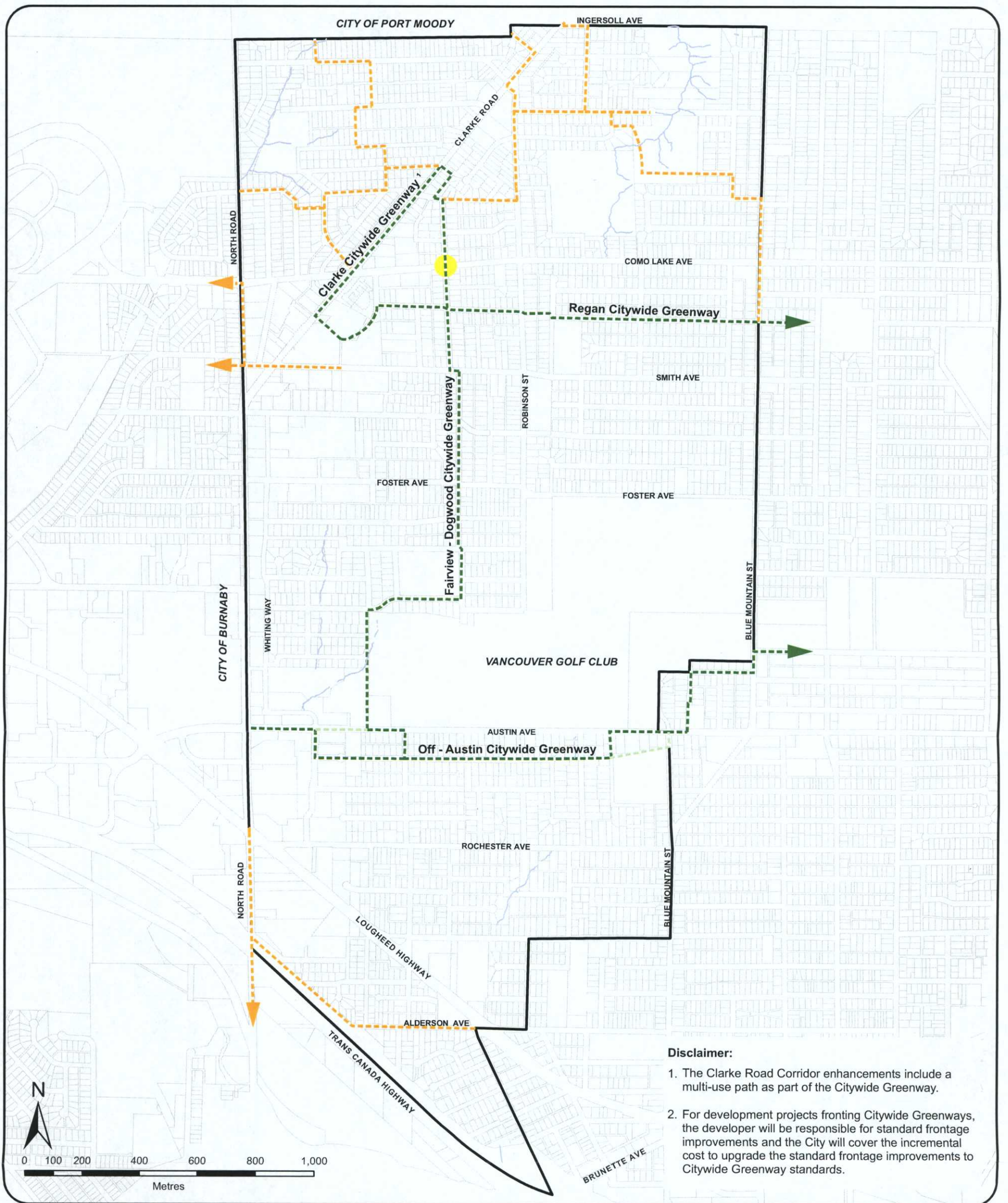
5.0 Dwelling Unit Projection

Table 12 – Projected Increase in new Dwelling Units in the BLNP Area to 2046

	High-rise Apartment	Low-rise Apartment	Townhouse	Housing Choices	TOTAL
Units	3,900	2,780	1,950	600	9,230

Assumptions:

- Unit projections are gross figures and do not include existing units lost to redevelopment.
- Average unit size:
 - Apartment 87 m² (935 sq. ft.)
 - Townhouse 150 m² (1,615 sq. ft.)
 - Housing Choices 190 m² (2,045 sq. ft.)
- The DCC projections in Table 1 include an estimate of 80,000 m² (861,000 sq. ft.) of commercial floorspace.



**APPENDIX A - BURQUITLAM - LOUGHEED SERVICING ASSESSMENT
TRANSPORTATION IMPROVEMENT PROJECTS – CITY FUNDED**

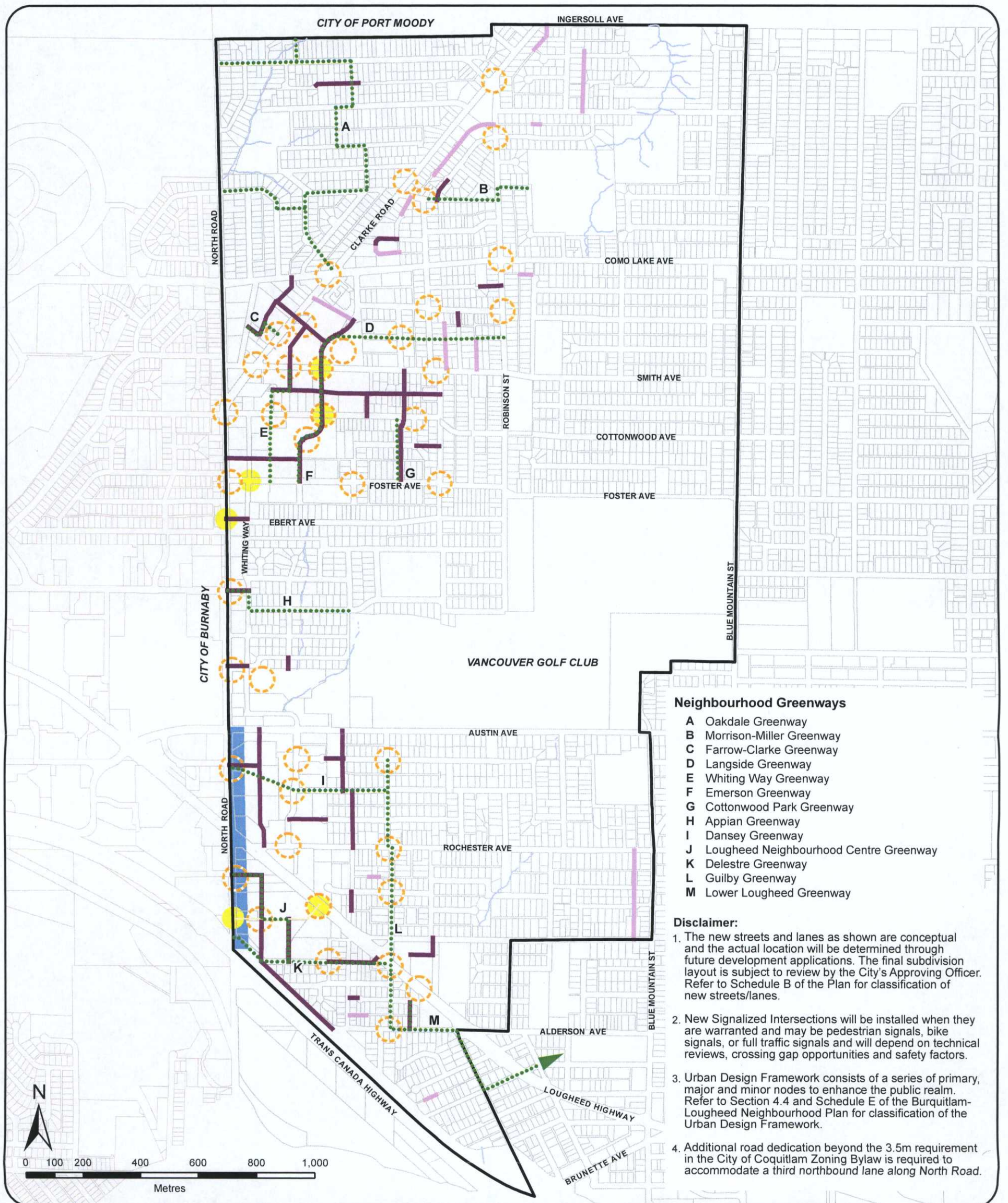
- Proposed Citywide Greenway ²
- Proposed Citywide Greenway Alternate
- Proposed Cycle Route
- New Signaled Intersection
- Watercourse
- Burquitlam - Lougheed Neighbourhood Plan Boundary

DRAFT

Adopted: XXX XX, XXXX
Amended: N/A

Prepared By: Planning & Development
Source: City of Coquitlam - OCP GIS layer





Neighbourhood Greenways

- A Oakdale Greenway
- B Morrison-Miller Greenway
- C Farrow-Clarke Greenway
- D Langside Greenway
- E Whiting Way Greenway
- F Emerson Greenway
- G Cottonwood Park Greenway
- H Appian Greenway
- I Dansey Greenway
- J Lougheed Neighbourhood Centre Greenway
- K Delestre Greenway
- L Guilby Greenway
- M Lower Lougheed Greenway

Disclaimer:

1. The new streets and lanes as shown are conceptual and the actual location will be determined through future development applications. The final subdivision layout is subject to review by the City's Approving Officer. Refer to Schedule B of the Plan for classification of new streets/lanes.
2. New Signalized Intersections will be installed when they are warranted and may be pedestrian signals, bike signals, or full traffic signals and will depend on technical reviews, crossing gap opportunities and safety factors.
3. Urban Design Framework consists of a series of primary, major and minor nodes to enhance the public realm. Refer to Section 4.4 and Schedule E of the Burquitlam-Lougheed Neighbourhood Plan for classification of the Urban Design Framework.
4. Additional road dedication beyond the 3.5m requirement in the City of Coquitlam Zoning Bylaw is required to accommodate a third northbound lane along North Road.

**APPENDIX B - BURQUITLAM - LOUGHEED SERVICING ASSESSMENT
TRANSPORTATION IMPROVEMENT PROJECTS - DEVELOPER FUNDED**

- Neighbourhood Greenway
- New Street ¹
- New Lane ¹
- Additional Road Dedication ⁴
- New Signalized Intersection ²
- Urban Design Framework - Nodes ³
- Watercourse
- Burquitlam - Lougheed Neighbourhood Plan Boundary

DRAFT

Adopted: XXX XX, XXXX
Amended: N/A
Prepared By: Planning & Development
Source: City of Coquitlam - OCP GIS layer



APPENDIX C BURQUITLAM - LOUGHEED SERVICING ASSESSMENT

SOUTHWEST COQUITLAM WATER, SEWER & DRAINAGE PROJECTS

- Water Main Improvements
- Sanitary Sewer Improvements
- Storm System Improvements
- Stream Improvements
- ⌋ Storm Culvert Improvements
- PS Water Pump Station Improvements
- PS Sanitary Pump Station Improvements
- Water Reservoir Improvements
- Water Bodies
- Streams
- Parks and Natural Areas
- Burquitlam - Lougheed NP Boundary
- Coquitlam City Boundary

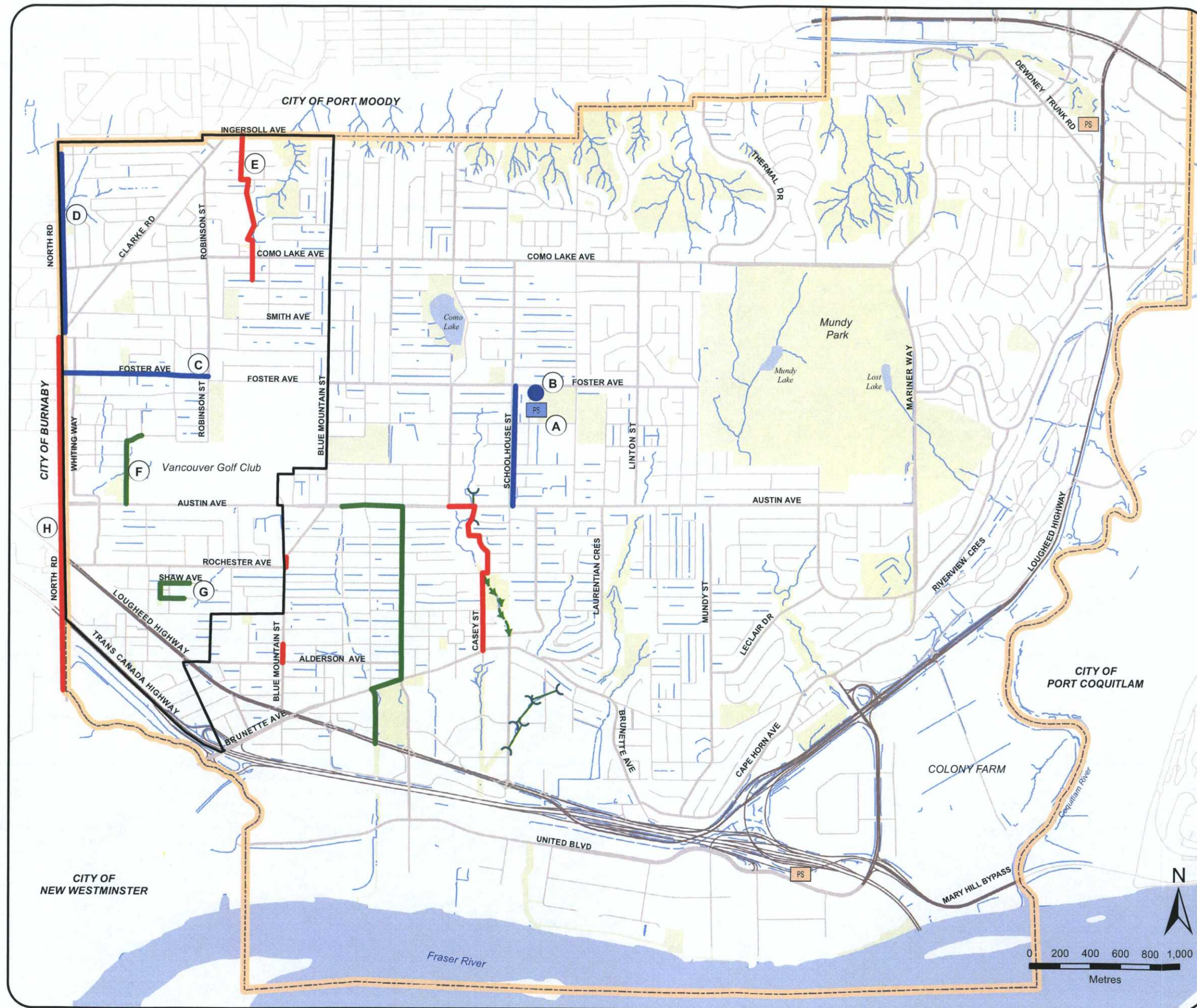
- (A) Foster Pump Station Expansion
- (B) Foster Reservoir Expansion
- (C) Foster Ave Watermain Upgrade
- (D) North Road Watermain Upgrade
- (E) Burquitlam East Sewer Upgrade
- (F) Austin Creek Diversion Pipe
- (G) Rochester Creek Diversion Pipe
- (H) GVS&DD Sanitary Main

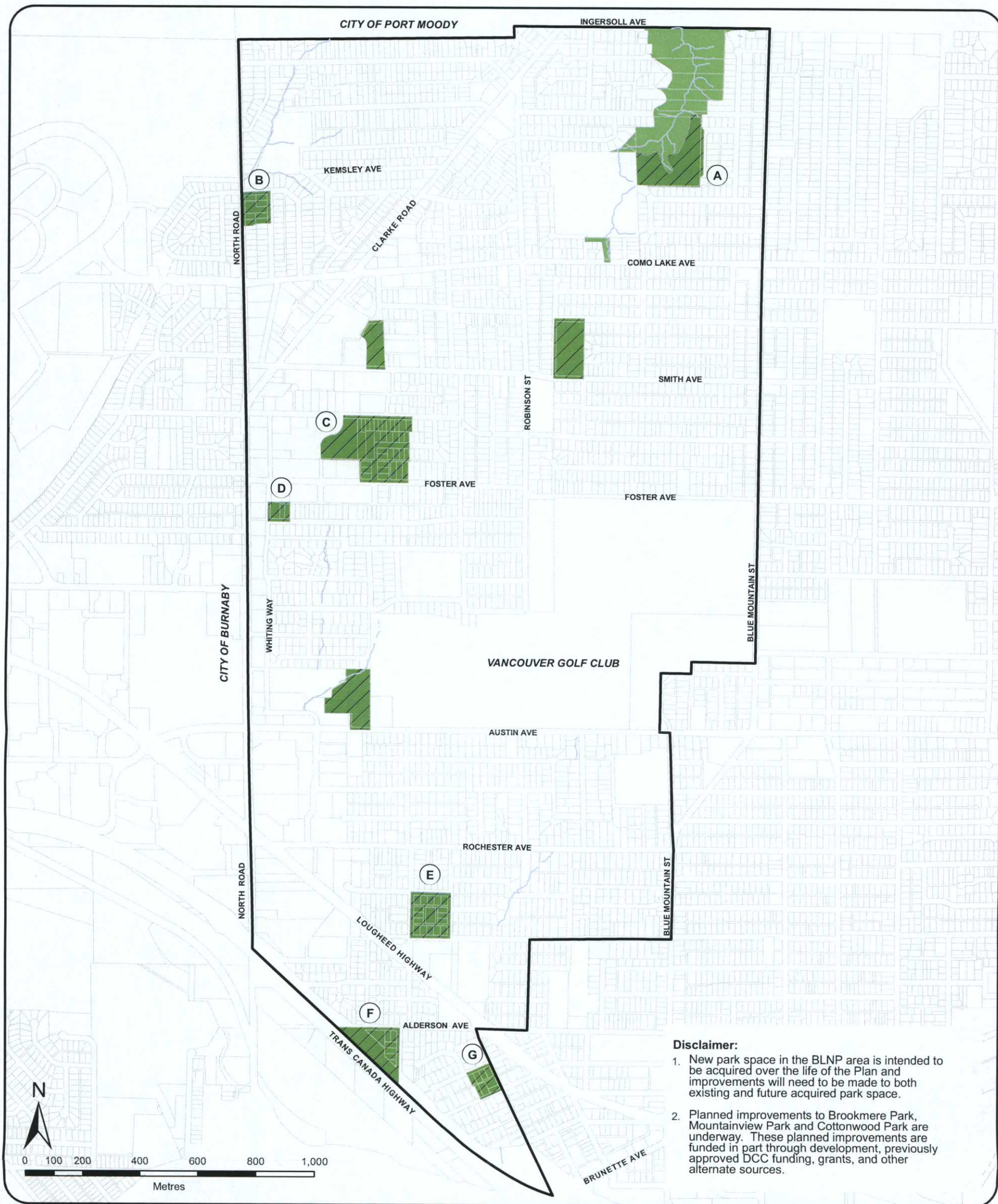
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Adopted: XXX XX, XXXX
Amended: N/A

Prepared By: Planning & Development
Source: City of Coquitlam - OCP GIS layer

Coquitlam





APPENDIX D - BURQUITLAM - LOUGHEED SERVICING ASSESSMENT PARK ACQUISITIONS AND IMPROVEMENTS

- Watercourse
- Natural Areas Land Use Designation
- Parks and Recreation Land Use Designation
- Burquitlam - Lougheed Neighbourhood Plan Boundary

- (A) Miller Park
- (B) Oakdale Park
- (C) Cottonwood Park
- (D) Burquitlam Community Garden
- (E) Guilby Park
- (F) Lower Lougheed Park
- (G) Gauthier - Hart Park

DRAFT

Adopted: XXX XX, XXXX
Amended: N/A

Prepared By: Planning & Development
Source: City of Coquitlam - OCP GIS layer

Coquitlam