

City of Maple Ridge

**COUNCIL WORKSHOP AGENDA**

**October 1, 2019**

**1:30 p.m.**

**Blaney Room, 1<sup>st</sup> Floor, City Hall**

*The purpose of the Council Workshop is to review and discuss policies and other items of interest to Council. Although resolutions may be passed at this meeting, the intent is to make a consensus decision to send an item to Council for debate and vote or refer the item back to staff for more information or clarification. The meeting is live streamed and recorded by the City of Maple Ridge.*

**REMINDERS**

October 1, 2019

Council Meeting

7:00 p.m.

1. **APPROVAL OF THE AGENDA**

2. **ADOPTION OF MINUTES**

- September 10, 2019 Council Workshop Meeting
- September 17, 2019 Council Workshop Meeting

3. **PRESENTATIONS AT THE REQUEST OF COUNCIL**

4. **UNFINISHED AND NEW BUSINESS**

4.1 **RCMP Update**

Presentation by Jennifer Hyland, Officer in Charge

4.2 **Post-Secondary Feasibility Study**

Staff Report dated October 1, 2019 recommending that the Mayor be authorized to sign a joint letter to the BC Minister of Advanced Education and Skills Training requesting funding for a feasibility study to determine the demand for post-secondary education options in Maple Ridge-Pitt Meadows.

#### 4.3 North East Albion Land Use and Servicing Concept: Process Summary and Concept Plan Endorsement

Staff report dated October 1, 2019 recommending that the draft North East Albion Land Use and Servicing Concept Plan be endorsed and that draft development applications in the North East Albion Area be evaluated according the draft concept plan.

#### 4.4 Review of Cycling on Sidewalks

Staff report dated October 1, 2019 providing information on the practice of permitting bicycles on sidewalks.

### 5. CORRESPONDENCE

*The following correspondence has been received and requires a response. Staff is seeking direction from Council on each item. Options that Council may consider include:*

- a) *Acknowledge receipt of correspondence and advise that no further action will be taken.*
- b) *Direct staff to prepare a report and recommendation regarding the subject matter.*
- c) *Forward the correspondence to a regular Council meeting for further discussion.*
- d) *Other.*

*Once direction is given the appropriate response will be sent.*

#### 5.1 CivX (Innovation in Local Government) 2019 Event

Letter from the Lower Mainland Local Government Association and CivicInfo BC inviting delegates to a CivX 2019: Civil Ideas for Less Civil times on Thursday, November 28, 2019.

#### 5.2 Upcoming Events

##### By Invitation to Mayor and Council

October 6, 2019 11:30 am to 3:45 pm	Ridge Meadows Youth Impact Summit, Alexandria Neighbourhood House, 2916 McBride Avenue, Surrey, BC Organizer: Rotary Club of Haney
October 8, 2019 7:15 am to 9:15 am	UDI Breakfast Seminar – TransLink CEO, Kevin Desmond Transportation, Technologies and Strategies, Crystal Pavilion Ballroom, Pan Pacific, Vancouver, BC Organizer: Urban Development Institute (UDI)

**General Community Events**

- October 3, 2019      Speaking of Art & History with Gerry Sheena (Artist in Residence),  
7:00 pm – 9:00 pm      The ACT Arts Centre, Maple Ridge, BC  
Host: The ACT Arts Centre
- October 5, 2019      Haney Farmers Market, Memorial Peace Park, Maple Ridge  
9:00 am – 2:00 pm      Organizer: Haney Farmers Market

6.      **BRIEFING ON OTHER ITEMS OF INTEREST/QUESTIONS FROM COUNCIL**

7.      **MATTERS DEEMED EXPEDIENT**

8.      **ADJOURNMENT**

Approved:   
Date: 2019-09-26

Space below for Clerk's Department Use Only	
Checked by: <u>U. Sauer</u> Date: <u>Sept. 26, 2019</u>	Checked by: <u>MM</u> Date: <u>Sept. 26, 2019</u>

2.0 Adoption of Minutes

City of Maple Ridge

**COUNCIL WORKSHOP MINUTES**

September 10, 2019

The Minutes of the City Council Workshop held on September 10, 2019 at 1:35 p.m. in the Blaney Room at City Hall, 11995 Haney Place, Maple Ridge, British Columbia for the purpose of transacting regular City business.

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**PRESENT**

*Elected Officials*

Mayor M. Morden  
Councillor J. Dueck  
Councillor K. Duncan  
Councillor C. Meadus  
Councillor G. Robson  
Councillor R. Svendsen  
Councillor A. Yousef

*Appointed Staff*

K. Swift, Acting Chief Administrative Officer  
C. Carter, General Manager Planning & Development Services  
D. Pollock, General Manager Engineering Services  
L. Benson, Director of Corporate Administration  
S. Nichols, Deputy Corporate Officer  
D. Denton, Acting Director Economic Development and Civic  
Property  
C. Goddard, Director of Planning  
T. Thompson, Chief Financial Officer  
V. Richmond, Acting Director of Parks and Facilities

*Other Staff as Required*

E. Elliott, Manager of Community Planning  
D. Hall, Planner 2, Development & Environmental Services  
M. Orsetti, Manager of Bylaw and Licencing Services  
S. Cote-Rolvink, Chief Building Official  
B. Livingstone, Business Retention and Expansion Officer

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Note: These Minutes are posted on the City Web Site at [www.mapleridge.ca](http://www.mapleridge.ca)  
Video of the meeting is posted at [media.mapleridge.ca/Mediasite/Showcase](http://media.mapleridge.ca/Mediasite/Showcase)

1. **APPROVAL OF THE AGENDA**

R/2019-503

It was moved and seconded

That the agenda of the September 10, 2019 Council Workshop Meeting be amended by adding as Item 5.1 "Fraser River Indigenous Society Request for Support"; and,

That the agenda as amended be approved.

CARRIED

2. *MINUTES*

2.1 Minutes of the July 23, 2019 Council Workshop Meeting

R/2019-504

It was moved and seconded

That the minutes of the Council Workshop Meeting of July 23, 2019 be adopted as circulated.

CARRIED

3. *PRESENTATIONS AT THE REQUEST OF COUNCIL* – Nil

4. *UNFINISHED AND NEW BUSINESS*

4.1 Options Report for Cannabis Licenses

Staff report dated September 10, 2019 recommending that direction be provided to staff on options shown in a decision making chart to allow staff to commence bylaw introduction.

R/2019-505

That a moratorium be declared on cannabis-related applications until the Zoning Bylaw for production and processing is completed.

CARRIED

R/2019-506

It was moved and seconded

That a letter be sent to relevant regulating authorities expressing concerns pertaining to cannabis production and processing in Maple Ridge.

CARRIED

4.2 Town Centre Area Plan Overview

Presentation by L. Zosiak, Planner, and D. Denton, Director of Economic Development and Civic Properties

#### 4.3 Housing Needs Assessment: UBCM Grant Application

Staff report dated September 10, 2019 recommending that a grant application to undertake a Housing Needs Assessment be submitted to the Union of British Columbia Municipalities ("UBCM").

R/2019-507

It was moved and seconded

That staff be directed to submit a grant application to UBCM to undertake a Housing Needs Assessment, in consultation with community residents, stakeholders and neighbouring First Nations; noting the City of Maple Ridge's willingness to provide overall grant management for the Housing Needs Assessment.

CARRIED

#### 4.4 Maple Ridge Historical Society Operating Agreement Revision

Staff report dated September 10, 2019 recommending that the report titled "*Maple Ridge Historical Society Operating Agreement Revision*" be forwarded to the September 10, 2019 Council Meeting.

R/2019-508

It was moved and seconded

That the attachment to the September 10, 2019 Council Workshop report titled "*Maple Ridge Historical Society Operating Agreement Revision*" be forwarded to the September 10, 2019 Council Meeting.

CARRIED

#### 4.5 Mussallem Residential Establishment at Maple Ridge Cemetery

Staff report dated September 10, 2019 recommending options for the future of the Mussallem Residence at Maple Ridge Cemetery.

R/2019-509

It was moved and seconded

That staff be directed to reach out to the community to determine if an individual or community group would accept the Mussallem House at no cost and undertake to remove the building from the Cemetery within three months; and,

That should there be insufficient community interest to accept and remove the House from the Cemetery within a three month period, that staff be directed to demolish the building; and further,

That staff be directed to return the donation of \$100,000 received towards the house move and establishment at the cemetery.

CARRIED

Councillor Duncan – OPPOSED

5. *CORRESPONDENCE*

5.1 Fraser River Indigenous Society Request for Support

R/2019-510

It was moved and seconded

That a letter be provided by Council to the Fraser River Indigenous Society recognizing the work they do in the community and offering support for an application to pursue charity status.

CARRIED

6. *BRIEFING ON OTHER ITEMS OF INTEREST/QUESTIONS FROM COUNCIL – Nil*

7. *MATTERS DEEMED EXPEDIENT*

8. *ADJOURNMENT – 4:03 p.m.*

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M. Morden, Mayor

Certified Correct

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L. Benson, Corporate Officer

City of Maple Ridge

**COUNCIL WORKSHOP MINUTES**

September 17, 2019

The Minutes of the City Council Workshop held on September 17, 2019 at 3:00 p.m. in the Blaney Room at City Hall, 11995 Haney Place, Maple Ridge, British Columbia for the purpose of transacting regular City business.

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<i>PRESENT</i>	<i>Appointed Staff</i>
<i>Elected Officials</i>	K. Swift, Acting Chief Administrative Officer
Mayor M. Morden	C. Carter, General Manager Planning & Development Services
Councillor J. Dueck	D. Pollock, General Manager Engineering Services
Councillor K. Duncan	D. Boag, Acting General Manager Parks, Recreation & Culture
Councillor C. Meadus	L. Benson, Director of Corporate Administration
Councillor G. Robson	S. Nichols, Deputy Corporate Officer
Councillor R. Svendsen	C. Crabtree, Chief Technology Officer
Councillor A. Yousef	T. Thompson, Chief Financial Officer
	<i>Other Staff as Required</i>
	M. Orsetti, Manager of Bylaws and Licencing
	L. Zosiak, Planner
	S. Cote-Rolvink, Chief Building Official

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Note: Councillor Duncan was not in attendance at the start of the meeting. She joined the meeting at 3:47 p.m.

1. **APPROVAL OF THE AGENDA**

R/2019-532

It was moved and seconded

That the agenda of the September 17, 2019 Council Workshop Meeting be approved as circulated.

CARRIED

2. **MINUTES - Nil**

3. **PRESENTATIONS AT THE REQUEST OF COUNCIL - Nil**

4. *UNFINISHED AND NEW BUSINESS*

4.1 Secondary Suites Regulatory Review: Accountability Mechanisms

Staff report dated September 17, 2019 recommending options for regulation of accountability mechanisms for secondary suites.

Staff provided a presentation and answered questions from Council.

Note: Councillor Robson left the meeting at 4:49 p.m.

R/2019-533

It was moved and seconded

That staff report back on secondary suite options as outlined in Items 1-5 in Appendix B. of the staff report titled "Secondary Suite Regulatory Review Accountability Mechanisms" dated September 17, 2019.

CARRIED

Note: Councillor Robson returned to the meeting at 4:51 p.m.

4.2 Community Social Safety Plan Update

Staff report dated September 17, 2019 recommending that the Community Social Safety Initiative process be endorsed and that the Terms of Reference for the Community Social Safety Task Force be endorsed.

Staff provided a presentation and answered questions from Council.

R/2019-534

It was moved and seconded

That the Community Social Safety Plan item be deferred until the new CAO is in place.

DEFEATED

Mayor Morden, Councillor Duncan, Councillor Dueck, Councillor Meadus,  
Councillor Svendson – OPPOSED

R/2019-535

It was moved and seconded

1. That the Community Social Safety Initiative process, as outlined in Appendix B, be endorsed; and further
2. That the Terms of Reference for the Community Social Safety Task Force, be endorsed.

CARRIED

Councillor Robson, Councillor Yousef, Councillor Svendson – OPPOSED

Note: Councillor Yousef left the meeting at 6:10 p.m.

R/2019-536

It was moved and seconded

That the Council Workshop meeting of September 17, 2019 be recessed until the close of the Public Hearing scheduled to begin at 7:00 p.m.

CARRIED

Note: The meeting was recessed at 6:12 p.m. and reconvened at 7:45 p.m.

Note: Councillor Robson was not in attendance when the Council Workshop Meeting was reconvened. Councillor Yousef was in attendance.

#### 4.3 Strategic Plan Progress Report and Council Workplan Matrix

Staff report dated September 17, 2019 recommending that the attachment to the Council Workshop report titled "Strategic Plan Progress Report and Council Workplan Matrix" be forwarded to the October 1, 2019 Council meeting.

Staff provided a presentation and answered questions from Council.

Feedback from Council was requested as well as ranking of Appendix B – Council Workplan Matrix – September 17, 2019 to allow staff to report on results and develop a prioritized workplan.

#### 5. *CORRESPONDENCE*

##### 5.1 Upcoming Events – Nil

#### 6. *BRIEFING ON OTHER ITEMS OF INTEREST/QUESTIONS FROM COUNCIL* – Nil

#### 7. *MATTERS DEEMED EXPEDIENT* – Nil

8. *ADJOURNMENT* - 8:30 p.m.

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M. Morden, Mayor

Certified Correct

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L. Benson, Corporate Officer



**TO:** His Worship Mayor Michael Morden  
and Members of Council  
**MEETING DATE:** October 1, 2019  
**FROM:** Chief Administrative Officer  
**FILE NO:**  
**MEETING:** Workshop  
**SUBJECT:** Post-Secondary Feasibility Study

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**EXECUTIVE SUMMARY:**

Council has identified the pursuit of post-secondary institutions as a key action item in the 2019 Strategic Plan.

The Provincial Government (Province) recently conducted a preliminary feasibility study into demand for post-secondary education in a region on Vancouver Island with a smaller population base than the Maple Ridge-Pitt Meadows area. The study concluded that there was a need for post-secondary education in that region and based on these findings, the Province has subsequently announced further funding for development of a more comprehensive business case. Given that the demand analysis template has already been created and that the Province is familiar with the process, it is recommended that the City of Maple Ridge with other stakeholders in the community make a joint request to the Province to fund a feasibility study to determine the need for post-secondary education in our community.

**RECOMMENDATION:**

**That the Mayor be authorized to sign a joint letter to the BC Minister of Advanced Education and Skills Training requesting that the Ministry fund a feasibility study to determine the demand for post-secondary education options in Maple Ridge-Pitt Meadows.**

**DISCUSSION:**

**a) Background Context:**

On September 16, 2019, a meeting took place with Hon. Lisa Beare (MLA Maple Ridge-Pitt Meadows), Bob D'Eith (MLA Maple Ridge-Mission) and representatives from various agencies including the City of Maple Ridge. Discussion included a recent feasibility study conducted on the need for post-secondary options for the West Shore<sup>1</sup> (Langford) on Vancouver Island that could potentially be replicated in the Maple Ridge-Pitt Meadows area. The preliminary West Shore feasibility study was undertaken and completed by Royal Roads University with funding by the Province. The study concluded that there is a need for new post-secondary options in the area. Based on the report's recommendations, the Province subsequently announced \$1.5 Million in additional funding to build the complete business case, which will include

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<sup>1</sup> West Shore consists of City of Langford, City of Colwood, District of Sooke, District of Highlands, District of Metchosin, Juan de Fuca Electoral Area, Lkwungen First Nation, Scia'new First Nation, Pacheedaht First Nation, T'Sou-ke First Nation, Malahat First Nation, and Sooke School District

advanced student enrollment modelling, detailed academic curriculum design, infrastructure needs, site selection and design as well as a detailed financial analysis and timelines.

Maple Ridge is the third fastest growing city in Metro Vancouver. 2016 census data puts the population of Maple Ridge-Pitt Meadows at 100,000 with expected growth of 40% by 2041. Students in School District No. 42 (SD42) maintain a lower than regional average transition rate from secondary to post-secondary education. Six-year high school completion rates are above the provincial average at 91.4% (2018) but direct transition rates to post secondary are below the provincial average at just 44% (five-year average from 2011-15). Long, costly commutes or paying to live away from home are considered factors for students from the community choosing not to pursue post-secondary education. The City of Maple Ridge is aware of these issues facing students and the need for more accessible post-secondary education in the community.

The recommendation is that the City participate in a joint request to the Province to fund an identical study (to West Shore) to be followed by a more comprehensive business case if the feasibility study determines it is warranted. Joint partners in this request include:

- City of Maple Ridge
- City of Pitt Meadows
- Kwantlen First Nation
- Katzie First Nation
- School District No. 42
- Hon. Lisa Beare (MLA Maple Ridge-Pitt Meadows)
- Bob D'Eith (MLA Maple Ridge-Mission)

**b) Desired Outcome:**

The desired outcome is for the Province to provide the funding support necessary to conduct a feasibility study and to determine the demand for post-secondary education options in Maple Ridge-Pitt Meadows.

**c) Strategic Alignment:**

This aligns with Council's Strategic Plan for 2019.

**d) Business Plan/Financial Implications:**

If the feasibility study determines there is a need for post-secondary education in Maple Ridge-Pitt Meadows, a request will be brought forward for Council's consideration to seek further support from the Province to fund a business case.

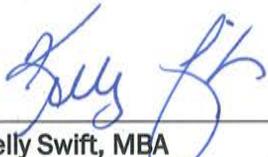
**CONCLUSION:**

The West Shore example demonstrates a successful process that Maple Ridge-Pitt Meadows can emulate to make a case for post-secondary education in this community. The recommendation is to proceed with the letter to Ministry.

  
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*Prepared by:* **Amanda Fiorini**  
**Executive Assistant to Chief Administrative Officer**

  
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*Reviewed by:* **Darrell Denton**  
**Acting Director, Economic Development & Civil Property**

  
\_\_\_\_\_  
*Approved by:* **Christine Carter**  
**General Manager, Planning & Development Services**

  
\_\_\_\_\_  
*Concurrence:* **Kelly Swift, MBA**  
**Acting Chief Administrative Officer**

Attachments:  
(A) Draft Joint Letter

**DRAFT**



September 19, 2019

Honourable Melanie Mark  
Minister of Advanced Education and Skills Training  
Parliament Buildings  
Victoria, BC V8V 1X4

RE: Post-Secondary Education in Ridge Meadows

Dear Minister Mark,

As leaders of the cities of Maple Ridge and Pitt Meadows, School District 42, the Katzie and Kwantlen First Nations, and provincial government representatives, we respectfully request the opportunity to work with you to assess the post-secondary education needs for young people in our communities.

Ridge Meadows is growing quickly, but our high school graduates are transitioning at a rate lower than the provincial average. They do not have the same opportunities afforded to students in neighbouring municipalities throughout the Lower Mainland. They face a choice between long and costly commutes, or paying to live away from home. As a result, too many promising local students in our communities choose not to pursue a post-secondary education.

We respectfully request that the Ministry act as a partner and consider a feasibility study to clearly establish what needs exist among parents and students, as well as local businesses and First Nations, for post-secondary opportunities in Ridge Meadows.

Like you, we know that post-secondary education is critical to the future of the next generation – as well as the well-being of our businesses and communities' prosperity and local quality of life. We also recognize that providing equitable access to education is vital to First Nations reconciliation.

We hope that you will join us in taking this step towards ensuring Ridge Meadows students can make the most of the promise that post-secondary education holds.

***DRAFT***

Sincerely,

Korleen Carreras  
Chair, Maple Ridge-Pitt Meadows School District (SD42)

Grace Cunningham  
Chief, Katzie First Nation

Marilyn Gabriel  
Chief, Kwantlen First Nation

Bill Dingwall  
Mayor, City of Pitt Meadows

Michael Morden  
Mayor, City of Maple Ridge

Lisa Beare  
MLA for Maple Ridge-Pitt Meadows

Bob D'Eith  
MLA for Maple Ridge-Mission



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**City of Maple Ridge**

**TO:** His Worship Mayor Michael Morden  
and Members of Council  
**FROM:** Chief Administrative Officer  
**SUBJECT:** **North East Albion Land Use and Servicing Concept:  
Process Summary and Concept Plan Endorsement**

**MEETING DATE:** October 01, 2019  
**FILE NO:** 2019-046-CP  
**MEETING:** Workshop

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**EXECUTIVE SUMMARY:**

On January 22, 2019, Council endorsed the North East Albion Land Use and Servicing Concept Planning Process. The North East Albion Area has been identified in the Albion Area Plan as an area requiring future land use and servicing assessments. Specifically, existing policies raise questions regarding the sequence of development and impacts to servicing systems, and identifies the need for a renewed land use assessment to evaluate residential, commercial, recreational, and servicing needs. The Concept Plan once endorsed by Council would then be used to guide the preparation and evaluation of specific development proposals in the North East Albion Area.

This report presents the culmination of the process to Council, including a land use concept plan (Appendix A), an accompanying Zoning Matrix (Appendix B), and the outcomes from an extensive community consultation process (Appendix C). The intent in bringing this material forward is to seek endorsement on the draft North East Albion Land Use and Servicing Concept Plan.

**RECOMMENDATION:**

**That the draft North East Albion Land Use and Servicing Concept Plan be endorsed.**

**That staff be directed to evaluate development applications in the North East Albion Area according to the draft North East Albion Land Use and Servicing Concept Plan.**

**BACKGROUND:**

In May 2018, Council received a development application (2018-217-RZ) from Epic Homes to rezone four properties located in the northeast section of the Albion Area Plan (North East Albion Area). The North East Albion Area has been identified in policy as an area requiring future land use and servicing assessments. Specifically, existing policies raise questions regarding the sequence of development and impacts to servicing systems, and identifies the need for a renewed land use assessment to evaluate future residential, commercial, recreational, and servicing needs.

To address these issues, Council endorsed a planning process, to be undertaken collaboratively with the applicant, to prepare a Land Use and Servicing Concept Plan for North East Albion. Once endorsed by Council, such a Concept Plan would then be used to guide the preparation and evaluation of specific development proposals in the North East Albion Area, beginning with the current application of 2018-217-RZ.

Following Council's direction to initiate the North East Albion Land Use and Servicing Concept Planning Process, staff in collaboration with a consultant team funded through a cost-recovery approach by the applicant, completed background review and research to inform the development of the draft Neighbourhood Concept Plan(s). This review covered relevant City policies as well as those of institutional stakeholders (i.e. School District 42, Metro Vancouver Parks); transportation networks;

environmental systems and features; site servicing capacities (i.e. water, sanitation, and stormwater); as well as housing and land use economic analyses.

This founding research effort identified many opportunities and constraints within the North East Albion Area lands and, in doing so, formed the basis for the subsequent community engagement process. Staff and the team of consultants undertook an extensive engagement process to gain insights from landowners and community residents:

- **“Pop up with a Planner”**

In March 2019, Staff “popped-up” five times in Albion to build awareness about the North East Albion Planning Process. Through these Pop-Ups, staff were interested in hearing what types of housing forms, commercial services, and amenities the community envisioned for this area. At these Pop-Ups, attendees were able to ask questions, learn about the process, and sign-up for the project e-newsletter to stay up to date on the project.

- **Stakeholder meetings**

Throughout March and April 2019, staff and the consultant team sought to engage a number of local and regional stakeholders. Meetings took place with School District No. 42, Metro Vancouver, as well as KEEPS (Kanaka Education & Environmental Partnership Society). Additional stakeholders, such as the Haney Horsemen have been informed and engaged in the process through regular City communication channels.

- **Landowners Workshop**

Recognizing that landowners have specific interests in area planning processes, landowners were invited to participate at a Landowners’ Workshop on Wednesday, April 17th at Samuel Robertson Technical Secondary School. Registered landowners were sent a letter through the post inviting them to attend.

- **Technical Design Charrette & Landowners ‘Sneak Peek’**

Staff and institutional stakeholders (School District 42 and Metro Vancouver Parks) undertook a facilitated Technical Design Charrette on Wednesday April 24th and Thursday April 25th in collaboration with the team of consultants. The Charrette took place at City Hall and was a technical exercise that explored and refined possible land uses and development forms, based on the background research done to-date as well as what was heard through the consultation activities.

As a further effort to ensure Landowners were kept informed of the North East Albion process, they were invited to view the initial outcomes of the Technical Design Charrette at a North East Albion Post-Charrette “Sneak Peek” on Thursday, April 25th at Samuel Robertson Technical School. At the Sneak Peek, information boards summarizing the background research and review done to-date were available. The two initial Land Use Concepts Plans were presented and landowner input was solicited.

- **Emerging Ideas Open House & Community Survey**

Based on the initial landowners’ feedback, along with more detailed information from the areas identified as needing further study, the two land use concepts were then evolved. To ensure broad input from the Albion community was integrated in the proposed land use

concept plans, the refined land use concepts were subsequently presented to the community through an Emerging Ideas Open House, which took place on Thursday, May 16th 2019 from 5:30 – 8:30pm at Samuel Robertson Technical School. The intent of the Open House was to solicit wider Albion community feedback on the two land use concepts emerging from the Charrette.

- **North East Albion Draft Land Use Concept Open House & Community Survey**

On Monday, June 24th 2019 from 5:30 – 8:30pm, a community-wide North East Albion Open House was held at Samuel Robertson Technical School, where a preferred concept plan incorporating earlier community and stakeholder input was presented for community review. The draft North East Albion Concept Plan represents a combination of publically preferred elements from the two land use concepts presented at the May 16th Open House, based on the key messages heard through the Emerging Ideas community survey.

Throughout the North East Albion Planning process to-date, 402 letters and 11,550 post-cards have been sent to landowners and Albion Area residents in addition to multiple e-mails sent out to interested residents on the North East Albion Email Update list.

## **PUBLIC ENGAGEMENT KEY MESSAGES**

Overall, what was heard through the public engagement process suggested the need for a balance between retaining the environment and its character while accommodating new development opportunities. Key messages that were heard:

- Natural features should serve as key elements of the draft Concept Plan, including bordering environmental areas with multi-family development for stewardship purposes and the identification of significant tree clusters.
- Positive response to the location of the co-located Elementary School and Neighbourhood Park.
- Appreciation for the integration of community amenities, including local parks and trail network and creating local hubs; clustering community amenities (i.e. park and commercial services); and incorporating a variety of housing types to improve housing choice and opportunity for residents.
- Comments that future land uses should ensure the right 'fit' in this area so as to minimize impacts to existing and rural neighbourhoods. Comments were also received regarding the need for more townhomes (or smaller residential units) to improve homeownership opportunities in the area and specifically call for some currently designated single-family areas to have a multi-family future.
- Comments calling for additional wildlife corridors, given particular concern for the resident bear population, and greenspaces for the area.
- Interest in the sort of services or shops that may be available at the Commercial Node(s) and through the Neighbourhood Parks.
- Need for local traffic transportation network, including consideration of the impacts of any future east-west connectivity through to Grant Hill and request for consultation on this strategic transportation connection.
- Frustration with expansive development trends within the City without the employment and transportation infrastructure to support the future residents.
- Acceleration of the co-located park & elementary school planning process as well as consideration for future secondary school capacity.

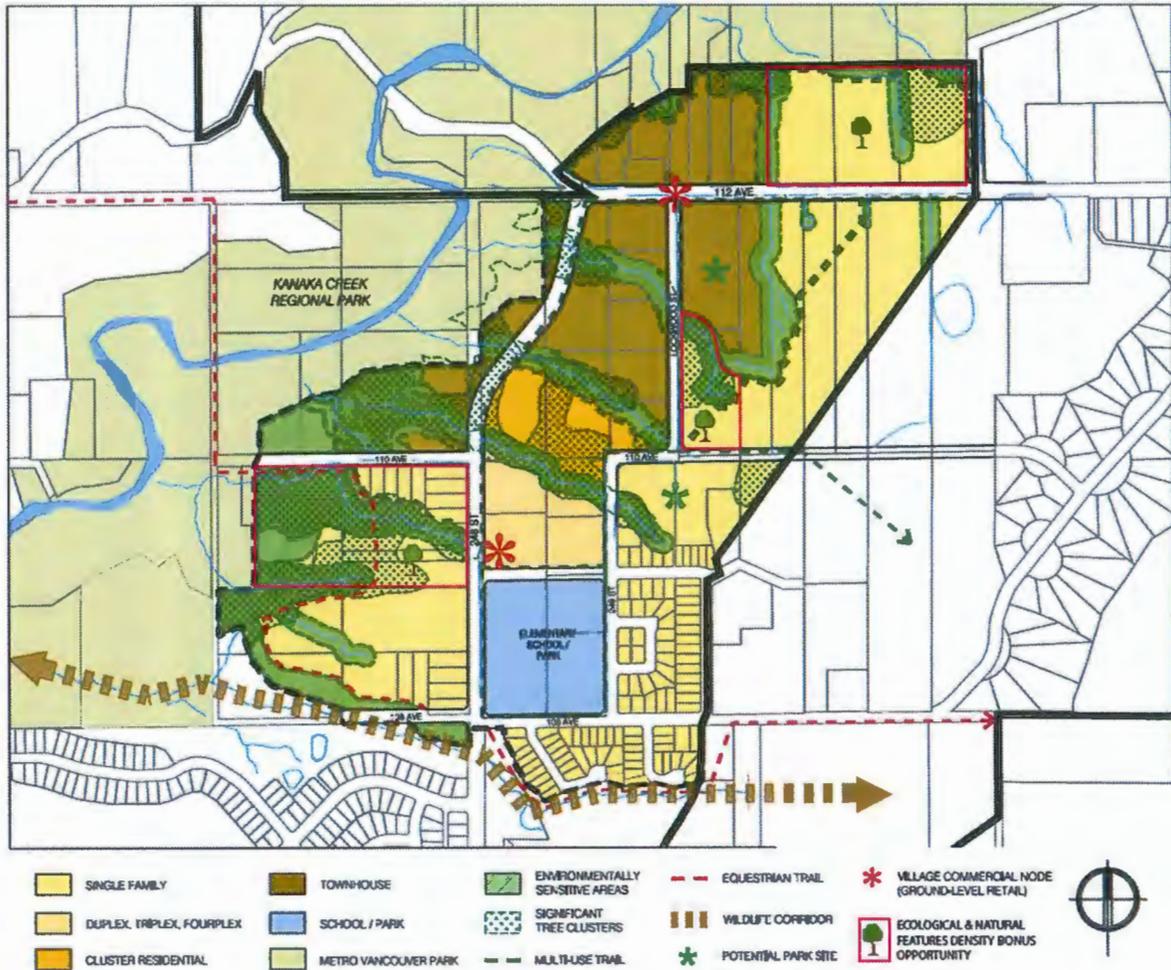
- Appreciation for the proposed storm water management strategy and focus on environmental features.
- Appreciation for the consultation process and efforts to integrate community and stakeholder comments.

Further details of the process, including promotional materials, information boards and survey results are available in Appendix C,

**DRAFT NORTH EAST ALBION LAND USE AND SERVICING CONCEPT PLAN**

The Draft North East Albion Land Use and Servicing Concept Plan (Appendix A) emphasizes the development of a 'complete community' by integrating environmental stewardship, the protection of natural resources and the preservation of ecosystems while balancing the social and economic objectives of the community. The draft Concept Plan envisions residential pockets nestled between existing watercourses linked by a network of pathways and trails. The draft Concept Plan focuses multi-family development around commercial and amenity nodes; offering residents gathering spaces and commercial opportunities. Residential areas sensitively scale down into surrounding single family neighbourhoods. A multi-modal network links neighbourhood amenities, such as parks, an elementary school and shopping nodes within the community and to the larger Albion Area and Kanaka Creek Regional Park. The draft Concept Plan is reflective of consultation with area residents and other stakeholders throughout the process, and represents an attempt at balance; balance of the many research insights and community interests revealed along with the policy expectations for Albion as one of the City's growth neighbourhoods.

Proposed Land Use Concept Plan:



The existing environmental context of the Concept Plan guides the strategies and tools proposed to mitigate the impacts of development and increase connections to wildlife. The draft Concept Plan has been developed with the intent to protect fish and fish habitat, minimize potential for stream erosion, prevent surface flooding, and ensure major storm conveyance systems are capable of safely conveying significant flows and minimize damage to life and properties under extreme storm conditions. Significant tree stands that are not already protected through existing legislation, bylaws or policies are encouraged to be maintained through thoughtful site design and possible bonus density provisions. Such significant tree stands are primarily located within existing riparian areas and are critical to maintaining and improving watercourse health and habitat. Watercourses and steep slopes will be protected to preserve environmental health and integrity throughout the North East Albion Area.

Kanaka Creek Regional Park provides valuable habitat for wildlife as well as movement corridors. Through the draft Concept Plan, existing movement corridors along Kanaka Creek and Grant Hill along Thornhill will be preserved and enhanced in support of wildlife conservation and resident safety. Furthermore, the draft Concept Plan proposes to buffer Kanaka Creek Regional Park where wildlife travels currently. This buffer, coupled with landscaping and stormwater management features, will improve wildlife passage in and around the North East Albion Area.

The draft Concept Plan proposes a co-located park and elementary school with a sports field, playground, pathways to meet the needs of the growing community. As parks and open spaces are important components of complete, liveable communities, additional neighbourhood parks are also proposed for the North East Albion Area. While specific park amenities will be determined later through the park design process, which will include neighbourhood engagement, typical neighbourhood park amenities include: playgrounds, sports courts, splash pads, looping pathways, open areas and seating areas.

The draft Concept Plan proposes a network of trails and multi-use pathways linking the residential areas to the community amenities. These trails and pathways will act as a greenway and buffer to sensitive environmental areas while creating an attractive public realm for residents.

A key feature of the draft Concept Plan is a 'Spine Trail' which will connect the northern portion of North East Area, including the trailhead to Kanaka Creek Regional Park, to the co-located school and park site in the south as well as serve as an important stormwater feature that celebrates and protects the water resources of the area. A series of connected ponds will be woven into the trail system. A similar landscape feature will also be integrated into a Northern Greenway trail along the Metro Vancouver Parks border at the north end of the area.

In terms of housing mix, the proposed residential land uses are reflective of what the City is experiencing in Albion South and Albion North today both in terms of number of units and projected populations while striving to offer flexibility in housing choice as well as affordability levels. Secondary suites and detached garden suites may also be incorporated, subject to other City policy and zoning regulations within the North East Albion Area. A draft Zoning Matrix is included in Appendix B with more information about the various proposed land uses set out below.

#### **a) Proposed Land Uses**

##### **a. Village Commercial**

Incorporating mixed-use development is a fundamental component to achieving a complete neighbourhood where residents can live, work and play. Recognizing that the Albion Area has limited commercial opportunities, two commercial nodes are proposed in the North East Albion Area. One node is proposed at the intersection of 112<sup>th</sup> Avenue and Lockwood Street with the second node located adjacent to the proposed elementary school at 248<sup>th</sup> Street. It is anticipated that the northern node will be developed first while the southern node will likely be delivered at the time the school develops based on the market demand at that time. Pre-zoning of these commercial nodes may occur when their adjoining residential lands are zoned in order to facilitate market uptake.

These commercial nodes are envisioned as anchors for the community; ground-floor commercial with residential units above. It is anticipated that each node will have capacity for four to six ground-floor shops with uses that may include a café, small businesses, personal service establishments and/or a child care center.

b. Multi-Family Residential – Townhouse Units

The Townhouse designation is intended to permit multifamily housing forms. This designation is in areas with access to arterial transportation routes, commercial areas as well as public amenities. The housing form is intended to be townhouse units, however there may be circumstances where smaller intensive single family residential forms may be incorporated onto a site, with the focus on minimizing the development footprints on the land (see amenity zoning discussion below).

c. Cluster Residential

Recognizing that there are areas within North East Albion that are environmentally sensitive, this designation is intended to accommodate development by promoting integrated site designs that consider the natural features and topography of the area. The designation is intended for clustered forms of ground-oriented multi-family units, including townhouse, courtyard and fourplex units that minimizes impacts to the land and environment.

d. Duplex, Triplex, Fourplex

As the name suggests, this designation is intended for buildings joined by a common party wall or strata building, such as Duplex, Triplex and Fourplex forms. This designation may include a mix of semi-detached row homes or attached courtyard-like dwellings. Units are to be ground-oriented and reflect the character of a single family neighbourhood. As such, this designation is located where it can interface with community amenities and existing single family neighbourhoods – a means of sensitively incorporating density while retaining the feel of a single family neighbourhood.

e. Single Family

The Single Family designation is intended for detached dwellings on a range of lot sizes that is similar to what is seen in the Albion Area today. This designation helps protect the rural edge by sensitively locating larger lot sizes adjacent to the eastern Plan boundary while permitting an opportunity to bonus into smaller lot sizes closer to the community nodes (see amenity zoning discussion below). The Single Family designation also includes potential for including secondary suites and/or detached garden suites.

**Additional Considerations**

**a) Proposed Amenity Zoning**

The draft North East Albion Land Use and Servicing Concept Plan proposes a variety of similar amenities, including: neighbourhood park space, multi-use pathways, trail connections, stormwater galleries and affordable housing. Typically, neighbourhood amenities can be provided at the time of new development through tools such as site specific dedications and development cost charges. In addition, as part of the greater Albion Area Plan, density bonus zoning and its amenity contribution rates assist in the delivery of neighbourhood amenities. Given the amenities outlined in the draft Concept Plan, staff examined the existing Albion Density Bonus Program to ensure it could also support the delivery of the envisioned North East Albion amenities.

Like all density bonus programs, such zoning is optional in nature. Under density bonus zoning, there is a fixed base level of density that is available to all development, and an optional maximum density that can be permitted should the applicant wish to provide an amenity contribution. Financial analysis indicates that the existing Albion density bonus contribution rates (\$3,100 for new smaller single family lots; \$3,100 for new townhouse with the FSR increased from 0.6 FSR to 0.75 FSR) are still appropriate and in keeping with the level of amenities sought through the Plan. One small amendment

that is being proposed under the draft North East Albion Concept Plan to the existing Albion Density Program, would be to incorporate the proposed density bonus option for commercial properties to the Albion Area, namely that for a fee, additional residential floorplace would be permitted above ground-floor commercial. This would be reflective of the proposed City-wide density bonus draft regulations, subject to Council approval.

In addition to the existing Albion Density Bonus Program, the draft plan proposes a new Ecological & Natural Features Density Bonus program to protect environmentally sensitive areas and permanently preserve important natural features beyond what is permitted through land dedication requirements in exchange for additional density. This new program would be considered as an add-on to the existing Albion Density Bonus Program and is not intended to replace the existing approach. Instead, in specific areas identified on the concept plan, background studies, technical review, and public process determined areas with significant environmental and ecological value. These areas, if voluntarily dedicated to the City by an applicant for preservation as conservation land, then the applicant would be permitted additional floorspace or a reduction in permitted lot sizes.

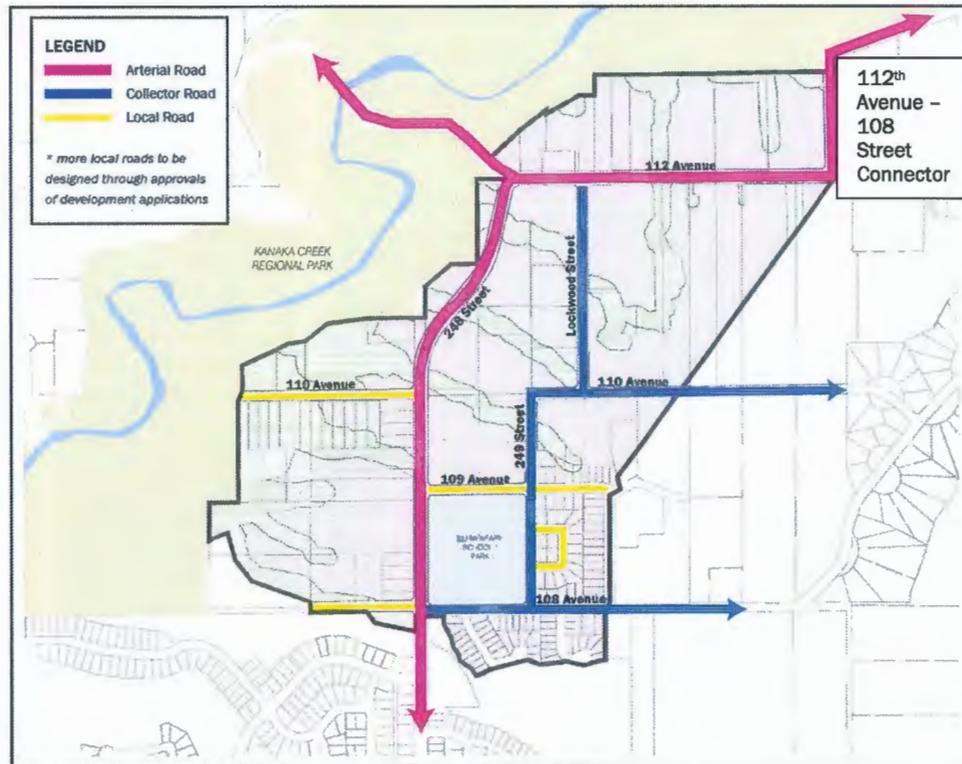
#### **b) Strategic Transportation Plan – 112<sup>th</sup> Avenue – 108 Street Connector**

Despite the generally positive feedback heard at the Open House, and throughout the process to-date, staff noted one instance where contradictory feedback was received. Namely, the June survey indicated that only 27% of respondents either strongly agree or agree with the plan, while 24% indicated neutrality, and 48% either disagree or strongly disagree with the proposed concept plan.

Given the contradictory nature of the comments received, staff examined the survey and the responses in more detail. From that review, and again based on discussions held at the June 24<sup>th</sup> Open House, there appears to be a heightened concern from residents around the Grant Hill neighbourhood about the potential for an 112<sup>th</sup> Avenue – 108 Street Connector as a result of the North East Albion planning process.

The 112<sup>th</sup> Avenue - 108 Street Connector is identified in the City's Strategic Transportation Plan as a new roadway between 252 Street and 268 Street along the slope of Grant's Hill. The road would provide a connection to complete an east-west route between Lougheed Highway at the Haney Bypass (via Kanaka Way) and 272 Street. The intent is to provide long-term access to rural and emerging growth areas of the City. The 112<sup>th</sup> Avenue – 108 Street Connector is outside of the North East Albion Area.

## Proposed Transportation Network for North East Albion



Specifically, Grant Hill residents were encouraged through a letter (available for review in Appendix C) circulated by private residents in the Grant Hill/Whonnock areas to attend the June 24th Open House and provide comment. As noted earlier, the exploration of the 112<sup>th</sup> Avenue - 108 Street Connector was rooted in policy direction under the City's Strategic Transportation Plan and Official Community Plan, and the intent of the North East Albion assessment was to satisfy that any land use or servicing concept plan did not rule out the potential for a future connector. As part of the servicing review for the North East Albion Area, the consultants did review the road alignment options for 112<sup>th</sup>, and have determined that 112<sup>th</sup> will follow its existing route. As identified at the Open House, the exact alignment of any future Connector has not been determined, and would be the subject of a future process and analysis. However, despite such information, it appears that many attendees have expressed concern about the route alignment, the process, and would like an update on the preliminary road alignment. Noting this interest, Engineering have indicated that the topic of a future 112<sup>th</sup> Ave - 108<sup>th</sup> Street Connector alignment will be incorporated in the pending review of the Strategic Transportation Plan.

### c) Sanitary Service

The North East Albion Area is not currently serviced with sanitary sewer other than for a small portion of land at the south end that is serviced by the southern Albion Area system. The consultant team provided a sanitary servicing framework on how the remainder of the North East Albion Area could be integrated into the overall master sanitary plan of the City.

The North East Albion Area is proposed to be serviced primarily by a municipal pump station located on 112<sup>th</sup> Avenue just east of the Kanaka Creek Bridge. This pump station would service the area not currently being serviced by the southern Albion Area system. Many technical details, including site-specific considerations for the required pump station, are still being resolved and involve consultation with Metro Vancouver Parks. Ultimately, the implementation of the North East Albion Land Use And Servicing Concept Plan will be subject to the resolution of these issues.

#### **e) Stormwater Management**

The North East Albion Land Use and Servicing Concept Plan outlines a vision and strategy for sustainable water stewardship practices. To maximize groundwater protection and water conservation, stormwater management best practices, including visible stormwater management features, are integrated throughout the Plan. At time of site-specific development, geotechnical investigations will be required to include a groundwater impact assessment and impact mitigation measures in order to protect Kanaka Creek and drinking water resources. Many technical details will need to be resolved on a site-by-site basis and that implementation of the draft North East Albion Land Use And Servicing Concept Plan will be subject to the resolution of these factors during the development application process.

#### **d) Water**

The North East Albion Area is not currently serviced with water other than for a small portion of previously developed land at the south end that is serviced by the 108 Avenue system. The consultant team provided a 'water analysis' to determine appropriate infrastructure requirements, including trunk sizes and system pressures.

The North East Albion Area is proposed to be serviced by the existing Albion infrastructure, with redundancy provided from the Grant Mountain Reservoir.

#### **NEXT STEPS:**

Should Council endorse a draft North East Albion Neighbourhood Concept Plan, the cost recovery land use and servicing planning process would come to an end. Afterwards, staff would then begin the process to amend the Albion Area Plan in the City's Official Community Plan. During this process, the endorsed draft North East Albion Neighbourhood Concept Plan would be used to guide the preparation and evaluation of specific development proposals in the North East Albion Area, beginning with the current application of 2018-217-RZ.

#### **INTERGOVERNMENTAL IMPLICATIONS:**

##### **a) School District No. 42:**

The School District has identified that North East Albion will be one of two areas where a new school site will be needed over the next ten-year period. On July 24, 2018, Council passed a resolution supporting the Board of Education's proposed eligible school site requirements for School District 42. At this time, no formal comments have been received from the School District, however the School District has been an active participant through the North East Albion Planning Process and has indicated general support for the direction of the proposed land use concepts at this time.

##### **b) Metro Vancouver and Kanaka Creek Regional Park:**

While formal comments have not yet been received, Metro Vancouver has been an active participant and appreciates the opportunity to provide input into this process. Metro Vancouver Regional Parks is currently undertaking a review of technical documents produced during the process to-date especially related to the siting of the proposed Sanitary Pump Station. They do note that park interfaces and buffers will remain key issues especially in relation to public safety, tree management, hydrology and the protection of conversation and recreation lands. Metro Vancouver is interested in remaining engaged with the City on the details of these land-use planning principles over the coming weeks and months.

**INTERDEPARTMENTAL IMPLICATIONS:**

Engineering, Planning and Parks, Recreation & Culture have been working collaboratively with the team of consultants undertaking this comprehensive planning and engineering exercise.

**STRATEGIC ALIGNMENT:**

The North East Albion Land Use and Servicing Concept Plan is identified as a key action item under the Growth priority of the Council Matrix in the 2019 – 2022 Strategic Plan.

**CONCLUSION:**

Council endorsed the North East Albion Land Use and Servicing Concept Planning Process in January 2019. Staff in collaboration with a team of cost-recovered consultants, have undertaken background review and research to support the development of the proposed draft Land Use Concept Plan. This report presents the culmination of the process to Council, including a Land Use Concept Plan and seeks endorsement on the draft North East Albion Land Use and Servicing Concept Plan.

“Original signed by Amanda Grochowich”

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“Original signed by Christine Carter”

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*Approved by:* **Christine Carter, M.PL, MCIP, RPP  
GM Planning & Development Services**

“Original signed by Kelly Swift”

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*Concurrence:* **Kelly Swift, MBA  
Acting Chief Administrative Officer**

# NORTH EAST ALBION

## LAND USE AND SERVICING CONCEPT PLAN



# TABLE OF CONTENTS

PART 1 - LAND-USE CONCEPT PLAN.....	1
1 INTRODUCTION.....	2
1.1 ORIGINS.....	2
1.2 PURPOSE.....	2
1.3 CONCEPT PLAN AREA.....	2
2 PLANNING PROCESS.....	3
2.1 TIMELINE.....	3
3 EXISTING CONDITIONS.....	4
3.1 POLICY CONTEXT.....	4
3.2 EXISTING LAND USES.....	5
3.3 ENVIRONMENTAL CONTEXT.....	6
3.4 MOBILITY CONTEXT.....	10
3.5 COMMERCIAL CONTEXT.....	11
3.6 EXISTING INFRASTRUCTURE.....	12
4 COMMUNITY CONSULTATION.....	13
4.1 CONSULTATION PROCESS.....	13
4.2 CONSULTATION HIGHLIGHTS.....	14
5 LAND-USE CONCEPT PLAN.....	15
5.1 PLAN SYNOPSIS.....	15
5.2 NEIGHBOURHOOD QUADRANTS.....	17
5.3 ENVIRONMENTAL INTEGRATION.....	21
5.4 COMMUNITY SERVICES AND AMENITIES.....	23
5.5 VILLAGE COMMERCIAL.....	25
5.6 HOUSING TYPOLOGY .....	27

PART 2 – SERVICING STRATEGY.....	32
6 INTRODUCTION.....	33
7 TRANSPORTATION.....	33
7.1 ROAD NETWORK.....	34
7.2 FUTURE ROAD ALIGNMENTS.....	34
7.3 ACTIVE TRANSPORTATION.....	35
8 SANITARY.....	36
8.1 DESIGN CRITERIA.....	36
8.2 SERVICING PLAN.....	36
8.3 FINANCIAL BUDGET REVIEW.....	37
9 WATER.....	38
9.1 DESIGN CRITERIA.....	38
9.2 SERVICING PLAN.....	38
9.3 SYSTEM DEMANDS.....	39
9.4 HYDRAULIC ANALYSIS.....	39
10 STORMWATER.....	40
10.1 STORMWATER MANAGEMENT CRITERIA.....	40
10.2 METHODOLOGY.....	41
10.3 EXISTING CONDITION OVERVIEW.....	41
10.4 HYDROLOGIC AND HYDRAULIC MODELLING.....	42
10.5 STROMWATER MANAGEMENT CONCEPTS.....	46
10.6 STROMWATER MANAGEMENT DESIGN GUIDELINES.....	53
10.7 STROMWATER MANAGEMENT SYSTEM OPERATION, MAINTENANCE AND PERFORMANCE MONITORING.....	58
11 BC HYDRO, TELECOMM, CABLE & GAS.....	61
12 LARGE FORMAT DRAWING.....	61
 PART 3 – CONCLUSION.....	 77
13 IMPLEMENTATION.....	78

Prepared by:



Technical Team:



PART 1 -

LAND-USE CONCEPT PLAN

# 01 | INTRODUCTION

## 1.1 ORIGINS

The North East Albion Land Use and Servicing Concept planning process was initiated by City of Maple Ridge Council in January 2019.

It was triggered by a rezoning application submitted by Aplin & Martin Consultants Ltd. (Aplin Martin) on behalf of Epic Homes for the properties located at 11070 Lockwood Street and 24984, 25024, and 25038 112 Avenue.

For the purpose of proceeding with this application, a Land Use and Servicing Concept planning process for North East Albion was advanced to help guide future growth and development in the community. As anticipated in the Albion Area Plan adopted in the Maple Ridge Official Community Plan (OCP), a review and update to the land uses and servicing for North East Albion has been conducted to ensure that development in the area responds to the community's changing needs.

Aplin Martin was retained to conduct the planning process, cost recovered through Epic Homes, and working collaboratively with the City of Maple Ridge. The North East Albion Land Use and Servicing Concept Plan is the result of technical rigor, research, and robust consultation.

## 1.2 PURPOSE

The purpose of this report is to summarize the planning process and to present the proposed North East Albion Land Use and Servicing Concept Plan. It provides an overview of the technical analyses and key land-use decisions that shaped the North East Albion Concept Plan. This report may be used as a tool to interpret the Concept Plan and Servicing Strategy but does not replace site specific analysis. Future development applications will be subject to comprehensive site analysis per standard development procedures.

## 1.3 CONCEPT PLAN AREA

North East Albion is in the Albion Plan Area in eastern Maple Ridge. The total area consists of 70.4ha (174.1ac), discounting lands recently acquired by Metro Vancouver.

The area is bound by:

- North - Kanaka Creek Regional Park and Agricultural Land Reserve
- South - Existing Residential (Albion Area Plan)
- West - Kanaka Creek Regional Park
- East - Rural Residential, Grant Hill

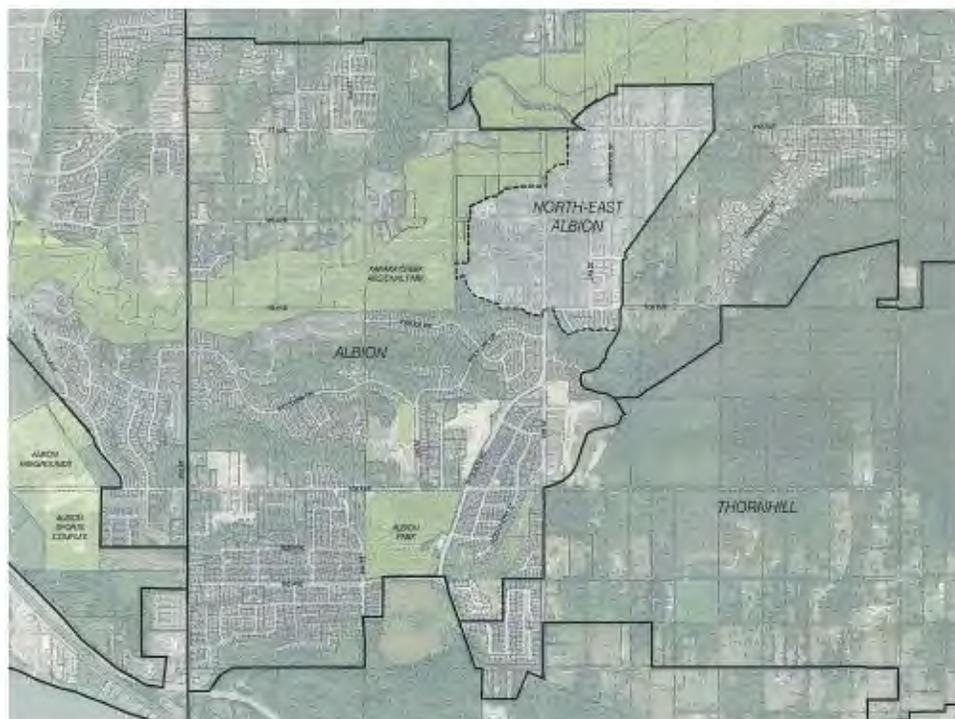


Figure 1 - North East Albion Context

## 02 | PLANNING PROCESS

### 2.1 TIMELINE

The North East Albion Land Use and Servicing Concept planning process has been iterative and responsive to information provided by the consultant team, City staff, external stakeholders, and the community.



## 03 | EXISTING CONDITIONS

### 3.1 POLICY CONTEXT

The existing Albion Area Plan currently designates the North East Albion neighbourhood as “Low Density Residential”, “Low/Medium Density Residential”, “Medium Density Residential”, “Conservation”, and “Institutional”.

The OCP identifies that future growth in the area may create a need for commercial spaces in proximity to the neighbourhood. However, the OCP does not specify the thresholds of residential densities that would trigger the need for the creation of a neighbourhood commercial node in Albion (section 6.3.7).

Furthermore, the OCP and the Maple Ridge - Pitt Meadows School District 42 Strategic Facilities Plan outline the location for a future school in North East Albion.

The North East Albion concept planning process examined different forms of residential land uses for this area of Maple Ridge in order to create a more complete community. It will also ensure that the City has the population density, services, and amenities necessary to support such a neighbourhood in the long term.

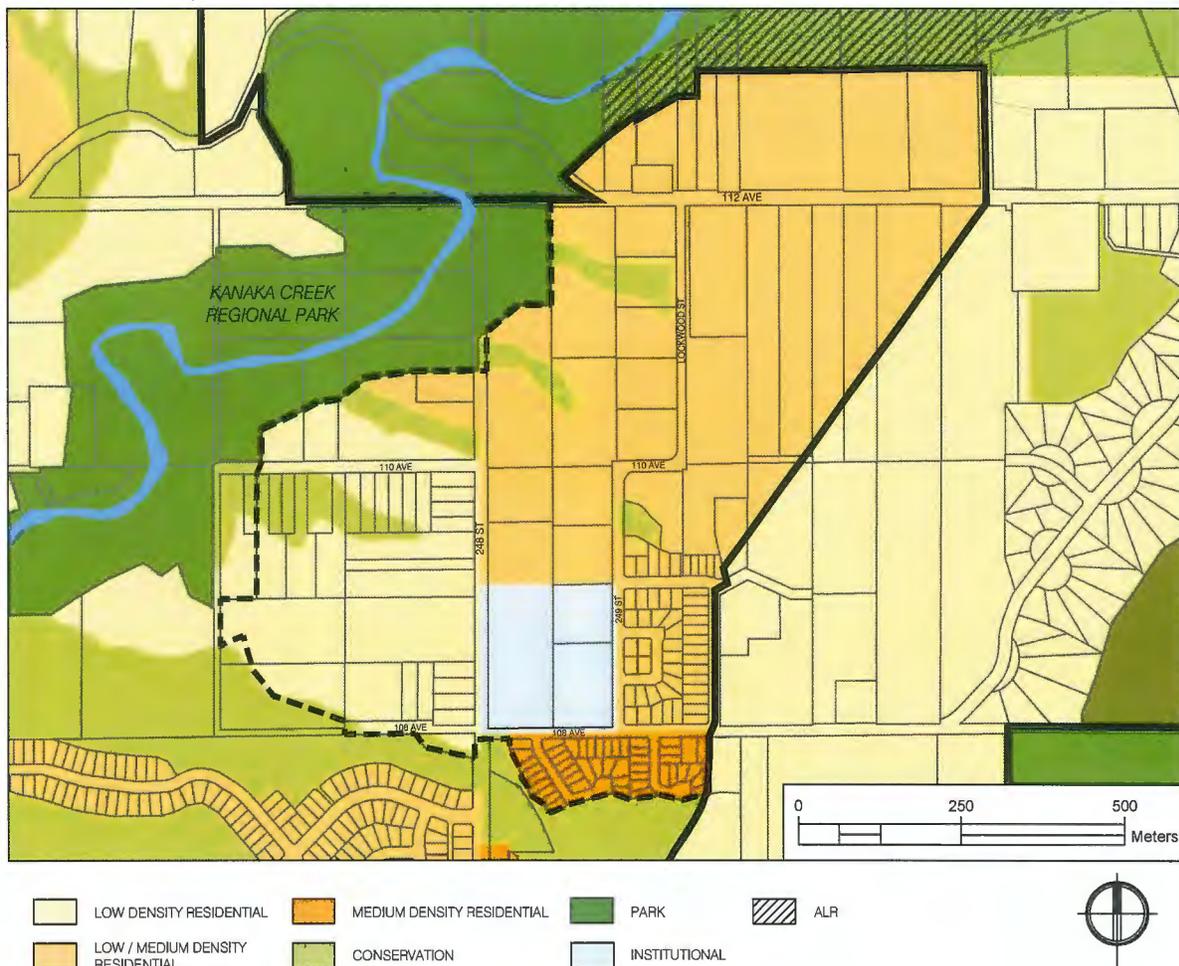


Figure 2 - Existing Land Use Designations (Official Community Plan, 2014)

### 3.2 EXISTING LAND USES

The current land use in North East Albion is residential, comprised of 157 properties, most of which are large rural acreages. The landscape is a mix of residential yards and lawns to mature mixed evergreen and deciduous forest stands. A small number of serviced lots exist on Morrisette Place and south of 108 Avenue, in the south-east of North East Albion. These lots have been developed as low-medium density single-family dwellings. North East Albion has remained relatively undeveloped and rural in nature.



Existing Housing on Jackson Road



Figure 3 - Existing Land Uses in North East Albion

### 3.3 ENVIRONMENTAL CONTEXT

#### Topography

North East Albion is located between Grant Hill to the southeast and the Kanaka Creek ravine to the north/northwest. The southern boundary runs along the ravine top-of-bank of Thornvale Creek. The land generally slopes down to the west/northwest towards the Kanaka Creek ravine. Analysis shows contours ranging from approximately 110m in the east to 20m in the west (west end of 100 Avenue) which is a substantial grade difference of 90m across the Concept Plan area. Overall, North East Albion is characterized primarily by a mix of moderate to significant northwestward slopes (10% to greater than 25% grade) with smaller patches of relatively flat lands along the northern and western extent of the North East Albion boundary adjacent to Kanaka Creek Regional Park.

There are a number of streams within North East Albion, several of which are within ravine settings. Streams generally flow to the west or north, toward the Kanaka Creek ravine.

The slopes in North East Albion will be an important consideration for the design and form of future development and services in this area in order to preserve natural grade, where possible. Preserving the natural character of the land has been identified as an important consideration by local residents.

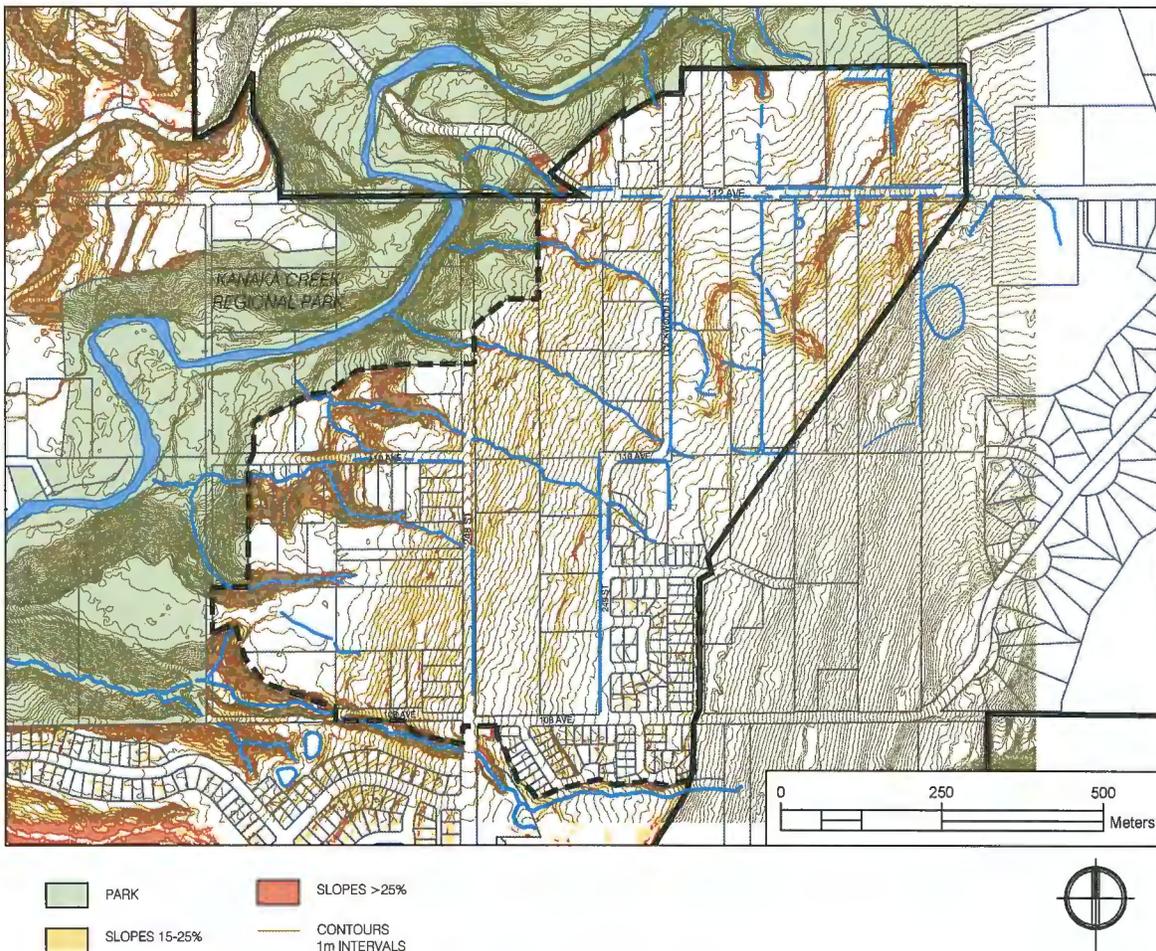


Figure 4 - Slope Analysis Showing 1m Contour Lines

## Soil and Geology

Surficial geology mapping shows that native soils (beneath topsoil) across most of North East Albion are comprised of three different types: Fort Langley Formation (FL – primarily subtype FLc with some FLb and FLd), Undivided pre-Vashon Deposits (UPV), and Tertiary bedrock.

FL soils are mapped in the northwest portion of North East Albion. FL soils are described as glacial and deltaic sediments. Subtype FLc (the primary mapped FL soil subtype within North East Albion) described as glaciomarine stony clayey silt to silty sand 8 to 90m thick, commonly thinly bedded and containing marine shells. FLb is described as outwash and ice-contact gravel and sand containing clasts of FLa (till with sandy loam). FLd is described as marine silty clay to fine sand commonly containing marine shells.

UPV soils extend into the eastern portion of North East Albion and consist of till, glaciofluvial, glaciolacustrine, fluvial, marine, and organic sediments.

A significant portion of southeast North East Albion is mapped as Tertiary which appears to be associated with Grant Hill. Tertiary type is described as tertiary bedrock including sandstone, siltstone, shale, conglomerate, and minor volcanic rocks. Where bedrock is not at the surface, it is overlain by glacial deposits and colluviums.

The soil makeup of the area determines ground permeability and affects infiltration rates. The types of soil found in North East Albion have helped to determine stormwater management improvement requirements outlined in Section 10.5.



*Kanaka Creek*

## Groundwater

Areas of groundwater recharge are present within North East Albion, but the area is primarily characterized by groundwater discharge. A large, moderately vulnerable, bedrock aquifer is present within North East Albion, referred to as the 'Grant Hill Aquifer'. The main recharge area for this aquifer is on Grant Hill, to the southeast of North East Albion. Potential recharge areas also exist in the south and east of North East Albion, where soils are classified as Tertiary. Additionally, a moderately vulnerable, shallow aquifer, referred to as the 'South of Grant Hill Aquifer', protrudes into North East Albion from the south. The shallow depth of this aquifer and its proximity to Thornvale Creek suggest that it may provide valuable moderated water flows to this important salmonid-spawning stream. Groundwater flow is expected to be generally northwestward, consistent with local surface topography. There is potential for groundwater to produce springs and streams along the toe of sloped areas in the eastern portion of North East Albion. This would occur during winter and early spring periods while the shallow aquifer remains saturated and where geological layers that are otherwise subsurface become exposed.

The management of groundwater is a key consideration for development in order to preserve the existing drainage patterns, maintain watercourse quality and water quantity, and protect shallow wells.



*Deer In The Forest*

## Watercourses

North East Albion contains numerous tributaries and watercourses that feed into Kanaka Creek. These watercourses are primarily groundwater fed from the Grant Hill aquifer, which provides flows year-round. The watercourses flow toward Kanaka Creek, starting at shallow gradients. On occasion, they are culverted under roads or diverted along property lines and receive additional flows from roadside streams or ditches. Nearing Kanaka Creek Regional Park, the watercourses located within the Concept Plan enter steep ravines until they reach the benches above Kanaka Creek channel. The watercourses in the northern portion of the Concept Plan then drop over a canyon into the Kanaka Creek channel.

The reaches of the watercourses within North East Albion (KA1 to KA7 and unnamed watercourses) do not appear to be fish-bearing with the exception of KA1 (downstream) and Thornvale Creek. Most of the creeks contain permanent barriers to fish migration, for example due to waterfalls, steep ravine reaches, and/or very shallow, braided channels.

The importance of these watercourses, and the role of groundwater inputs to these watercourses, is in providing fish habitat, maintaining habitable temperatures, steady flows, and considerable nutrient content to the habitat of Kanaka Creek. Future development in North East Albion must be designed to buffer and protect watercourses in order to preserve and improve the water quality and quantity within the watercourses and subsequently in Kanaka Creek and its tributaries.

Not all watercourses have been identified or classified as part of the conceptual planning process. Further ground-truthing will be required on a site-by-site basis at the time of development.

## Vegetation and Forest Cover

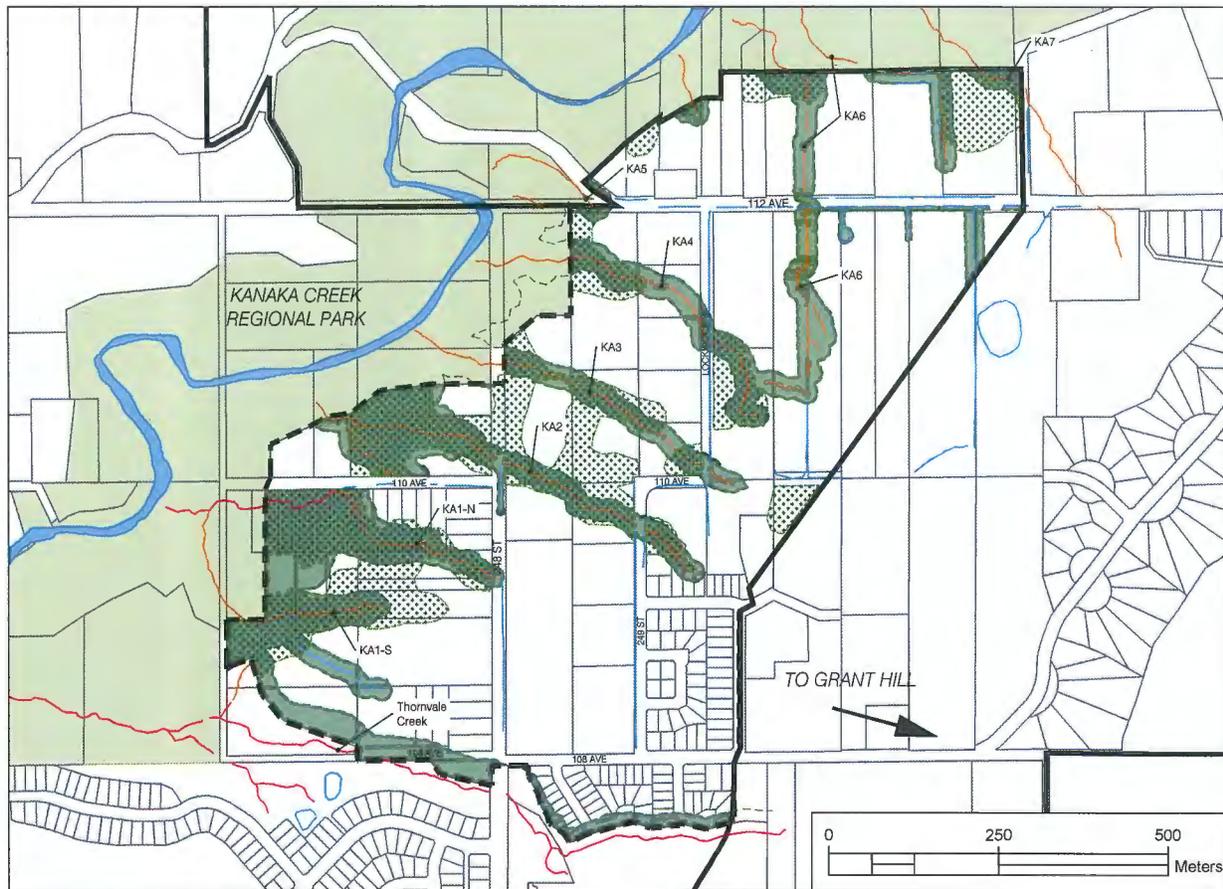
Trees and forest stands provide cultural and aesthetic values as well as synergetic value to aquatic and terrestrial habitat. The existing vegetation communities in North East Albion range from residential landscaped yards and lawns to mature mixed evergreen and deciduous forest stands. There are distinct vegetation communities in the area; they include grassed and landscaped residential areas, riparian areas that are young to moderate in age, mature forest communities, and young to moderate in age forest communities. Forest stands are primarily found within aquatic riparian areas. Significant mature conifers are frequently present between riparian areas in the west of North East Albion or they stand alone on landscaped lawns. The stands located outside of protected riparian setbacks offer important and valuable wildlife linkages. For further details on forested areas, please refer to Figures 5, 9, and 12

As identified by area residents, preservation of high-value tree stands is desirable. Per standard development processes, development applications will be required to retain a Certified Arborist to evaluate tree health and retention suitability.

## Wildlife Inventory and Habitat

North East Albion offers a high degree of biodiversity as exemplified by the richness of the plant and animal species that occupy it. Valuable habitat is located throughout North East Albion, including Kanaka Creek, the forest stands, and the streamside riparian areas. Regular visitors in the area include bears, deer, mink, otters, muskrats, coyotes, foxes, moles, shrews, voles, mice, squirrels, and chipmunks. Cougars are occasionally seen within Kanaka Creek Regional Park. Maintaining the movement corridors of these animals along Kanaka Creek and between Kanaka Creek and Grant Hill is important for facilitating wildlife conservation and resident safety as it reduces the risk of dangerous wildlife encounters.

Key ecological corridors currently utilized by native habitat include Thornvale along the south boundary, which provides a link to Grant Hill, and Kanaka Creek Regional Park to the west and north.



- METRO VANCOUVER REGIONAL PARK
- FISH BEARING WATERCOURSE (30m Setback)
- DITCHES / UNCONFIRMED STREAMS
- ENVIRONMENTAL SETBACK AREA
- NON-FISH BEARING WATERCOURSE (15m Setback)
- MATURE FOREST



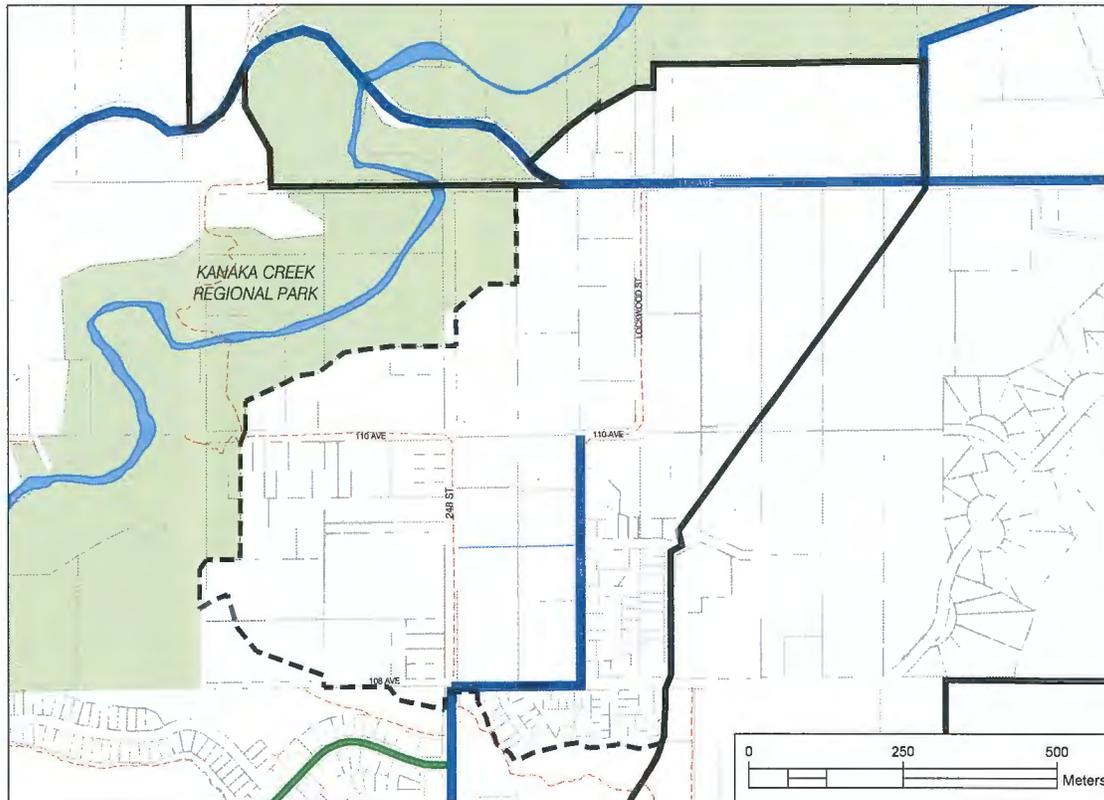
Figure 5 - Watercourses and Mature Forests

### 3.4 MOBILITY CONTEXT

The North East Albion area is currently serviced by 112 Avenue to the north and 108 Avenue to the south. At present, active transportation options are limited for Albion residents. There are currently no sidewalks on 112 Avenue through North East Albion and there is no dedicated cycling infrastructure available, despite community interest in the provision of cycling paths within North East Albion.

North East Albion is served by a TransLink operated community shuttle (#748 Haney Place/Thornhill) and is roughly a 30-minute ride to Downtown Maple Ridge. Port Haney Station is served by nearby bus #746 Haney Place/Albion or roughly a 15-minute drive by car.

The Maple Ridge Strategic Transportation Plan (STP) has identified several key considerations for the future of mobility and transportation in North East Albion. One key concept is a 108 Avenue/112 Avenue connector, which has been identified as necessary to provide east-west connectivity between Lougheed Highway at the Haney Bypass (via Kanaka Way) and 272 Street for existing and future development. Additionally, the STP identifies long-term transit service in the North East Albion area will continue to be provided via Community Shuttle transit service. The STP identifies North East Albion as an area to improve walkability for residents by providing sidewalks as growth occurs, constructing temporary sidewalks where needed, and striving towards a full sidewalk standard in the long-term. Future sidewalk construction will be provided through the land development application process.



- ARTERIAL (EXISTING)
- COLLECTOR (EXISTING)
- - - TRAIL (EXISTING)



Figure 6 - Existing Major Roads - Arterials and Collectors

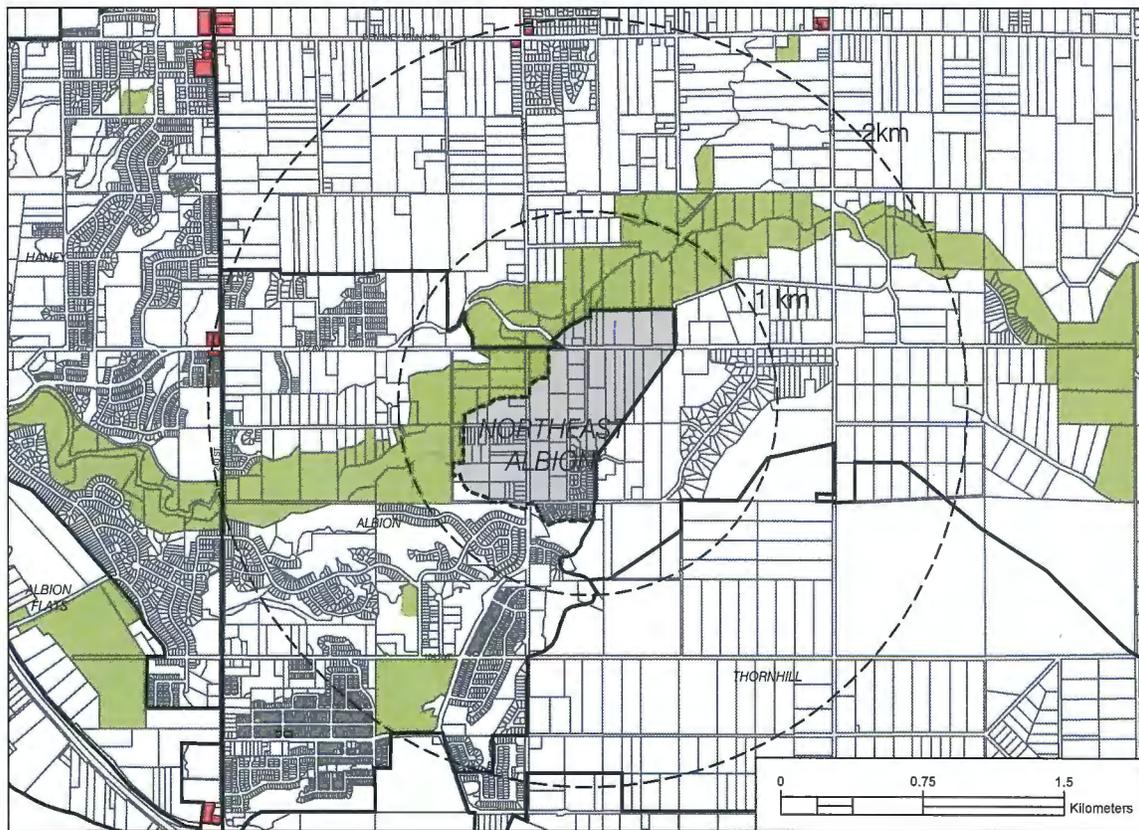
### 3.5 COMMERCIAL CONTEXT

Nearby commercial uses are located primarily along 248 Street. These existing commercial nodes offer retail and commercial services for residents including a grocery store, restaurants, childcare centers, pharmacies, and salons.

The potential for retail to be located and succeed in North East Albion will be influenced by the location of existing and planned retail nearby, the existing and future transportation network, and the proposed population density in North East Albion. A retail economic analysis concluded that North East Albion has the potential to support a convenience retail node that may include tenants such as take-out restaurants, cafes, hair salons, childcare centre, convenience stores, and florists, for example



*Kanaka Creek Coffee, 102 Avenue at 241 Street.*



*Figure 7 - Existing Commercial Nodes*

### 3.6 EXISTING INFRASTRUCTURE

There are currently limited sanitary services in North East Albion. North East Albion is primarily serviced by well water and septic sewer, except for a small portion of land in the south, which is serviced with sanitary and water that drains south into the Albion area system.

For North East Albion to accommodate future development, substantial investment into sanitary infrastructure is required. New development in the area will be responsible for financing all proposed infrastructure.

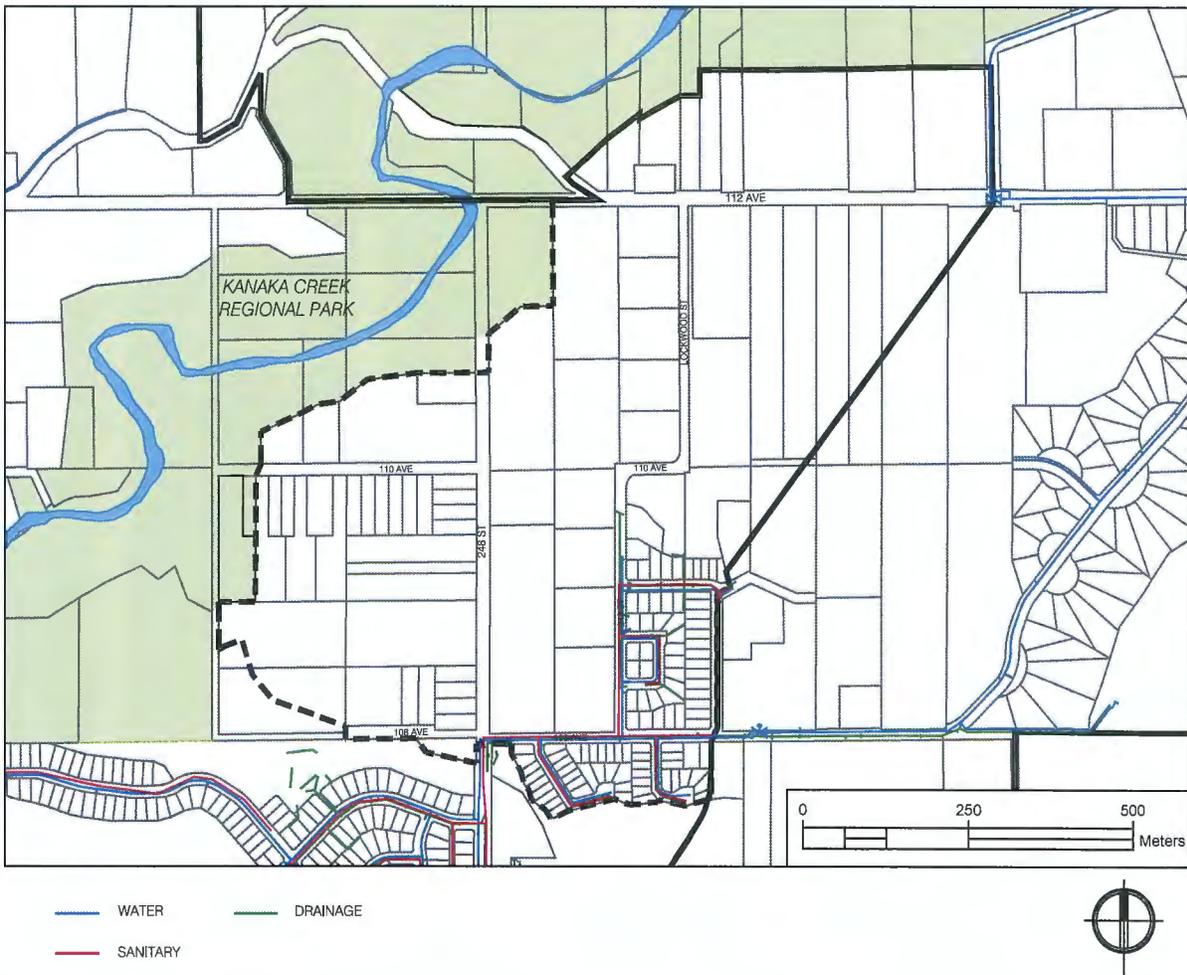
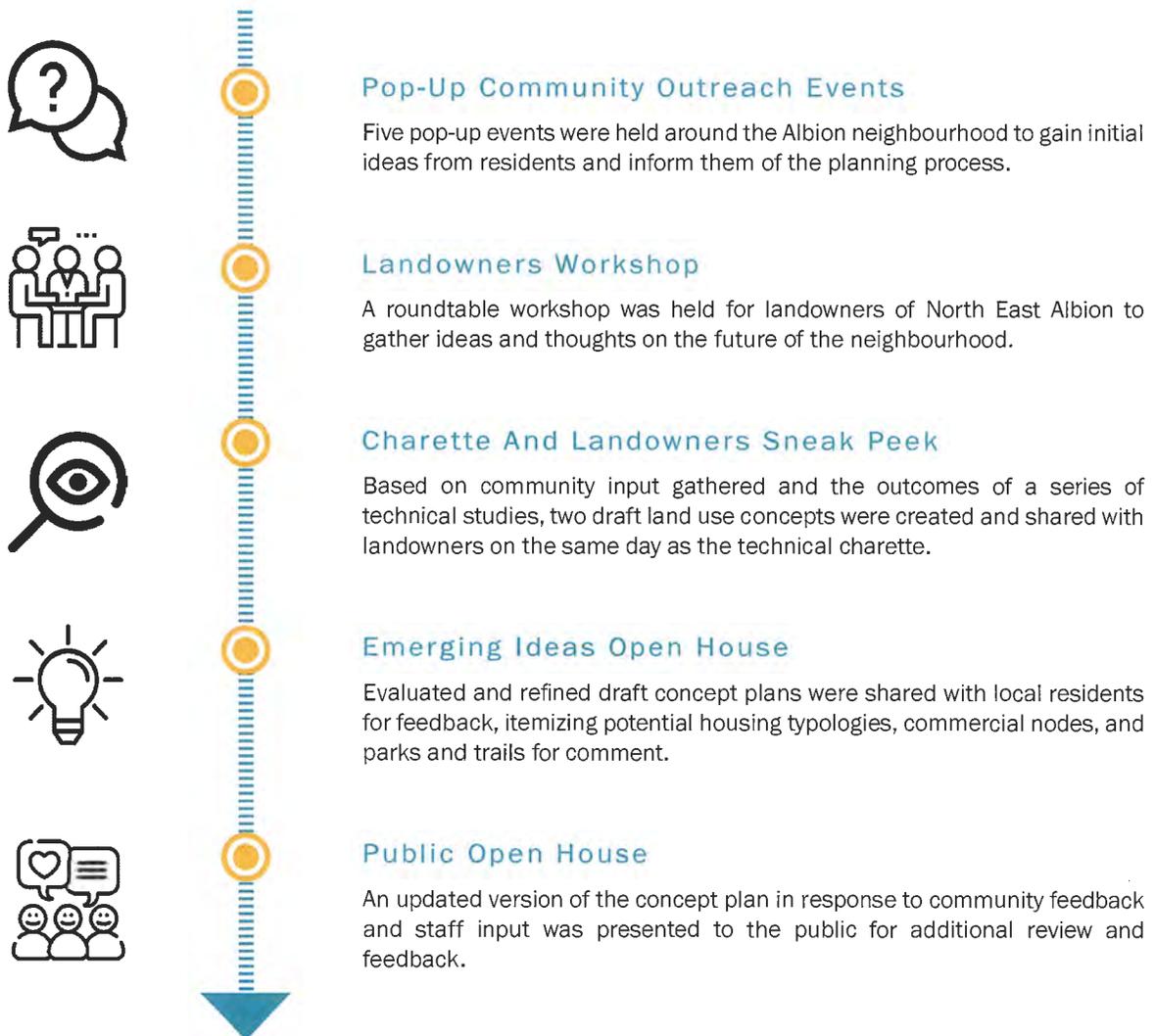


Figure 8 - Existing Services

## 04 | COMMUNITY CONSULTATION

### 4.1 CONSULTATION PROCESS

The planning process has been iterative and responsive to information provided by the consultant team, City staff, external stakeholders, and the community. From January to July 2019, Aplin Martin and the City of Maple Ridge conducted an extensive consultation program with key stakeholder groups and the community at large.



## 4.2 CONSULTATION HIGHLIGHTS

A number of public consultation events for both local landowners and the greater community were held throughout the planning process. At one of the initial visioning events, community members were asked to help the Consultant team understand what makes North East Albion truly special.

### WHAT MAKES A GREAT NEIGHBOURHOOD?

- Knowing your neighbours
- Shops within walking distance
- Diversity and affordability of housing
- Options for homeownership and rental housing
- Private, quiet, and unique homes
- Sidewalk, streetlights, sewer, and water infrastructure
- Sufficient parking, limited traffic
- Transit options
- Playgrounds and parks for all ages
- Greenery and shaded recreation areas for families
- Trails, linkages, and pathways
- Fire station
- Daycares, schools, and libraries
- The secret duck pond (Shhh!)

### WHAT ARE THE OPPORTUNITIES IN NORTH EAST ALBION?

- New, modern homes
- Increased product choice for prospective homeowners
- Improved streetscapes, street lighting, and greenery
- Improved transit to the West Coast Express and the Town Centre
- Creation of a Park-and-Ride nearby
- Protection of groundwater and wells
- Protection of wildlife corridors
- Preservation of nature and access to nature
- Create sightlines to Kanaka Creek Regional Park
- Improved safety and privacy
- Townhouses with backyards
- Secondary suites as a mortgage helper
- Interconnected trail network
- Improvement of long-standing equestrian trails
- Introduction of bicycling lanes
- Improved access to Kanaka Creek Regional Park
- Local commercial options
- Affordable housing options located near services
- A diversity of housing types
- Sports fields and playgrounds
- Spaces for dogs
- Viewpoints

### WHAT CHALLENGES DO WE HAVE FOR NEW DEVELOPMENT?

- Financing new community amenities and services
- Traffic flow on Lougheed Highway during peak hours
- Limited local parking
- Limited emergency routes for evacuation
- Limited lighting and visibility through Kanaka Creek Regional Park
- Threats to pollution of groundwater and dewatering of wells
- Steep grades and erosion
- Potential for disruption to existing residents during construction
- Potential for the loss of green space, natural assets, and rural character



*Community Consultation*

## 05 | LAND-USE CONCEPT PLAN

### 5.1 PLAN SYNOPSIS

The natural environment forms the foundation upon which the land use planning process evolved. This framework is reflective of consultation with area residents and other stakeholders and embodies the planning themes and principles developed throughout the process. The Concept Plan represents a strategy to integrate land use and sustainable ecosystem management, while addressing concerns around housing affordability and diversity, transportation, parks, school capacity, and improving local neighbourhood amenities. The Concept Plan envisions residential pockets nestled between watercourses linked by a network of pathways and trails. A multi-modal network links neighbourhood amenities, such as parks, an elementary school, and shopping nodes within the community and to the larger Albion area and Kanaka Creek Regional Park.

North East Albion is typified by a tapestry of watercourses draped over a sloping landscape. These watercourses lead to one of Maple Ridge's greatest environmental treasures, Kanaka Creek. Mapping this rich and diverse landscape was the first step in establishing the Concept Plan and connecting these natural areas with green links, the second. Interconnected loops of pathways and trails are identified throughout the Concept Plan. A "Spine Trail" was established in the eastern portion of the plan area along a contour line in order to create a gentle-grade connection from the elementary school to 112 Avenue and the Cliff Falls trailhead. The Spine Trail will connect the community to future open spaces and amenity spaces. This trail, along with the "Northern Greenway" trail identified along the north boundary of the Concept Plan (from 112 Avenue to KA6) are designed to serve operational and aesthetic purposes by incorporating stormwater features into their design. These features will help provide for the management of sensitive ecosystems as well as the long-term protection of groundwater and natural aquifers. This celebration of water is illustrated through visible stormwater management features that will serve to capture surface water, create habitat, and protect our water resources.

The future for North East Albion is seen as an inclusive and sustainable community with equal opportunities for people of all ages, cultures, lifestyles, and abilities. An affordable and varied housing stock is an important foundation for achieving this vision and ensuring a diverse and vibrant city. The North East Albion Concept Plan introduces density through a range of housing forms that support a resilient local economy, respect the area's existing rural character at the Plan's boundaries, and ensure a greener future.

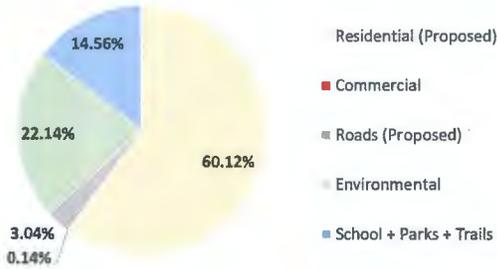
The proposed housing forms in North East Albion include the following:

- Townhouses are proposed in the centre of the Concept Plan, adjacent to 112 Avenue. By including higher density housing forms in North East Albion, the high cost of land is defrayed among more units, increasing housing affordability.
- Townhouse and attached-building forms stretch along arterial and collector roads towards the proposed elementary school site, providing affordable homeownership opportunities for families near services and amenities.
- Lower density, single-family detached homes and duplex, triplex, and fourplex dwellings that resemble single-family homes are proposed adjacent to existing small lot residents, plan boundaries, and sensitive habitat areas west of 248 Street. Single-family forms permit secondary suites or detached garden suites, creating an opportunity for more affordable homeownership and the potential for rental options for neighbourhood residents.

The Concept Plan reimagines North East Albion as a comprehensive, modern neighbourhood that incorporates housing choice, improved community amenities, and affordable housing, all while respecting the natural environment. In order to achieve a complete community that supports the daily needs of residents, new commercial nodes are being proposed within North East Albion near 112 Avenue and 248 Street. A neighbourhood that includes commercial nodes reduces vehicle trips taken and encourages active forms of transportation, leading to a healthier lifestyle and environment. The initial commercial node and nearby neighbourhood park are envisioned to proceed alongside initial development. The full network of amenities will be achieved overtime as the area continues to grow and mature. Guided by the Concept Plan, growth in North East Albion will be sustainable, resilient, and well-integrated to contribute to the overall quality of life for residents in Maple Ridge.

### Plan Summary By the Numbers

**NORTH EAST ALBION CONCEPT PLAN  
PROPOSED LAND USE (%)**



**NORTH EAST ALBION CONCEPT PLAN  
PROPOSED RESIDENTIAL MIX (%)**

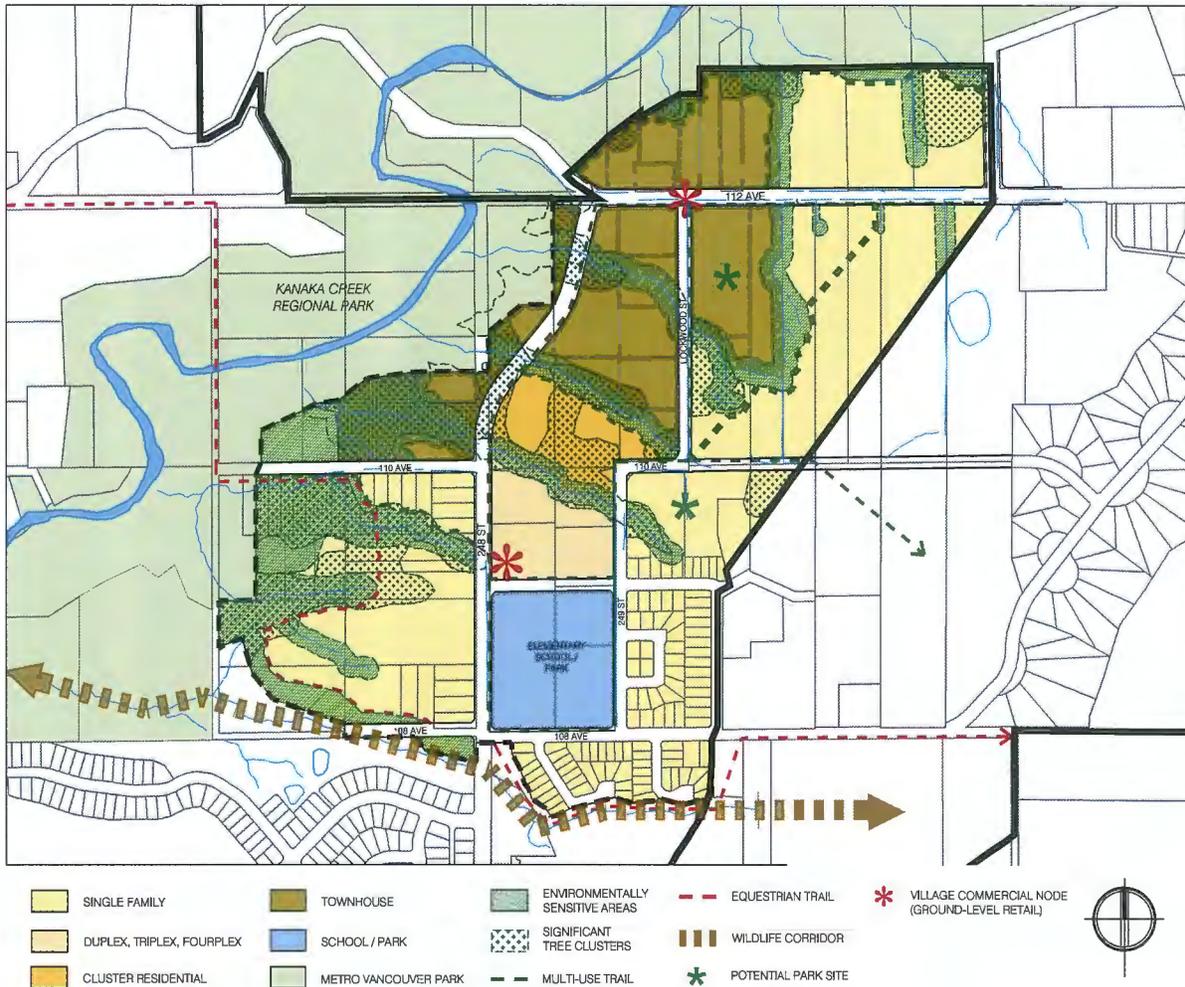
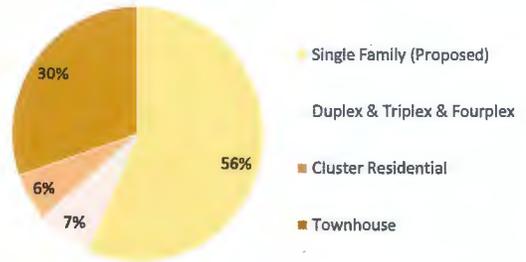


Figure 9 - Proposed Land-Use Concept Plan

## 5.2 NEIGHBOURHOOD QUADRANTS

### Quadrant East of Lockwood Street

#### North Village Commercial Node

A gathering place connected by trails, adjacent to a neighbourhood park, and a short walk from the trailhead to Cliff Falls. The northern node will have the capacity for 4-6 shops and may include a café, take-out restaurant, convenience store or other small businesses.

#### Multi-Modal Spine Trail

Creating a gentle-grade connection from the proposed elementary school to the Cliff Falls trailhead. The trail is designed to include landscaped features that celebrate and protect the water resources in the area through visible stormwater management.

#### Protection of Trees

Smaller forms of residential development are permitted to protect and preserve high-value trees.

#### Single-Family Residential

Single-family homes reflecting the character of existing neighbourhoods.

#### Northern Neighbourhood Park

Programmed park near the village commercial node and linked by multi-use paths.

#### Single-Family Residential

Larger lots as a sensitive transition to rural acreages outside of the urban area boundary.

#### Celebration of surface water

Visible stormwater management features along the Spine Trail to capture surface water, create habitat, and protect water resources.

#### Central Neighbourhood Park

Programmed park linked by multi-use paths, close to the existing single-family area in the south.

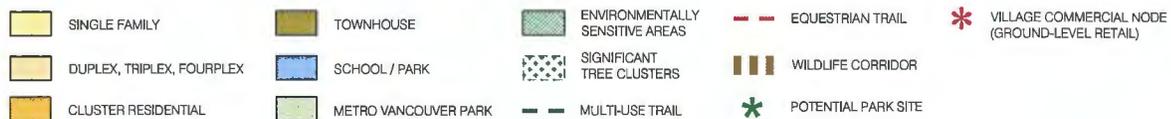


Figure 10 - Proposed Quadrant Land-Use Plan, East of Lockwood Street

## Quadrant Between 248 Street and Lockwood Street

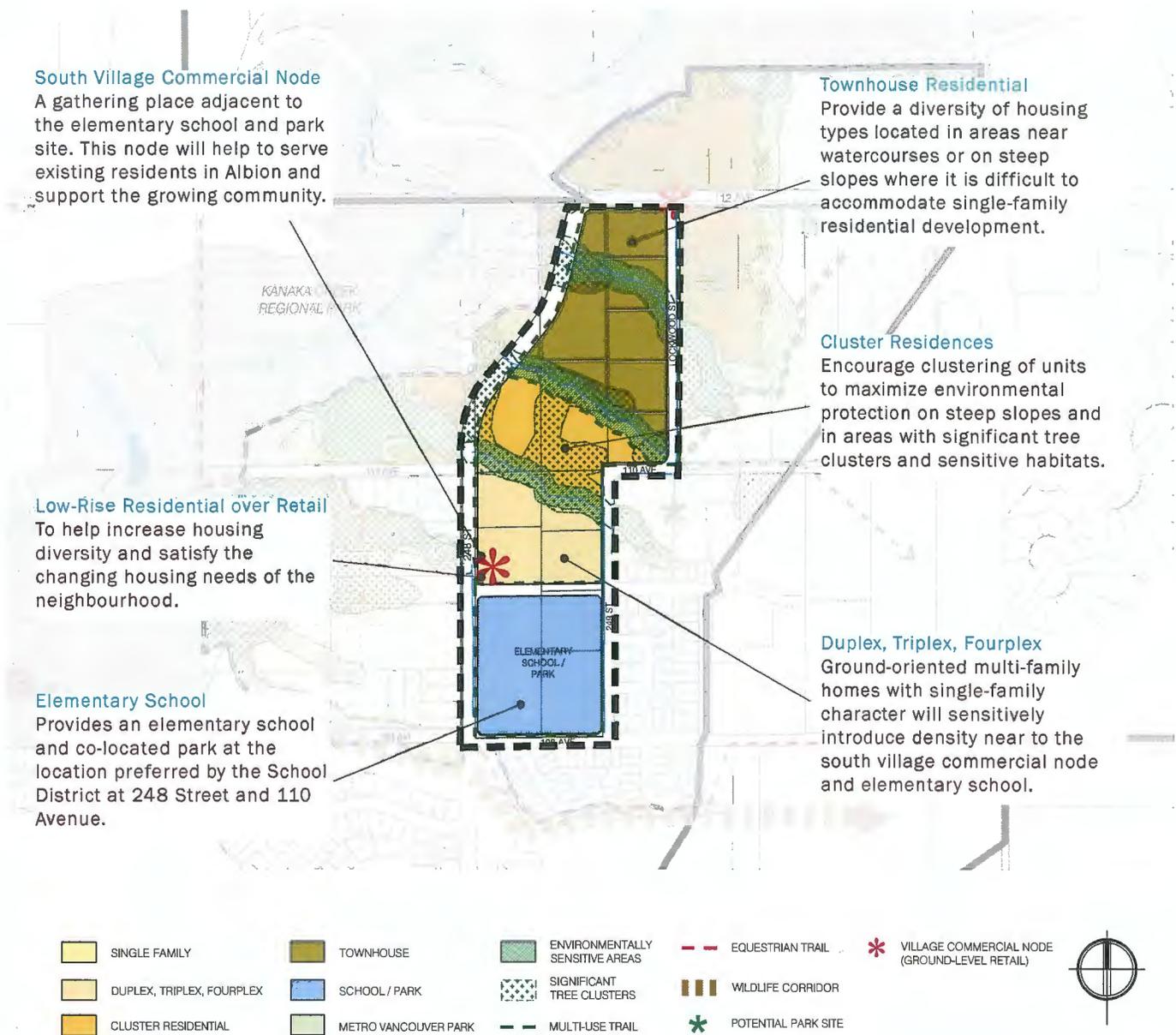


Figure 11 - Proposed Quadrant Land-Use Plan, Between 248 Street and Lockwood Street

## Quadrant West of 248 Street

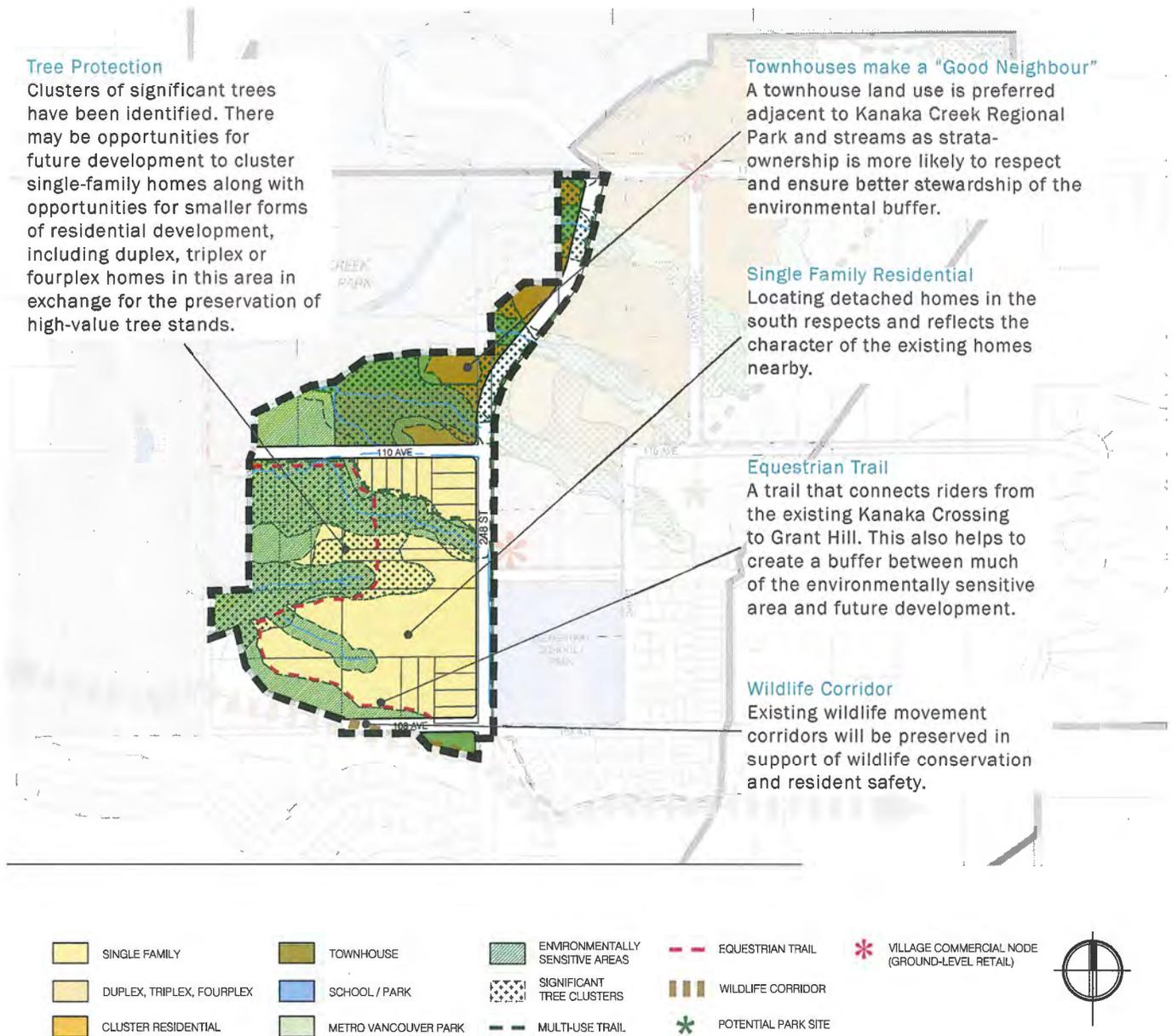


Figure 12 - Proposed Quadrant Land-Use Plan, West of 248 Street

## Quadrant North of 112 Avenue

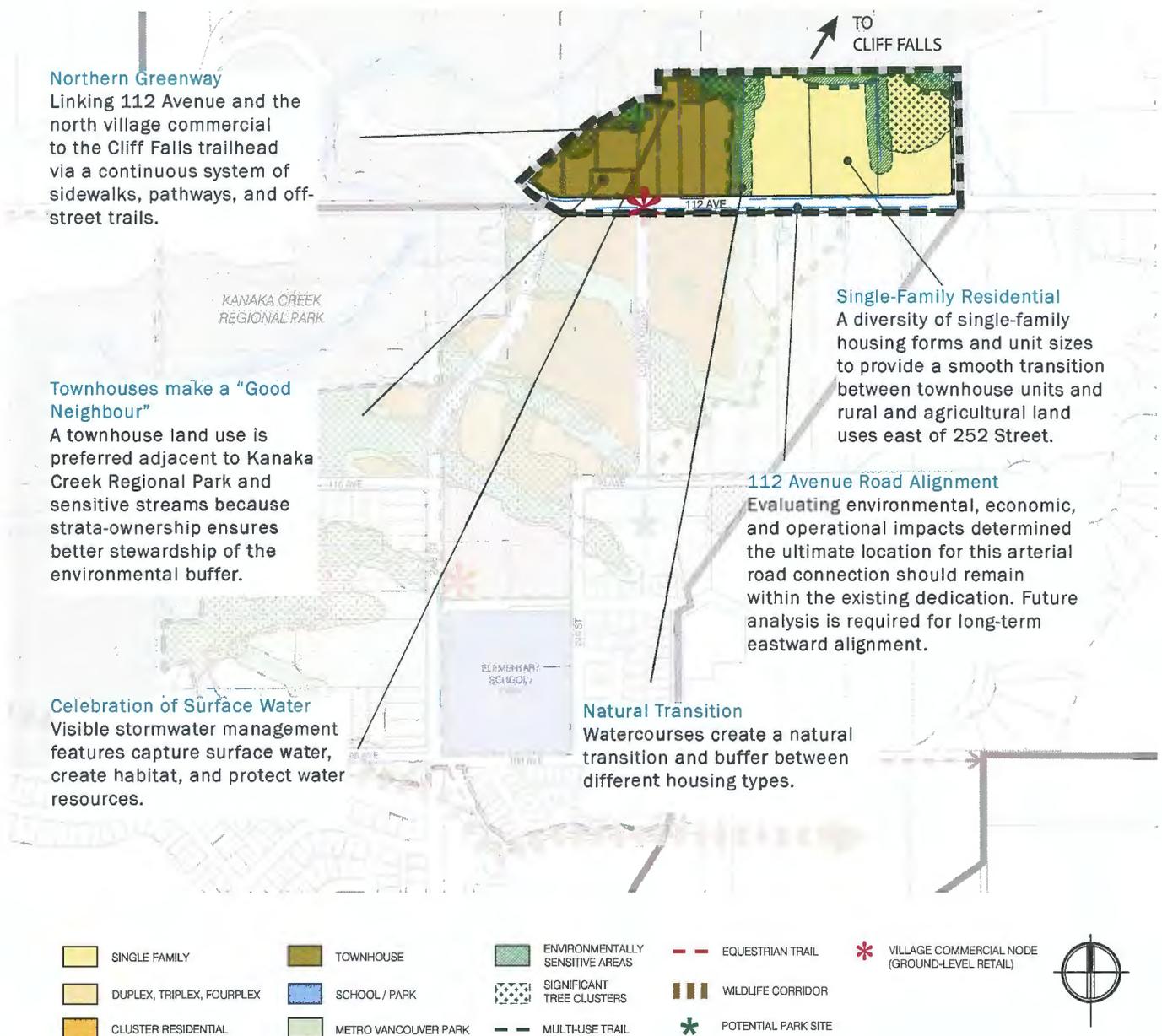


Figure 13 - Proposed Quadrant Land-Use Plan, North of 112 Avenue

### 5.3 ENVIRONMENTAL INTEGRATION

A healthy community depends on a healthy environment. The Concept Plan emphasizes environmental objectives at its forefront to promote environmental stewardship, protect natural resources, and preserve ecosystems while balancing social and economic objectives for the community.

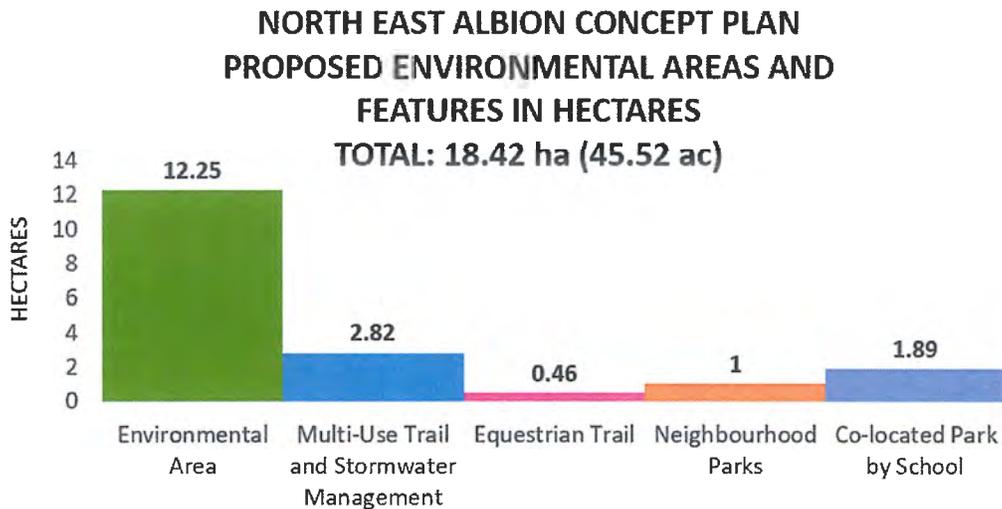
The existing environmental context guides the strategies and tools proposed in this Concept Plan to balance the impacts of development and increase human connection to nature. North East Albion will be developed to protect fish and fish habitat, minimize potential for stream erosion, prevent surface flooding, and ensure major storm conveyance systems are capable of safely conveying significant flows and minimize damage to life and properties under extreme storm conditions.

#### Water Conservation

The Concept Plan provides a vision for sustainable water stewardship practices that will adapt to climate change impacts and the pressures placed on water resources from a growing population. Water conservation is a key component to ensuring the health of humans, plants, and animals by protecting

groundwater, fisheries, and potable water. Water conservation measures in the context of a changing climate in the Concept Plan will protect fish and fish habitat by maintaining baseflows and water quality to Kanaka Creek and its tributaries. By effectively managing water, North East Albion will have reliable, safe, and clean water, maintain property values, and ensure the environmental stewardship of wildlife hubs and corridors in the area.

To maximize groundwater protection and water conservation, stormwater management best practices, including the introduction of visible stormwater management features, are proposed throughout the Concept Plan. At the time of development, Geotechnical investigations will be required to include a groundwater impact assessment that is focused on groundwater characterization regarding aquifer presence at a site (e.g. groundwater-bearing soil formation, depth, flow direction) and impact mitigation measures (e.g. intercept and direct to nearby stream, supplement with stormwater infiltration) to protect stream base flows and local use of drinking water resources.



## Watercourses and Setbacks

Watercourses will be protected by environmental setbacks to preserve their health and integrity throughout the Concept Plan. The riparian setback areas illustrated in the Concept Plan provide a high-level overview of the many watercourses in the Concept Plan. These watercourses feed into the Regional Park and support the health and integrity of the Kanaka Creek ecosystem. Additional unclassified watercourses may be discovered with individual site investigation at the time of development.

There are ditches and unclassified roadside streams located throughout the Concept Plan that have not been assessed. These ditches and streams may have habitat and aquatic value that will require compensation if relocated or will require some level of recognition, interpretation, or integration in the development design.

Sensitive design is encouraged to ensure that pre-development water quality and quantity are maintained in post-development conditions. This will be determined based on ground-truthing at the time of development on a site-by-site basis.

## Tree Retention and Forest Stands

Significant tree stands that are not already protected through existing legislation, bylaws or policies may be preserved through thoughtful site design. There is the potential for density bonuses for the purpose of managing the development footprint while maximizing environmental preservation. Evaluation by a certified Arborist is required to determine tree health and retention potential. High-value trees should be incorporated into site design, where possible. Significant trees are primarily located within existing riparian areas and are critical to watercourse health.

## Mature Forest

The Concept Plan also acknowledges the importance of mature forest stands and potential co-dependence with riparian areas to create a windfirm boundary. Tree retention in North East Albion enhances the natural beauty of the area and provides significant environmental benefits such as air purification and carbon sequestration. Tree retention is also imperative to minimizing local climate impacts, creating habitat for wildlife, and water management objectives.

## Wildlife Movement

Kanaka Creek Regional Park provides valuable habitat for wildlife. Existing wildlife movement corridors along Kanaka Creek and between Kanaka Creek and Grant Hill along Thornhill will be preserved in support of wildlife conservation and resident safety. The Concept Plan proposes to further buffer Kanaka Creek Regional Park where wildlife primarily travels currently. This buffer will couple landscaping and stormwater management features to improve passage for wildlife by further setting back from steep ravine barriers within the Regional Park. The proposed buffer will also act as a deterrent to encroachment, as they will be maintained by the City and/or strata.

## 5.4 COMMUNITY SERVICES AND AMENITIES

### Parks

New parks and open spaces are important components of a green, liveable, and connected neighbourhood. The Concept Plan proposes a co-located neighbourhood park and elementary school with a sports field, as well as playgrounds, pathways, and neighbourhood park(s) to meet the needs of the growing community.

- Neighbourhood parks form the visual, physical, and social focus of a neighbourhood and are typically a minimum of 0.49ha (1.2ac) in size.
- A co-located school-park site with the proposed elementary school could include an active use sports field, looping trails, sports courts, and playgrounds.
- All residents will have a park within a 5-minute walk.

### Park Programming

Park amenities are typically determined through the design process, which includes neighbourhood consultation several months prior to park development. Typical neighbourhood park amenities include:

- Playgrounds
- Sports courts
- Splash pad
- Looping pathways
- Open grass
- Picnicking and seating areas

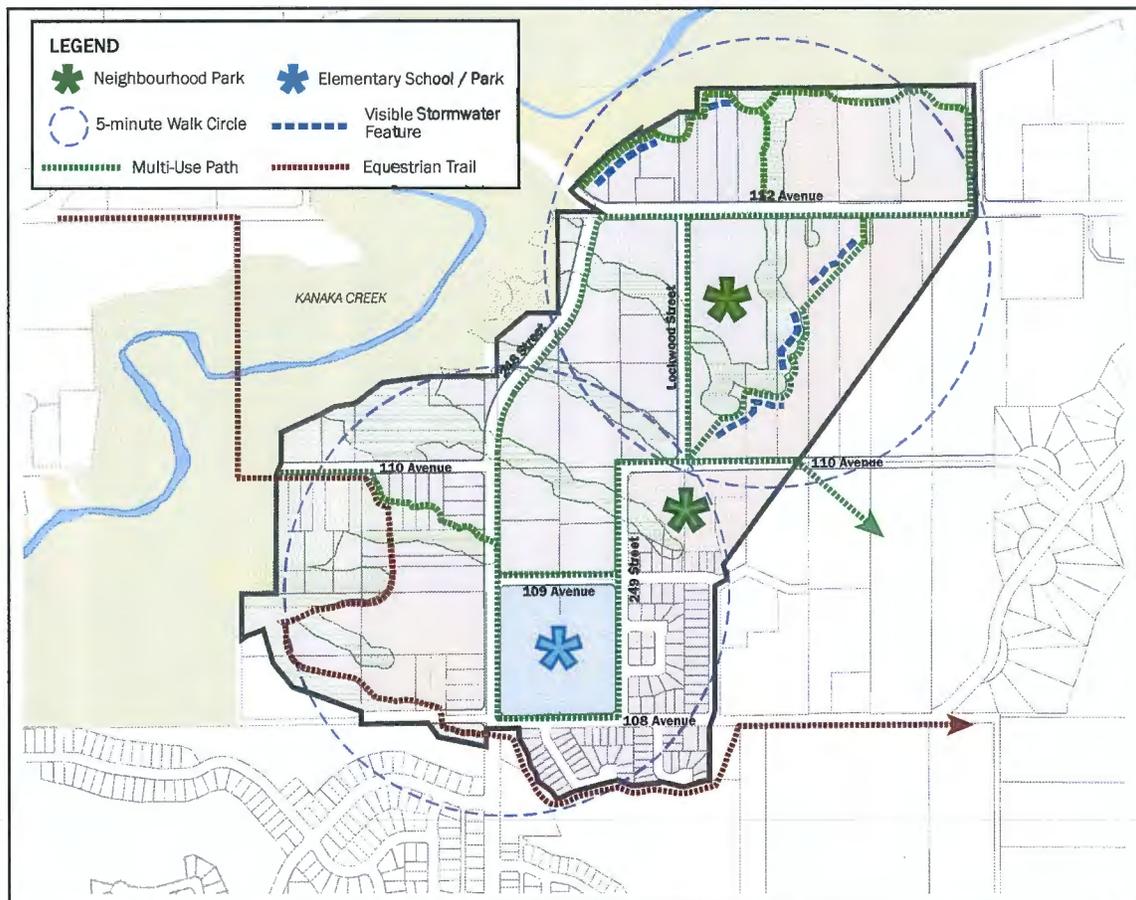


Figure 14 - Proposed Neighbourhood Parks and Trails

## Trails and Pathways

North East Albion will provide active and passive recreational opportunities woven into the neighbourhood through a network of off-street trails and multi-use pathways. These trails and pathways act as a greenway and buffer to sensitive environmental areas and create a more attractive public realm for pedestrians and bicyclists. They are connected by walking loops throughout the community, linking residents to neighbourhood amenities and green spaces. These will encourage reduced driving in North East Albion as short trips are made by walking rather than driving.

### Spine Trail & Northern Greenway

The Spine Trail creates a gentle-grade connection from the proposed elementary school to the Cliff Falls trailhead on-street following 249 Street and 110 Avenue and off-street from 110 Avenue to 112 Avenue. The Northern Greenway links the 112 Avenue Parkway over Kanaka Creek to Cliff Falls via a continuous pathway lining the Kanaka Creek Regional Park boundary at the northern edge of the Concept Plan.

A townhouse land use is proposed adjacent to the Northern Greenway to ensure better stewardship of the environmental buffer and provide additional surveillance as well as “eyes-on-the-trail”.

These trails will be designed to include landscaped features that celebrate and protect the water resources in the area through visible stormwater management. A series of connected

ponds are proposed to be woven into the trail system. The design and location of these features along the trails is flexible to ensure that they meet stormwater management targets and can be sensitively and seamlessly knit into the natural slope of the site. Site specific analysis at the time of development will refine the design and location of these features.

### Equestrian Trail

A trail that connects riders from the existing Kanaka Crossing to Grant Hill. This trail helps to create a buffer between the environmentally sensitive areas and future development.

### Elementary School

North East Albion has been identified as a high priority for an additional elementary school site by the Maple Ridge – Pitt Meadows School District No. 42 (SD 42) in their Strategic Facilities Plan. SD 42 has identified the parcels located at 248 Street and 108 Avenue as the preferred location for a new elementary school, per the Albion Area Plan, and has asked the Ministry of Education for funding to acquire the parcels.

While more detailed design and analysis is anticipated, at this time the new elementary school is expected to be 5,100 m<sup>2</sup>, and is to accommodate approximately 660 additional students from the community in 27 classrooms. The site identified will also accommodate a sports field to be owned and operated in partnership with the City of Maple Ridge.

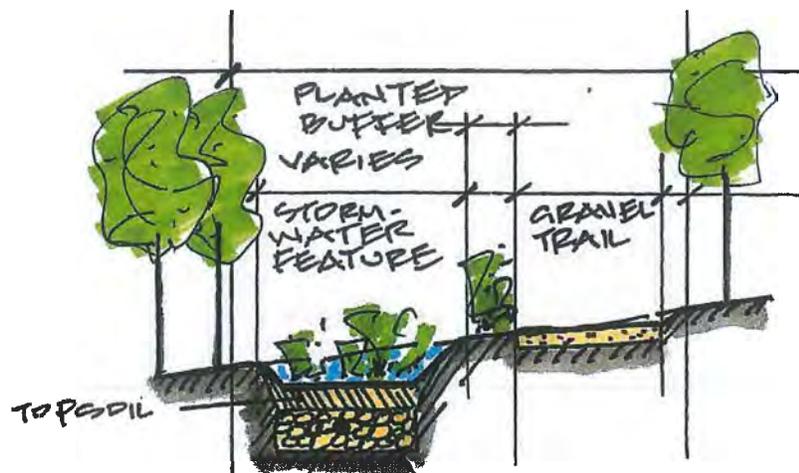


Figure 15 - Trail and Stormwater Feature Typical Section

## 5.5 VILLAGE COMMERCIAL

### Mixed-Use Development

Mixed-use development is a fundamental component to achieving a complete neighbourhood where residents can live, work, and play. Two commercial nodes are proposed in North East Albion, one at the intersection of 112 Avenue and Lockwood Street, and one adjacent to the proposed elementary school at 248 Street. The nodes are envisioned as anchors for community activity: connected by trails, adjacent to new neighbourhood park(s), and a short walk away from trailheads into Kanaka Creek Regional Park. The northern commercial node is envisioned to be achieved at the early stages of build-out. The secondary commercial node, adjacent to the elementary school site, allows for additional commercial space should there be sufficient demand as the neighbourhood grows.

Each node will have the capacity for 4-6 shops (555-840 m<sup>2</sup>). Retail uses at this scale may include a café, take-out restaurant, hair salon, childcare center, florist, convenience store or other small businesses.

The nodes will be designed as 2-3 storey multi-family apartments or townhouses stacked above ground-level commercial, allowing for both affordable home ownership and the possibility of rental housing to be introduced in North East Albion. The inclusion of mixed-use development may stimulate more variety in the design of, and options for, more affordable multi-family housing.

The benefits of mixed-use development include a reduction in reliance on vehicles and promote more of a pedestrian-friendly environment due to the short distances between living, work, commercial, and recreational destinations. This results in lowered commuting costs and decreased road congestion. Mixed-use developments also contribute to livelier urban spaces with public gathering places and a variety of shops, restaurants, and entertainment.



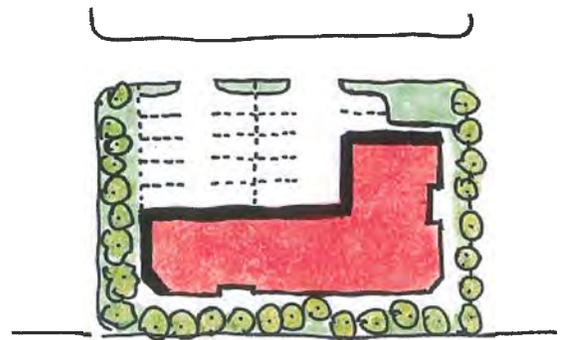
*Mavis Street, Fort Langley*



*Reid Block, Fort Langley*

### Design Intentions

- Blends commercial, residential, and institutional uses to create an activated and animated street presence.
- Sized appropriately to meet the needs of the growing community with additional room to expand, should demand be present.
- Locating commercial nodes near future multi-family units to help support the commercial interests.
- Co-locating commercial uses adjacent to homes, parks, trails, and areas of activity and gathering.
- Within a 5-to-10-minute walk of the future school; easy access from an arterial road to respect future car travel routes.
- Market or rental apartment or townhouse units above ground-floor commercial, providing residents with easy access to a wide range of amenities.
- Ground-oriented and street-facing units along 112 Avenue and Lockwood Street.
- Building heights tapering to adjacent lower density land-uses.

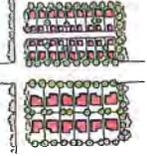
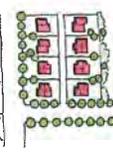
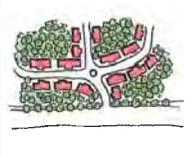
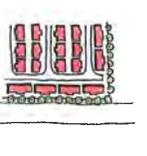
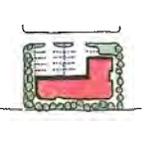


*Typology Sketch*

## 5.6 HOUSING TYPOLOGY

Maple Ridge is a growing and diverse community that requires a range of housing options to support the social and economic health of the city. Allowing for, and encouraging, a mix of different housing types provides homes that are affordable within different ages and stages of one's life. A variety of residential designations are included in the North East Albion

Concept Plan to support a diversity of housing options, ranging from townhouses adjacent to the northern commercial node to single-family dwellings. The Concept Plan features a gradual decrease in density away from major roads and towards the urban area boundary and the existing single-family homes.

Land Use Designation	Single Family	Duplex, Triplex, Fourplex	Cluster Residential	Townhouse	Mixed Use Commercial
<b>Design Principle</b>	Single-family homes that serve as a continuation of the existing character in the area. May also include duplex, triplex, and fourplex in select locations.	Ground-oriented, multi-family homes that appear as a single-family house; increases housing diversity and maintains existing character.	Multi-family residential units clustered to minimize development footprint and maximize environmental protection in sensitive areas.	Multi-family homes at densities that support new commercial and park amenities.	Community node that mix retail options and residential units with an opportunity for rental options.
<b>Building Form Options</b>	2-3 storey attached or detached dwellings.  Large lots with front garages.  Small urban lots with rear or front garages.  Option for detached garden suite or secondary suite.	2-3 storey attached dwellings.  Smaller units within larger dwellings that have the appearance of a single-family dwelling.  Smaller units within larger dwellings surrounding a central courtyard or strata road.	2-3 storey townhouse units with private strata parking.  Option for detached garden suite or secondary suite in single family forms.	2-3 storey townhouse units with private strata parking.  3 storey townhouse or stacked townhouse with surface or underground parking.	2 storey with apartment above ground floor commercial.  3 storey stacked townhouse units above ground floor commercial.
<b>Illustrative Example</b>					
<b>Concept Design Illustration</b>					
<b>Photo Example</b>	 	 	 	 	 

## Townhouse

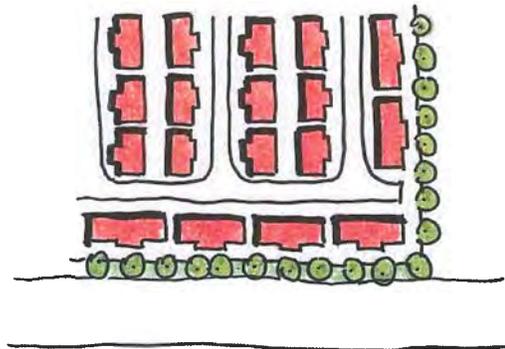
The Townhouse designation is intended to accommodate urban townhouses in areas with access to major circulation routes, commercial areas, and public amenities. The proposed townhouse developments are in close proximity to amenities and services, where residents can walk or bike rather than drive their cars. Typical townhouse developments may consist of primarily 2 to 3 storey buildings that house multiple dwelling units and provide some form of indoor and outdoor amenity spaces. These developments will feature private strata parking. Stacked townhouses up to 3 storeys are permitted along arterial roads adjacent to commercial nodes, with surface or underground parking.

### Design Intentions

- Townhouse units adjacent to roads, trails, and/or public spaces for increased surveillance.
- Townhouse or stacked townhouses adjacent to commercial nodes and green spaces along 112 Avenue.
- Townhouse units are preferred adjacent to Kanaka Creek Regional Park and sensitive streams to ensure buffering and stewardship of the Park.
- Oriented to and directly accessed from the fronting street.
- Front and rear yards as private outdoor living spaces for residents.



*Built Form Example*



*Typology Sketch*

## Cluster Residential

The Cluster Residential designation is intended for multi-family units that are clustered together to minimize the development footprint and maximize environmental protection in sensitive areas. Clustered residences promote integrated site design that is considerate to the natural features and topography of the site. They protect environmentally sensitive areas and permanently preserve important natural features and open space to create larger areas for recreation and social interaction. The designation is intended for ground-oriented multi-unit strata residential townhouse buildings and related amenity and open space.

### Design Intentions

- Integrated site design that is considerate to the natural features and topography.
- Protection of environmentally sensitive areas.
- Create more areas for open space, recreation, and social interaction.
- Units can be a variety of forms, including freehold or strata, attached or detached product.
- Townhouse units with front doors facing 248 Street and 110 Street and other major streets.



*Built Form Example*



*Typology Sketch*

## Duplex, Triplex, Fourplex

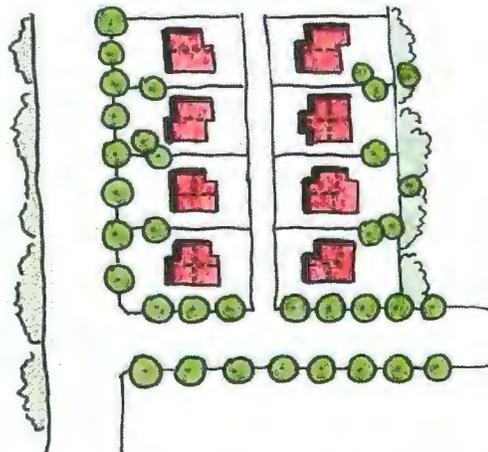
The Duplex, Triplex, Fourplex residential designation is intended for buildings joined by a common party wall or strata buildings. They provide greater housing diversity options to meet the needs of potential homeowners. This designation may include a mix of semi-detached or attached courtyard dwellings. They are to be designed to resemble single-family homes and are ground-oriented.

### Design Intentions

- Duplex, triplex, and fourplexes designed with the outward appearance of a single-family home yet feature multiple distinct entries.
- Units in a variety of designs to break up the massing of the building, provide for individuality in the design, and are visually interesting.
- Rowhouses are also permitted, maximizing opportunity for hidden density and interesting streetscapes.



*Built Form Example*



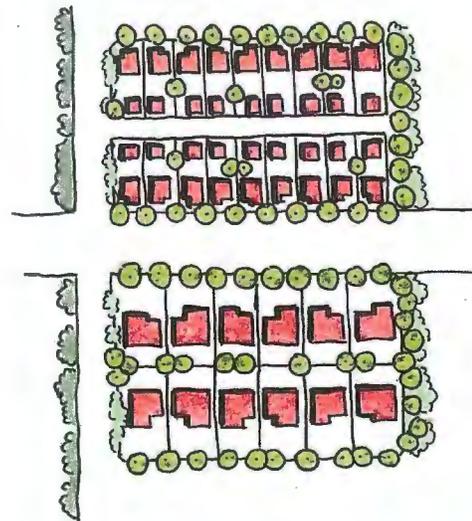
*Typology Sketch*

## Single-Family

The Single-Family residential designation is intended for detached dwellings on rural to smaller urban lots. The inclusion of smaller single-family lots will allow for more affordable homeownership opportunities for single-family homes. The opportunity to include secondary suites or detached garden suites on larger residential lots will also enhance affordability and the potential for rental opportunities in North East Albion. Intensive residential areas may also permit attached buildings forms along collector and arterial roads or when clustering away from environmentally sensitive areas.

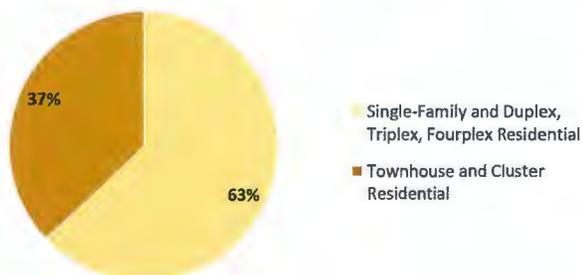
### Design Intentions

- Larger residential dwellings adjacent to the east Concept Plan boundary, adjacent to rural properties to protect the edge.
- Lots of varying size west of 248 Street clustered to encourage the protection of sensitive habitat and high-value tree clusters.
- Homes of a variety of sizes to increase housing diversity and affordability
- Smaller urban lots near the existing single-family dwellings.
- Attached or detached dwellings with rear garages adjacent to collector and arterial roads.
- Potential for the inclusion of secondary suites or detached garden suites on properties.



*Typology Sketch*

### NORTH EAST ALBION CONCEPT PLAN PROPOSED HOUSING MIX (%)



*Built Form Example*

PART 2 -

SERVICING STRATEGY

## 06 | INTRODUCTION

The North East Albion Land Use and Servicing Concept planning process involves a review of the existing infrastructure in the area and an evaluation of the existing systems to withstand buildout of North East Albion.

## 07 | TRANSPORTATION

The proposed transportation network is designed to foster interconnection between streets, trails, and greenways to promote cycling, walking, and horse-back riding. New roads essential to a functional street grid are identified, such as the 248 Street connection. Any new local roads required for proposed housing will be determined at the time of development. A network of high-quality trail loops will link neighbourhood parks, open spaces, commercial nodes, and other key destinations.

Please refer to Section 12, **Drawing 18-1022A-101 (Roadworks Master Plan)** for the proposed major road network and road classifications.

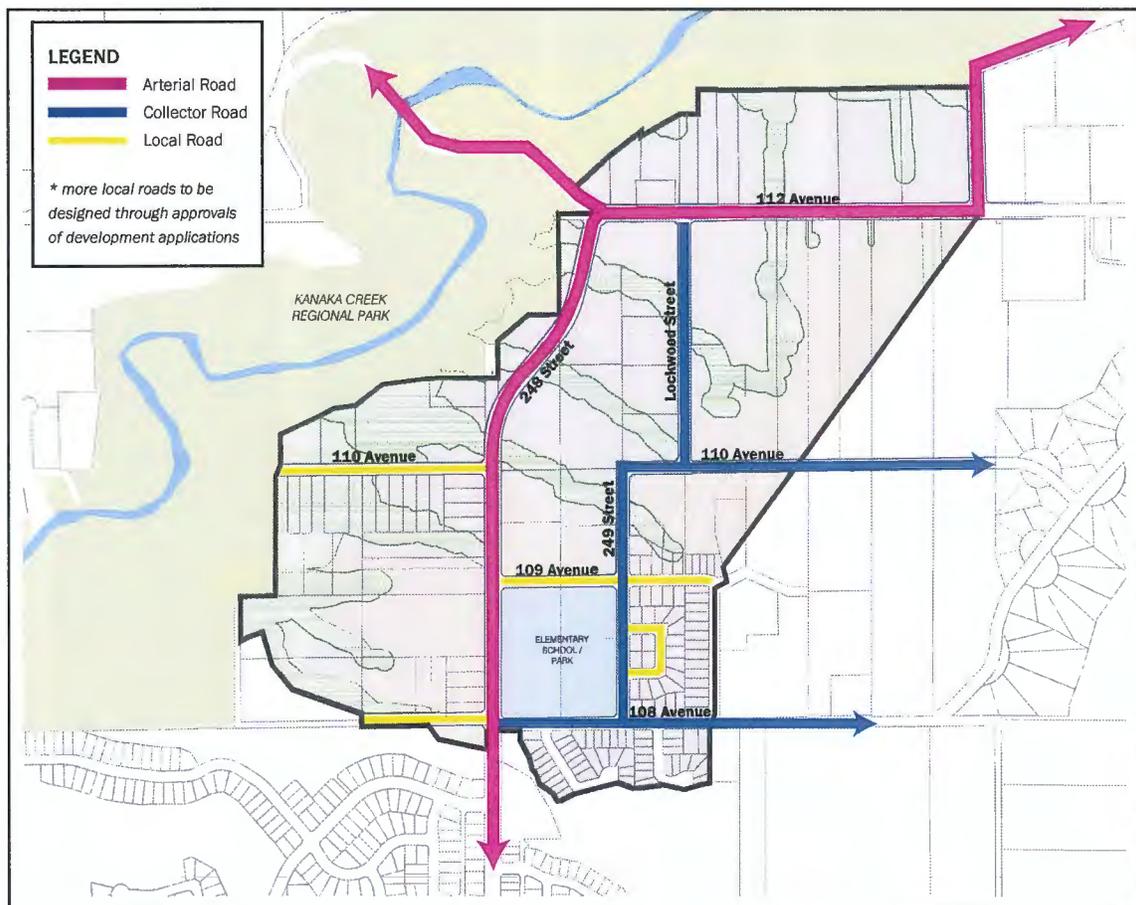


Figure 16 - Proposed Road Network

## 7.1 ROAD NETWORK

The North East Albion Concept Plan is currently serviced by 112 Avenue to the north and 108 Avenue to the south. New roadways shall be constructed generally in accordance with the City of Maple Ridge standards to service the proposed development of the area. A traffic signal is proposed to help traffic control and safe crossing at the 112 Avenue and 248 Street intersection, and a roundabout is proposed at the 112 Avenue and 252 Street intersection to facilitate movement as the arterial roadway turns north at 252 Street.

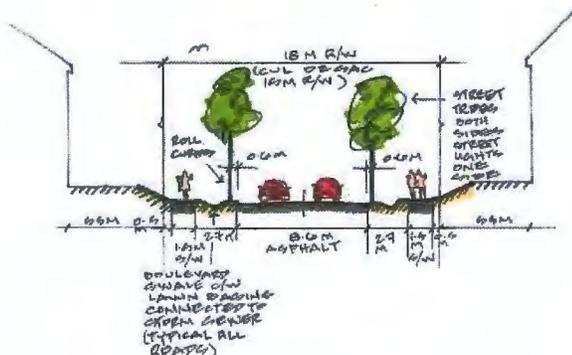
## 7.2 FUTURE ROAD ALIGNMENTS

As part of the Strategic Transportation Plan (STP), the City of Maple Ridge identified the 108/112 Connector as a long-term east-west link. The specific alignment was not detailed in the STP but rather a notional connection is illustrated, establishing

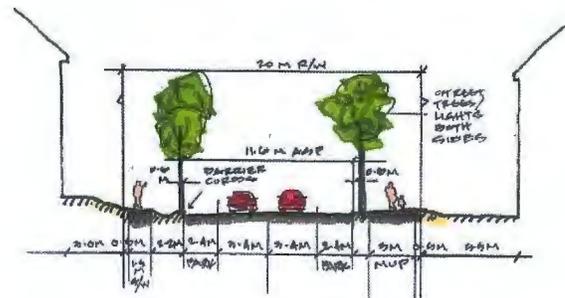
an east/west arterial grid network. As part of the North East Albion planning process, the Engineering Department at the City of Maple Ridge requested that the consultant team look at alignment options for the connector between 248 Street and 260 Street to ensure that the preferred option is not precluded by implementation of the North East Albion Plan.

It was determined that there is the possibility for future arterial road alignments, but these would be outside the Concept Plan area and would require further studies to be conducted under a separate process.

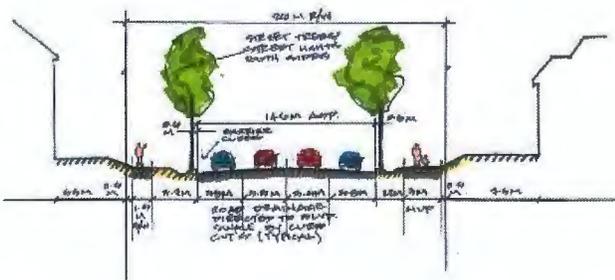
A major east-west arterial route analysis was also completed as a part of this project. As a result of that analysis, the ultimate alignment for the 112 Avenue connection from 248 Street to Grant Avenue was confirmed.



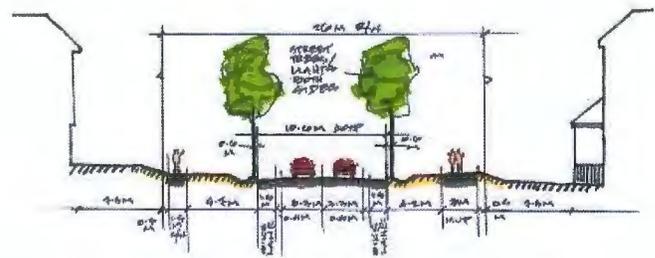
Typical Section, Local Road



Typical Section, Collector Road



Typical Section, 248 Street



Typical Section, 112 Avenue

### 7.3 ACTIVE TRANSPORTATION

The Concept Plan includes sidewalk or pathway access to the school site and to Cliff Falls in Kanaka Creek Regional Park. All roads include sidewalks or trails on both sides to encourage walkability through the area and to connect to the school and park.

The Maple Ridge STP identifies two corridors for a long-term bicycle network within the Concept Plan: 112 Avenue and 248 Street. The North East Albion Concept Plan provides on or off-street bicycle access to the school site and to the existing and planned municipal bike route network. 248 Street will have a multi-use path on the east side to facilitate access to the school and 112 Avenue will have on-street bike lanes consistent with the STP.

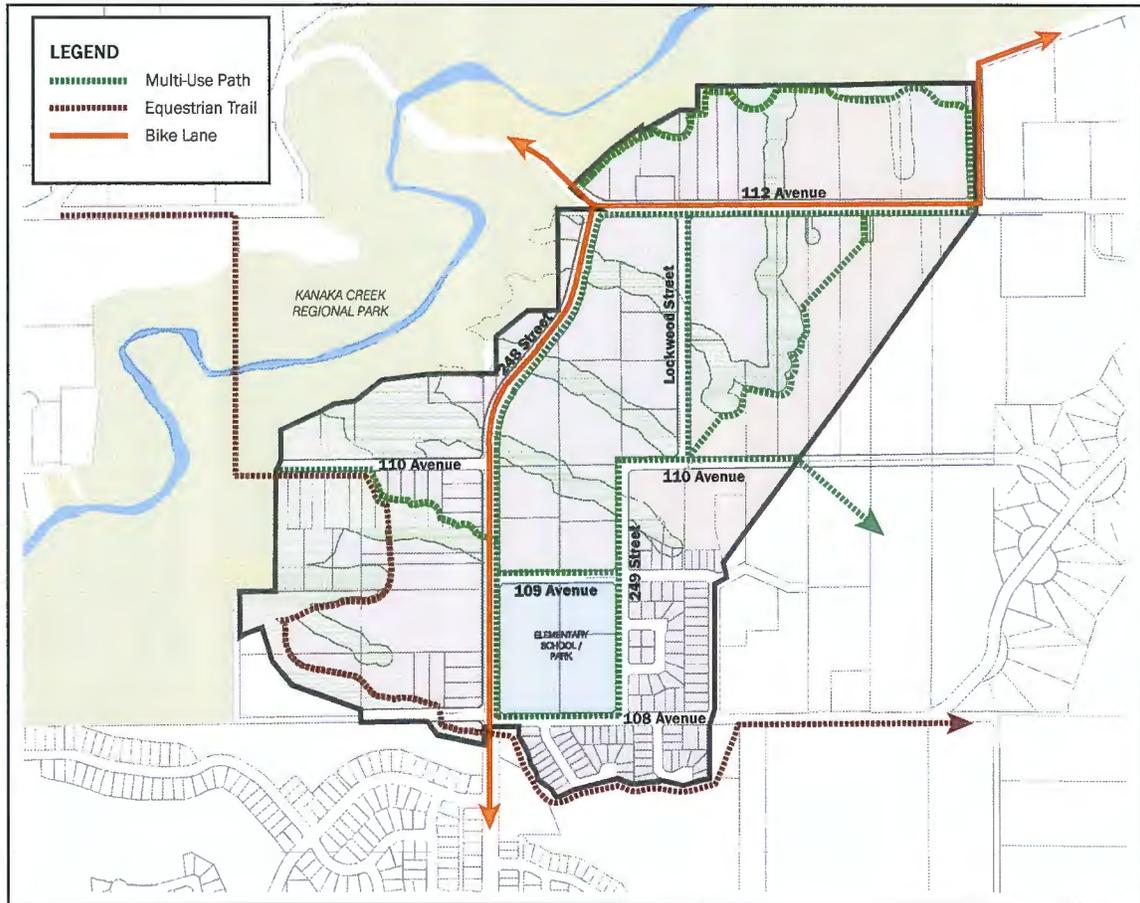


Figure 17 - Proposed Bike Lanes, Multi-Use Paths and Trails

## 08 | SANITARY

North East Albion is not currently serviced with sanitary sewer, except for a small portion of land near 108 Avenue that is currently serviced to the south by the existing Albion Area system. The City recently had a *Master Sanitary Plan (MSP)* completed by AECOM (November 7, 2016) that considered the existing (2016) system, anticipated 2018 loading, anticipated 2023 loading, and anticipated 2041 loading. The MSP forms the framework for integrating the localized North East Albion analysis in this Concept Plan into the overall master plan for the City.

The intent of this servicing analysis is to review the capacity of the existing system downstream of North East Albion based on the projected ultimate population proposed within the North East Albion Concept Plan.

### 8.1 DESIGN CRITERIA

The criteria for the evaluation of existing downstream systems used in this analysis is the same as that set forth in Section 4.1 of the Maple Ridge MSP, namely:

- Local sewers (PWWF < 40 L/s) were permitted to run at a maximum of 70% full ( $Q_{peak}/Q_{full} > 0.7$ ); and
- Trunk sewers (PWWF > 40 L/s) were permitted to run at a maximum of 83.5% full ( $Q_{peak}/Q_{full} > 0.835$ ). This is equivalent to approximately 70% of the full pipe depth.

### 8.2 SERVICING PLAN

North East Albion is proposed to be serviced primarily by a municipal pump station (PS-1) located on 112 Avenue just east of the Kanaka Creek bridge. This pump station will service the 65ha catchment within North East Albion not already being serviced to the south. Please see Section 12, **Drawing 18-1022A-201 (Sanitary Master Plan)** for the overall servicing plan and the downstream capacity calculations.

A pipe network along 112 Avenue, Lockwood Street and 110 Avenue will convey the northeast portion of the catchment to PS-1 by gravity. A gravity main along the north portion of 248 Street will convey the northwest portion of the catchment to PS-1 by gravity. Please see Section 12, **Drawing 18-1022A-202 (NE Albion Sanitary Catchment Plan)** for the local servicing plan and **Drawing 18-1022A-203 (NE Albion Sanitary Catchment Plan - Calculations)** for the local capacity calculations.

North East Albion lands south of this zone will be conveyed by gravity to PS-2 located at the west end of 110 Avenue. Flows will be pumped from PS-2 east on 110 Avenue and north on 248 Street until discharging into the gravity system on 248 Street (at MH S55). Lands at the southwest corner of North East Albion will be conveyed to PS-3 which will pump flows to 248 Street and convey them to PS-2. There is also a provision for an interim pump station to be located near the intersection of 110 Avenue and 248 Street, to permit some development within the ultimate PS-2 catchment to proceed ahead of lands for PS-2 being secured. This would also permit the school site to develop ahead of PS-2 being available, if desired.

The currently anticipated design flow and approximate total dynamic head values for the three ultimate pump stations are as below:

Pump Station	Design Flow (L/s)	Dynamic Head (m)
PS-1	40.3	16
PS-2	14.6	48
PS-3	4.4	20

### 8.3 FINANCIAL BUDGET REVIEW

North East Albion flows are proposed to be pumped west along 112 Avenue from PS-1 discharging to the existing 300mm diameter sanitary sewer on 112 Avenue just west of 244 Street (EX S1). The offsite analysis consisted of reviewing the existing 300mm diameter system from EX S1 east to EX S11 at the intersection of 112 Avenue and 240 Street, and the existing 375mm diameter system south from EX S11 to EX S17. Flows generated by this area were independently reviewed considering the latest state of development and developable areas for these catchment lands. Results were verified against the MSP and agreed very closely with the MSP predicted downstream flows for the 2041 scenario, providing a level of validation of the analysis.

With the proposed ultimate flows from North East Albion included, the downstream system meets the trunk main criteria for its entirety.

It should be noted that the MSP identifies one short section of downstream pipe for upgrade from an existing 200mm pipe size to a 375mm. However, the as-builts for this main provided by the City note that the 200mm size shown on the plan is incorrect, and that the pipe constructed is in fact a 375mm pipe.

Downstream of EX S19 (240 Street & Kanaka Creek Road) the system heads west into a major trunk line with significant excess capacity based on the MSP.

It is proposed to include all sanitary works located outside of the North East Albion boundary (gravity trunk main from boundary edge to PS-1, PS-1 including any road adjustments required to service PS-1, water service to PS-1, and forcemain from PS-1 to MH EXS1 including creek crossing) in an area latecomer applied over the entirety of the undeveloped North East Albion area.

It is expected that PS-2 and PS-3 may also require area latecomers in the future depending on how lands ultimately consolidate and develop. However, it should be noted that all undeveloped lands (including those catchment to PS-2 and/or PS-3) would be included in the PS-1 area latecomer, as all flows from these lands will eventually be serviced by PS-1 and the associated infrastructure west of 248 Street.

Preliminary budgets (not including land acquisition) for works associated with each pump station that would likely be eligible for an area latecomer are as below:

Pump Station	Budgetary Construction Values	Total Construction Value
PS-1	Pump Station: \$3,800,000 Gravity main & Forcemain: \$1,300,000	\$5,100,000
PS-2	Pump Station: \$1,000,000 Forcemain: \$185,000	\$1,185,000
PS-3	Pump Station: \$950,000	\$1,045,000

## 09 | WATER

North East Albion is not currently serviced with water, with the exception of a small portion of land at the south end that is currently serviced from the 108 Avenue system. The City recently had a *Master Water Plan (MWP)* completed by Kerr Wood Leidal (November 2016) that considered future upgrades on the City system at large. The MWP shows North East Albion being serviced by the 158m Albion pressure zone and being primarily fed by the Albion Reservoirs (158m TWL) with redundancy and some fire flow support provided from the Grant Mountain Reservoir (224m TWL).

PRV stations in three locations will ultimately allow for fire flow and emergency support from the Grant Mountain Zone to the Albion Zone. The stations are all existing, and are as follows:

- PRV 1: 112 Avenue at 252 Street;
- PRV 2: 108 Avenue just east of Morrisette Place; and,
- PRV 3: 112 Avenue and 256 Street (within the Grant Mountain Booster Pump Station).

The buildout of the North East Albion Concept Plan will allow for integration of the existing 158m Grant Mountain sub-zone into the 158m Albion Zone. This sub-zone services lots along 112 Avenue between 252 Street and 256 Street and was created as part of the Grant Mountain development.

Water Street Engineering Ltd. (WSE) was retained to assist in sizing the trunk infrastructure to service the area and to evaluate pressures throughout the system.

### 9.1 DESIGN CRITERIA

The City's Design Criteria states the following pressure requirements:

- Maximum allowable pressure: 900kPa (130 psi)
- Minimum pressure at Peak Hour Demand: 30 kPa (44 psi)
- Minimum pressure during Max Day Demand and Fire Flow: 150kPa (22 psi)
- Fire flow requirements:
  - Single family residential: 60L/s
  - Apartments / Townhouses: 120L/s
  - Commercial / Institutional: 150L/s

It is noted that the lowest elevation areas of the existing 158m Albion Zone (53m el. west of 248 Street) have pressures up to 1035 kPa (105m WC).

The design criteria proposed by WSE as a result of their previous work on this reservoir is as follows:

- Elevation range of 53m to 110m (lower elevations to be protected with PRVs or other measures as determined with City).
- Albion reservoir total storage available = 2,489m<sup>3</sup>;
- Grant Mountain fire storage available (cascading volume) = 409m<sup>3</sup>;
- Density of 2.8 people per dwelling unit;
- Net lot area to gross area ratio of 64%;
- Irrigable area to net lot area ratio of 50%;
- Balancing storage amount: 25% of MDD;
- Design fire flow of 150L/s for 2 hours;
- Emergency storage amount: 25% of balancing and fire storage combined; and,
- Areas south of 108 Avenue (outside of North East Albion) retain same build-out projections as those in the 2018 memo prepared by WSE.

### 9.2 SERVICING PLAN

It is proposed to comply with the overall servicing concepts outlined in the MWP. Please see Section 12 **Drawing 301 (Water Master Plan)**.

The Albion reservoir is currently undergoing storage expansion via cell #3 construction and is anticipated to be operational in 2019. Cell #3 is increasing the storage capacity by 1337m<sup>3</sup> to a total capacity of 2,489m<sup>3</sup> as noted above.

Within the Concept Plan, feeder mains are proposed along 248 Street and 112 Avenue, with internal looping along 249 Street, 110 Avenue, and Lockwood Street. Local mains will connect into these feeder mains as required to service build out of the lands.

A 50mm diameter water service is proposed to the sanitary pump station PS-1 from the North East Albion system. A localized PRV is expected to be required on the PS-1 service.

### 9.3 SYSTEM DEMANDS

The North East Albion demands in the MWP were based on a design population of 2700 capita (ca) and a serviced lot area of 43.2ha.

The unit rates used to develop demands in the MWP were:

- Residential base demands of 250L/ca/day
- Non-revenue water of approximately 12% of base demand
- Irrigable area to lot area ratio of 50%
- Seasonal demands of 0.47L/s/ha

The above unit rates were consistent with observed system-wide consumption in Maple Ridge. The resulting demands in MWP included a buildout maximum day demand of 49L/s for the 158m Albion Area, including 19L/s for the North East Albion Concept Plan.

The revised loads for the North East Albion are:

- Residential population of 3481ca
- ICI Population equivalents of 178PE
- Total population equivalents of 3659ca
- Serviced lot area of 42.12ha

Based on the above and unit-demand rates consistent with the MWP the expected buildout demands are 21.8 L/s, i.e. an increase of approximately 3L/s.

Using the City of Maple Ridge design criteria rate of 1200L/ca/day would yield flows of 51L/s for the North East Albion Concept Plan. Given the size of the proposed development and actual observed demands, use of this value for sizing of water transmission infrastructure would be overly conservative.

### 9.4 HYDRAULIC ANALYSIS

As per previous recommendations, the HGL setpoints for the Grant Mountain PRVs to the Albion Zone should be lower than the Albion Reservoir operating range (i.e. less than 154m HGL). This will prevent over-commitment of the Grant Mountain Reservoir and Pump Station. Hydraulic analysis was completed on this basis.

Hydraulic analyses were completed with proposed 200mm water mains added on 248 Street, Lockwood Street, 249 Street, and 112 Avenue as indicated on Section 12 Drawing

301 (Water Master Plan). The analysis was completed without other future minor mains in the area.

An analysis completed with build-out demands of 21.8L/s for the area indicated that:

- Peak hour minimum pressures were acceptable
- Fire flows were acceptable (generally > 200L/s throughout)

A second fire flow analysis was completed with design criteria demands of 51L/s for the area, PRV station links to the 224m Grant Mountain Zone closed, and 104 Ave Pump Station off (i.e. all flow supplied from Albion Reservoir). This analysis indicated that while available fire flows were reduced, they still met design criteria (>60L/s for single family, > 120L/s for multi-family, and > 150L/s for commercial and institutional areas).

As discussed above areas with elevations less than 53m will have operating pressures slightly exceeding 1035 kPa (150psi). Special considerations should be included for these areas such as a local pressure-reduced zone or pressure-reduction on services off of 248 Street (i.e. to strata developments).

## 10 | STORMWATER

The North East Albion Land Use and Servicing Concept Plan provides a vision and implementation measures for sustainable water stewardship and management. The Concept Plan contains numerous watercourses that flow to Kanaka Creek, a fish bearing creek. Because of the degradation of fish habitat and water flows overtime, it has been recognized as one of the 15 Sensitive Streams in BC in the *Water Sustainability Act*. The creek is very sensitive to peak flow rate increases and water quality degradation. Primary objectives for stormwater management in the North East Albion Concept Plan have been developed as follows:

- Maintain baseflows and water quality to Kanaka Creek and its tributary watercourses to protect fish and fish habitat in these streams;
- Control peak runoff flows under frequent storm events to best mimic pre-development conditions and minimize stream erosion;
- Promote onsite infiltration to protect shallow wells, maximize groundwater infiltration and recharge and ensure groundwater flows are not to be intercepted by site development and road construction;
- Design and construct a stormwater conveyance system that includes subsurface storm sewers, detention facilities, open channels and culverts to adequately convey storm runoffs to watercourses for rain events up to a 10-year return period;
- Ensure that storm runoffs under extreme storm conditions can be conveyed via major storm conveyance systems, including major road crossings, overland flow paths and stream channels and cause no damage to life and properties; and
- Preserve or maintain existing drainage patterns essential to the overall health of Kanaka Creek, wherever possible.

### 10.1 STORMWATER MANAGEMENT CRITERIA

Aplin Martin has identified the following design criteria to achieve the stormwater management objectives in the North East Albion Concept Plan:

**Stormwater Volume Control (Achieving City's Tier A Requirements):** Provide onsite infiltration and retention to capture the 6-month 24-hour event rainfall, which equals to 72% of the Mean Annual Rainfall (MAR or the 2-year return

period event rainfall) in both the development areas and the roads.

This criterion exceeds the City of Maple Ridge's Tier A design principle that requires capturing of 50% of the Mean Annual Rainfall.

**Water Quality Control:** Provide water quality treatment to runoff from frequent rainfall events up to a 2-year return period.

**Runoff Rate Control (Achieving City's Tier B Requirements):** Provide onsite or offsite storage to store runoff from design storm events up to and including the 10-year return period events and control the release rates at a forested land use condition.

This criterion exceeds the City of Maple Ridge's Tier B design principle that requires control of post-development peak flows to pre-development forested land use condition up to and including MAR (or the 2-year return period rainfall).

**Groundwater Protection:** Provide groundwater protection measures such as trench dams and/or groundwater flow diversions to ensure the subsurface flows in the shallow groundwater aquifer are not to be intercepted by development or new road construction.

**Flood Control (Achieving City's Tier C Requirements):** Design and construct minor and major stormwater conveyance systems to minimize surface flooding and flood damage to life and properties.

**Minor Conveyance System:** To adequately convey the 1:10-year return period post development flow within an engineered stormwater conveyance system that contains storm sewers, detention facilities, open ditches and culverts.

**Major Conveyance System:** To safely convey the 1:100-year return period post development flow within major flow paths, including major road crossings, overland flow paths and stream channels.

This criterion is same as the City of Maple Ridge's Tier C design principle.

**Considering Climate Change Impacts:** The stormwater conveyance system is to be designed to account for moderate climate change impacts that have been projected up to Year

2070 (assuming a 50-year design life for storm infrastructure).

The stormwater management criteria developed for the Concept Plan exceeds the City of Maple Ridge's three-tier stormwater design principles. This is to help maximize the environmental protection and minimize the impacts of development in North East Albion on the natural ecological system of the area and the overall Kanaka Creek watershed.

## 10.2 METHODOLOGY

Based on the above objectives, the stormwater management concept plan and Best Management Practices (BMPs) have been developed for the Concept Plan based on the following scope of work:

- Develop design storms under the existing and future 2070 moderate climate change conditions;
- Delineate existing land use condition catchment boundaries to the tributaries of Kanaka Creek;
- Determine proposed catchment boundaries and creek outfall locations based on the natural topography and practical development of lands;
- Determine pre-development forested land use design flows to the creeks;
- Determine post-development (existing and future 2070 climate condition) design flows to the creeks with and without the implementation of onsite BMPs;
- Prepare design guidelines for onsite BMPs;
- Determine onsite source control retention requirements;
- Determine unit detention requirements ( $m^3/ha$ ) that are in addition to the implementation of source control retention BMPs for post-development to meet the design criteria (up to 10-year peak flow control to pre-development forested land use);
- Review potential for community stormwater pond facilities in North East Albion for any of the creek catchment;
- Review overland flow paths, culvert capacities, and creek capacities to ensure safe conveyance of the 100-year event;
- Determine applicable measures for groundwater protection;
- Develop stormwater management concepts that include:
  - Proposed stormwater minor and major drainage conveyance system;
  - Design requirements for onsite source control BMPs;

- Design requirements for onsite and offsite detention facilities; and

- Design requirements for groundwater protection measures.

- Develop stormwater management design guidelines for development applications; and
- Develop operation and maintenance, as well as monitoring programs to ensure effectiveness and sustainability of the stormwater management measures in the future.

## 10.3 EXSITING CONDITION OVERVIEW

### Surface Drainage

The current state of North East Albion is generally undeveloped, with most of the land covered by natural forest and rural large parcel residential land uses. The area generally slopes west/northwest towards the Kanaka Creek ravine. Rainfall on the lands is mainly infiltrated into the ground with runoff being collected overland into ditches and tributary streams to Kanaka Creek.

### Watercourses

Watercourses in North East Albion are primarily tributary to Kanaka Creek. All the tributary ravine creeks are essential sources of water and nutrients to fish population in Kanaka Creek. Most of these creeks are fed by groundwater, so they export cool temperature waters at steady rates to Kanaka Creek.

### Groundwater

Based on the aquifer classification descriptions from the BC Water Resource Atlas, North East Albion is above three groundwater aquifers, the "Grant Hill" and "South of Grant Hill" aquifers, and an unnamed aquifer.

The Grant Hill Aquifer is a fractured sedimentary bedrock aquifer, underlying the entire area of North East Albion. The aquifer is approximately 6.1m to 28m below ground surface. A till layer generally covers the bedrock surface, limiting potential hydraulic connections between the shallow groundwater and fractured bedrock. However, the *Environmental Assessment*

Report – North East Albion Baseline Environmental Assessment report prepared by Phoenix Environmental Services Ltd. (April 2019), suggests that the southeast portion of North East Albion may have recharge values to this aquifer, based on background research and site investigation findings.

The South of Grant Hill Aquifer is a glacio-fluvial sand and gravel aquifer at approximately 1.2 to 1.5m below ground level. Only a small portion of the North East Albion lands on the south are underlain by this aquifer. The area near the proposed school site above this aquifer may have recharge value. In particular, the eastern side of the proposed school site consists of the well-draining soil types and this area may therefore constitute a valuable recharge area. The shallow depth of this aquifer and its proximity to Thornvale Creek suggest that it may provide valuable moderated water flows to this important salmonid-spawning stream.

The unnamed aquifer is located near the northeast portion of North East Albion. This aquifer is approximately 1.2m below ground level. Springs and streams along the toes of sloped areas in the eastern portion of North East Albion are likely fed by the aquifer.

## 10.4 HYDROLOGIC AND HYDRAULIC MODELLING

### Modelling Scenarios

The scenarios summarized in **Table 1** were developed and assessed to define the conveyance system and detention targets.

It should be noted that the conveyance system has been reviewed and sized to meet both the minor (1:10-year return period) and major (1:100-year return period) flow conveyance requirements under the future 2070 climate conditions without source control BMPs and detention storage. This is to ensure that the proposed conveyance system will adequately convey the target flows based on the design life of the system.

For source control BMPs and detention facilities, it is assumed that they will be applied to achieve the stormwater volume and rate control targets under the existing climate condition.

The source control BMPs shall be capable of retaining a minimum of 100% of the 6-month 24-hour event (72% of 2-year 24-hour rainfall volume) rainfall onsite. They are to be implemented in all development areas, including future roadway corridors.

The additional detention volumes required for the runoff flow rate control were estimated based on modelling a unit development site for various soil and post-development land use conditions in addition to the source control BMP measure(s) proposed for the site, to control the post-development flows to the pre-development levels for design storm events up to and including the 10-year return period events.

Table 1 – Modelling Scenarios

No.	Land Use	Climate	Onsite BMPs	Purpose
1	Future	2070	No	Define future performance under future climate conditions without source controls or detention features. This scenario is to assess and size the conveyance infrastructure.
2	Pre-development	Current	No	Define base flow control targets
3	Future	Current	Yes	Define future performance under existing climate conditions with source controls. This scenario is to size onsite BMPs and additional detention requirements.

## Model Coverage

The model covers the watershed encapsulating North East Albion, including the catchment draining into the neighbourhood area and via the tributary streams to Kanaka Creek. In Section 12, **Drawing 18-1022A-401** presents the existing catchment map delineated based on the air photo, topography and the available drainage plans from existing developed areas. In Section 12, **Drawing 18-1022A-402** presents the future catchment map based on the proposed Land Use Concept Plan and the planned storm sewer system for future developments.

## Design Storms

Design storms were developed under both the existing and future 2070 moderate climate change conditions based on the new design storm hyetographs developed by Aplin Martin for the City of Maple Ridge.

## Land Use and Percent Imperviousness

In Section 12, **Drawings 18-1022A-401** and **18-1022A-402** also summarize the existing and future land uses based on available orthophoto, zoning and the proposed Land Use Concept Plan, respectively. **Table 2** shows the percent impervious values assigned to each land use type.

For the purpose of stormwater modelling, Cluster Residential and Multiplex land-use designations have been combined to create the category of "Multiplex".

Please note for the pre-development forested land use condition model, surface conditions of all subcatchments are assumed being the Environmentally Sensitive Areas/Metro Vancouver Regional Park (5% imperviousness).

*Table 2 – Land Use Percent Imperviousness*

Land Use Type	% Imperviousness
Environmentally Sensitive Areas/Metro Vancouver Regional Park	5
Single-Family Residential	55
Multiplex	60
Townhouse	65
Institutional (excluding sport field)	80
Road ROW	78

## Soils and Infiltration Parameters

In Section 12, **Drawings 18-1022A-403** presents the soil map for the study catchment, showing that the study catchment area consists of three types of surficial soil textures, sandy loam, loam and silt loam soils. The soil map was developed based on soil information presented in *Soils of the Langley – Vancouver Map Area Volume 1* (Lutterding, 1981). The soil survey data has been interpreted into various soil texture categories and provided as an online open data source by the Ministry of Environment and Climate Change Strategy. This soil information has been commonly used for surficial drainage studies.

Soil infiltration parameters for the types of soils in the study area were selected based on the SWMM manual and typical textbook values.

Soil infiltration parameters used for modelling are summarized in **Table 3**.

Table 3 – Hydrological Modelling Parameters

Hydrological Model Parameters – North East Albion Neighbourhood		
<b>Global Parameters</b>	<b>Depression Storage, mm</b>	
	Impervious	2
	Pervious	7
	<b>Manning's n</b>	
	Impervious	0.015
	Pervious	0.25
<b>Green-Ampt Infiltration Parameters</b>	<b>Sandy Loam</b>	
	- Average Capillary Suction, mm (Wet)	110.1
	- Initial Moisture Deficit (Saturated)	0
	- Saturated Hydraulic Conductivity, mm/hr	25
	<b>Loam</b>	
	- Average Capillary Suction, mm (Wet)	88.9
	- Initial Moisture Deficit (Saturated)	0
	- Saturated Hydraulic Conductivity, mm/hr	13
	<b>Silt Loam</b>	
	- Average Capillary Suction, mm (Wet)	166.8
	- Initial Moisture Deficit (Saturated)	0
	- Saturated Hydraulic Conductivity, mm/hr	6.6

## Subsurface Flow Modelling

Geotechnical investigations performed in North East Albion indicated that the groundwater table is at approximately 1.0m below the ground surface during the winter months. Likely, rainfall infiltrated to the ground would slowly drain back to the stormwater system or downstream watercourses. We have therefore included the groundwater module in our model that simulates the subsurface flows. The parameters used for the groundwater module were based on the subsurface soil characteristics and our past groundwater model calibration experience, as shown in **Table 4**.

## Model Network

The stormwater network for existing developments was modeled based on the City's GIS data and available field verification data. The proposed future pipe network was modeled based on future land use and development plans, and the proposed future catchment plan. The modeled creek transects were approximated from the City's DEM data.

## Downstream Boundary Conditions

The hydraulic model developed covers the tributary streams to Kanaka Creek to which North East Albion drains. Based on the topography, it does not appear that there would be backwater effects from Kanaka Creek impacting the drainage in our study catchments. Therefore, we have assumed free outfall conditions for the tributary streams to Kanaka Creek in the model.

However, it may be prudent to review the modelled Kanaka Creek peak water level profiles from the Kanaka Creek ISMP study to assess whether backwater/downstream water levels should be considered in the modelling of the boundary conditions when the ISMP becomes available.

Table 4 – Subsurface Modelling Parameters

Subsurface Model Parameters – North East Albion Neighbourhood		
<b>Groundwater Aquifer Parameters</b>	Porosity (/)	0.453
	Wilting Point (/)	0.085
	Field Capacity (/)	0.19
	Conductivity (mm/hr)	10.9
	Lower GW Loss Rate (mm/hr)	0.002
	Bottom Elevation (m)	0
	Initial Water Table Elevation (m)	1.0
<b>Groundwater Parameters</b>	Surface Elevation (m)	2
	Groundwater Flow Coefficient (A1)	0.1
	Groundwater Flow Exponent (B1)	2
	Groundwater Flow Coefficient (A2)	0
	Groundwater Flow Exponent (B2)	0
	Surface Water Depth (m)	Depth from flow routing
	Threshold Water Table Elevation (m)	1.0

## 10.5 STORMWATER MANAGEMENT CONCEPTS

Stormwater management concepts have been developed for North East Albion Concept Plan based on the modelling results and are as follows:

- Proposed trunk storm sewer network and major flow paths;
- Onsite source volume and Water Quality control BMPs;
- Additional detention requirements;
- Regional stormwater management features; and
- Groundwater protection measures.

### Proposed Trunk Storm Sewer Network and Major Flow Paths

The proposed trunk storm mains were sized in compliance with the design criteria under Scenario 1, which simulates the peak flow in the system during future land use and future climate conditions, assuming 2070 climate condition and no source controls and detention features are functional. In Section 12, **Drawing 18-1022A-404** presents the proposed storm main sizes and upgrades to the existing system. The underground storm sewers are to be designed to convey 1:10-year return period peak design flows while the major road crossings are to convey 1:100-year return period peak design flows.

Major storm conveyance systems for safely conveying 1:100-year return period post-development flows also include overland flow paths and stream channels, in addition to major road crossings, to ensure no flood damage to life and properties. The major storm conveyance system under the post-development 2070 climate condition has been reviewed with major flow paths identified as shown in Section 12, **Drawing 18-1022A-405**. Stream channels' adequacy to convey extreme flows has been confirmed, with the exception of approximately 150m of an existing drainage ditch north of 112 Avenue that discharges to the tributary channel KA6 west (see Section 12, **Drawing 18-1022A-405**). The modelling results show that this ditch would be flooded and should be upgraded to a minimum 1m bottom width with 2:1 side slope channel to provide a suitable 100-year flow path under the assumed design condition.

### Onsite Source Volume and Water Quality Control BMPs

The objectives for onsite source volume and water quality control BMPs include:

- Retain 90% of the total annual rainfall volume onsite as that typically occurs under the natural forested land use conditions; and
- Control rainfall runoff quality.

Past hydrologic analyses indicate that capturing 100% of the 6-month 24-hour rainfall volume would roughly achieve the 90% annual rainfall volume retention in the Metro Vancouver region. The 6-month 24-hour rainfall depth for the study area is estimated to be 53.6mm, that equals to 72% of the 2-year 24-hour rainfall depth.

Types of source control BMPs recommended in North East Albion for developments with different land uses are summarized in **Table 5**. These BMPs were identified based on Aplin Martin's experience with past common BMP applications within the Greater Vancouver Lower Mainland area.

Detailed design of these BMPs shall follow the design guidelines provided in the *Metro Vancouver's Stormwater Source Control Design Guidelines 2012*. A general overview of each the recommended BMPs and their application in the North East Albion Concept Plan are provided below.

## ABSORBENT LANDSCAPE

Applying amended topsoil on pervious areas is the most commonly used stormwater source control BMP measure. It creates an absorbent landscape layer that acts like a sponge to soak up, store and slowly release rainfall. It also provides bio-infiltration or water quality control to the runoff draining into the absorbent landscape areas. This type of the BMP is generally suitable to use for all type of development applications. Runoff from impervious areas would need to be routed to the pervious areas.

Based on the native soil condition and percent imperviousness of the site, absorbent landscape alone or combined with other ground-infiltration measures would achieve the target volume and water quality controls in North East Albion.

Materials and application methods for absorbent landscape shall meet MMCD 2009 requirements for Topsoil and Finish Grading (Section 32-91-21), **Table 2** specifications for Growing Medium, with organic matter requirements amended to minimum of 8% for lawn areas and 15% for planting areas. The minimum amended topsoil depth is 300mm in grassed areas and 450mm in planted areas.



Absorbent Landscape

## INFILTRATION CHAMBERS

Infiltration chambers such as rock pits are a type of BMP that can be easily implemented, and they are cost effective for onsite stormwater volume control. Infiltration chambers are commonly used for residential development areas for rainfall infiltration and capture. They can be applied in combination with the absorbent landscape BMP to achieve the target volume and water quality controls for future single-family developments in North East Albion.

Infiltration chambers are typically located below the ground surface and consist of either prefabricated storage cells or drain rock wrapped in geotextile, with a perforated underdrain pipe connected to the municipal stormwater system.

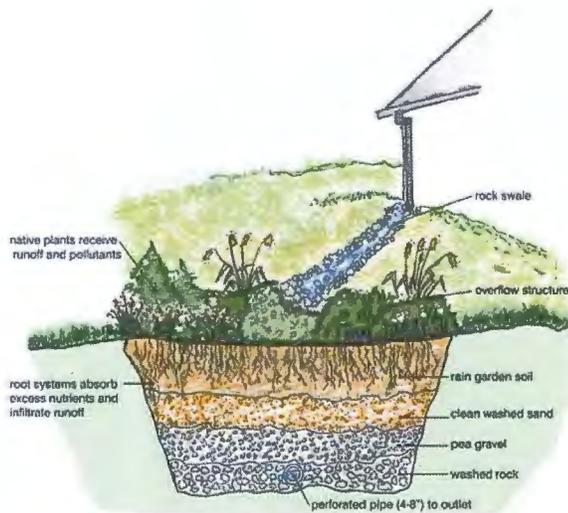


Infiltration Chambers

## BIO-RETENTION

Bio-retention BMPs, such as rain gardens and infiltration swale systems, combine aspects of a green medium layer for water quality control and an infiltration trench/reservoir for runoff to store and/or infiltrate to achieve volume control. Bio-retention cells would require more maintenance than infiltration chambers and they are typically more applicable to high density residential, industrial, commercial and institutional land use development. For the North East Albion Concept Plan, it is proposed that bio-retention BMPs are to be applied for the proposed townhouse sites and institutional lands in combination with the absorbent landscape BMP measure.

Bio-retention facilities are typically designed with a minimum 450mm thick growing medium layer with amended topsoil overlaid on a rock reservoir layer. Drain rock fills the rock reservoir layer with a perforated pipe installed near the top of the rock reservoir and connected to the municipal stormwater system.

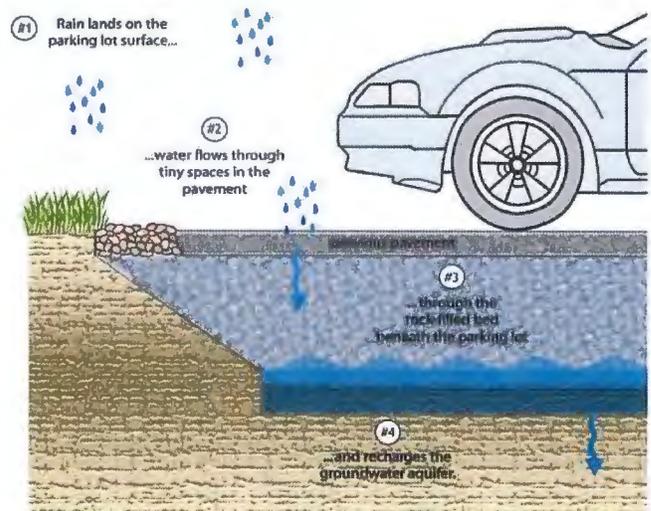


Bio-Retention

## PERVIOUS PAVING

Pervious paving is a surface layer of paving systems which allow rainfall to percolate into an underlying reservoir base, where rainfall is stored and either infiltrated to underlying subgrade or discharged via a sub-drain. The surface component of pervious paving can be porous asphalt or porous concrete, concrete or plastic grid pavers, or permeable unit pavers.

Pervious paving does not have a soil layer that treats runoff and is subject to clogging from surface pollutants. It should not be used to infiltrate runoff from city roads. They may be used for driveways, walkways, patio areas, or visitor parking areas for various land use developments in North East Albion. In addition, grades are to be considered when evaluating locations to implement pervious pavings.



Pervious Paving

## BIO-SWALE AND INFILTRATION TRENCH

Source control BMPs with a combined bio-swale and infiltration trench system is proposed for the roads in the North East Albion Concept Plan. Bio-swales provide water quality improvement of captured road runoff prior to discharge to infiltration trenches for infiltration and temporary storage to achieve rainfall volume control. Infiltration trenches are similar to infiltration chambers and have similar design requirements.

Amended topsoil shall also be used in the pervious areas in road rights-of-way and the surface of bio-swales. The minimum amended topsoil depth is 300mm in grassed areas and 450mm in planted areas.

Retention storage volumes for the source volume control BMPs are calculated based on the following mass balance equation:

Total 24-hour Rainfall = 24-hour Infiltration to native soil in pervious area + Water Storage in topsoil and rock reservoir

Several basic assumptions have been made to the calculation, as follows:

- Native Ground Infiltration Rate:
  - Sandy Loam: 25mm/hr
  - Loam: 13mm/hr
  - Silt Loam: 6.6mm/hr
- 50% effective pervious area, accounting for possible pervious area coverage to be reduced after development or during redevelopment;
- 300mm minimum depth of amended topsoil on pervious areas;
- 450mm standard soil depth in bio-retention facilities;
- 30mm water storage in amended soil layer (based on the typical 20% of the topsoil thickness as the water storage volume with 50% reduction accounting for topsoil loss over time);
- 100% impervious area will be routed via effective pervious area for all land use types except road right-of-way;
- Impervious areas in the road right-of-way will be drained to bio-swales then to infiltration trenches, assuming no retention storage in the amended topsoil.
- Assume 5% of the total development land area will be designated for source volume retention storage use for all land use types, except road rights-of-way;
- Infiltration trenches will be installed within all road rights-

of-way and cover minimum 10% of the total ROW area with minimum 200mm depth; and

- Detention storage area will be filled with drain rocks with 35% porosity.

**Table 6** below provides the estimated BMP retention storage requirements (in addition to the onsite infiltration and retention storage provided in the amended topsoil) based on the mass balance calculation.

Please refer to Section 12, **Drawing 18-1022A-403** for the soil map showing areas with different soil types in North East Albion.

In addition to the above recommended BMPs, other types of source volume and water quality control BMPs, such as rainwater harvesting facilities, soak-away pits, green-roofs, tree clusters, and/or other special bio-retention facilities can also be considered in the design to achieve the stormwater retention and quality control targets, subject to approval by the City of Maple Ridge Engineering Department.



Bio-Swale and Infiltration Trench

Structural water quality treatment devices, such as oil/grit separators and stormceptors, may also be considered in the design to treat urban runoff from areas with high pollutant loadings, prior to discharge into infiltration facilities or storm

sewers. These devices are used in urban environments where space is limited. They therefore may be retrofitted into the storm systems. They are to be specified to target treatment for oils and hydrocarbons, and sand and sediment trapping.

Table 5 – Recommended Source Volume Control BMPs

Land Use Type	Applicable BMP Types				
	Absorbent Landscape	Infiltration Chamber	Bio-retention	Pervious Paving	Bioswale + Infiltration Trench
Single Family Residential	X	X		X	
Multiplex	X		X	X	
Townhouse	X		X	X	
Institutional	X		X	X	
Road ROW					X

Table 6 – Onsite Source Volume Control BMP Storage Requirements

Land Use Type	% Imp	Required Rock Reservoir Storage Depth, mm			Rock Reservoir Area
		Sandy Loam	Loam	Silt Loam	
Single Family	55%	-	-	641	5% of the Total Development Area
Multiplex	60%	-	-	910	
Townhouse	65%	-	-	1,179	
Institutional	80%	-	1,109	1,987	
Road ROW	78%	200	456	1,045	10% of Road ROW Area

Note: For land use types with soil types showing no storage depth requirement, the onsite infiltration and retention in the amended topsoil would adequately provide the 6-month 24-hour rainfall capture.

## Detention Requirements

In addition to the BMP storages provided for 90% rainfall volume capture, additional detention may also be required to control runoff rates under the post-development condition to that of the pre-development forested condition for design storm events up to and including the 10-year return period events. This is to aim to provide erosion protection to the tributary and main channels of Kanaka Creek. To estimate the detention requirements, a unit development site of 1ha was modelled to estimate the flow hydrographs for the three soil types under pre-development forested land use and various post-development land use conditions. Onsite source volume control BMPs determined in Section 10.5 were modelled to estimate the additional detention requirements under various soil type and land use conditions. **Table 7** presents a summary of the unit detention volume required for each soil and post-development land use type according to the modelling results. Discharge rates of the detention facilities should be controlled to the pre-development forested condition rates, relative to the underlying soil stratigraphy, as shown in **Table 7**.

Detention and controlled discharge required for each development site shall be estimated based on pro-rating

storage and discharge rates required for areas with multiple land uses and/or soil types according to **Table 7**. Please refer to Section 12, **Drawing 18-1022A-403** for the soil map showing areas with different soil types in North East Albion.

Based on the topography of North East Albion, limited sites would be available for community detention facilities. The required detention volumes are therefore to be provided at individual development sites and subdivisions, roadways and/or at locations suitable for community stormwater management features. Detention storage can be provided with the following measures:

- Adding extra storage and flow controls to the onsite BMPs;
- Oversized pipes;
- Underground tanks; or
- Wet or dry open detention facilities.

Open water detention volumes integrated into the source volume and water quality control devices would be preferred in the design, instead of oversized pipes and underground tanks.

Table 7 – Summary of Detention Requirements

Soil Type	Forested Condition Peak Unit Discharge	Proposed Post-Development Land Use Type	Additional Detention, m <sup>3</sup> /ha
Sandy Loam	Q <sub>2-year</sub> = 3.7 L/s/ha Q <sub>5-year</sub> = 5.0 L/s/ha Q <sub>10-year</sub> = 5.9 L/s/ha	Single Family (55% Imp)	0
		Multiplex (60% Imp)	0
		Townhouse (65% Imp)	13.3
		Institutional (80% Imp)	196.0
		Road ROW (78% Imp)	167.4
Loam	Q <sub>2-year</sub> = 3.7 L/s/ha Q <sub>5-year</sub> = 5.0 L/s/ha Q <sub>10-year</sub> = 5.9 L/s/ha	Single Family (55% Imp)	18.3
		Multiplex (60% Imp)	65.7
		Townhouse (65% Imp)	119.6
		Institutional (80% Imp)	271.1
		Road ROW (78% Imp)	267.5
Silt Loam	Q <sub>2-year</sub> = 3.7 L/s/ha Q <sub>5-year</sub> = 9.0 L/s/ha Q <sub>10-year</sub> = 16.3 L/s/ha	Single Family (55% Imp)	41.3
		Multiplex (60% Imp)	64.5
		Townhouse (65% Imp)	58.6
		Institutional (80% Imp)	35.3
		Road ROW (78% Imp)	42.5

## Community Stormwater Management Features

In addition to the proposed stormwater onsite source control BMP and detention measures described above, community stormwater management features may be implemented in select areas as shown on Section 12, **Drawing 18-1022A-404**. These community stormwater features have been proposed adjacent to park trails and underutilized open spaces primarily to maximize water quality control opportunities from the trails prior to discharging into the downstream watercourses. These features may also create local detention opportunities for its adjacent properties.

The proposed offsite community stormwater features utilize a series of interconnected bio-retention cells, wetted habitat channels, and ponds/wetlands which convey surface water runoff collected from the adjacent lots towards the downstream watercourses.

In addition to the areas identified above, these community stormwater management features may also be applied to areas near stream setback boundaries or other conservation area boundaries onsite or offsite.

## Groundwater Protection

Groundwater is recognized as a valuable resource in North East Albion. Groundwater protection is key for stormwater management in the area. Such groundwater protection measures may include, but are not limited to:

- Promoting rainwater infiltration to recharge to groundwater. Implementing source volume control BMP measures as described in Section 10.5 would ensure capture of the 6-month 24-hour rainfall; equivalent to 90% of the annual rainfall in ground for groundwater recharge.
- Groundwater flows could be interrupted and/or redirected due to land development and road constructions. In order to ensure groundwater conservation, a groundwater impact assessment should be conducted by a qualified Hydrogeologist for each future application in North East Albion. The groundwater investigation should be focused on groundwater characterization regarding aquifer presence at a site (e.g. groundwater-bearing soil formation, depth, flow direction) and impact mitigation measures (e.g. intercept and redirect to nearby streams, supplement with stormwater infiltration) to protect stream base flows and local use as a drinking water resource.

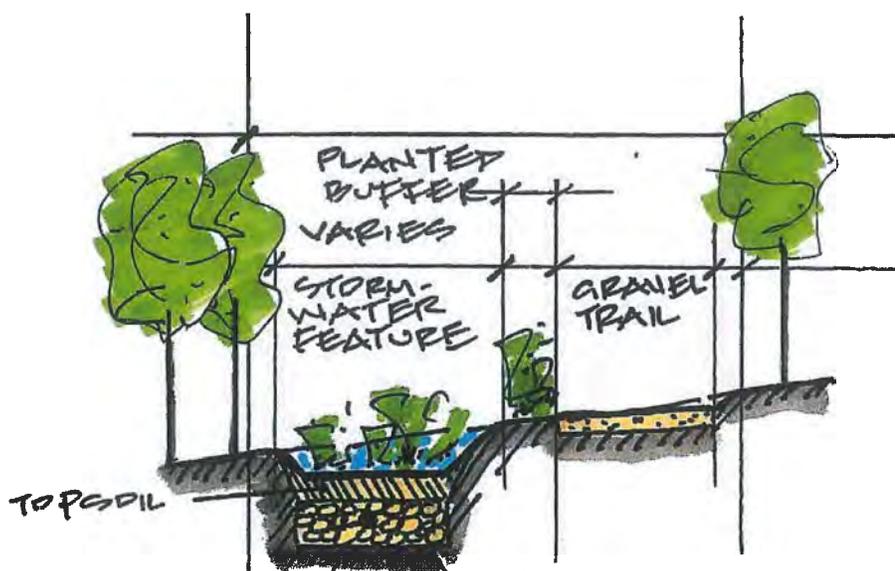


Figure 18 - Trail and Stormwater Feature Typical Section

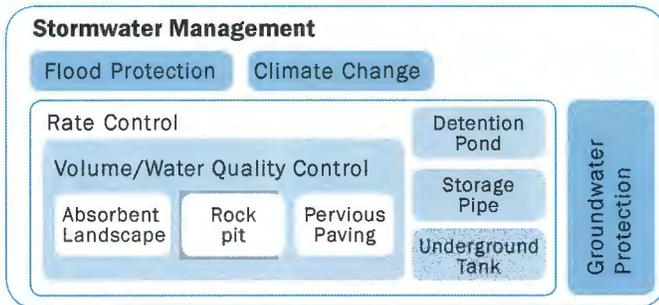
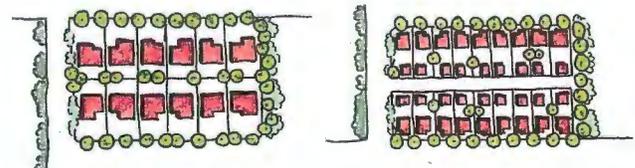
## 10.6 STORMWATER MANAGEMENT DESIGN GUIDELINES

Stormwater management designs for development applications in the North East Albion area are recommended to follow source control design guidelines developed for various land uses.

These design guidelines were prepared based on stormwater management concepts developed in Section 10.5

### Single Family

Maximum allowed imperviousness: 55%



Absorbent Landscape



Rock Pit

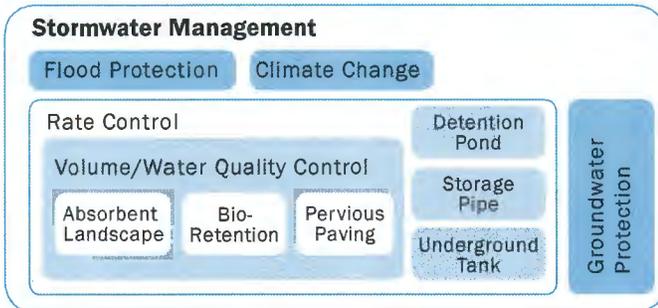
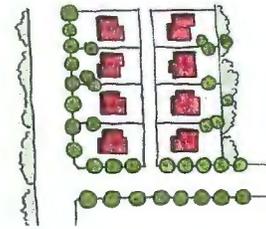
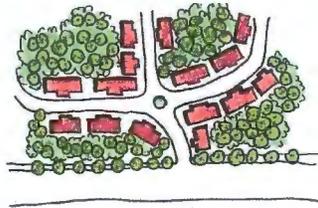


Pervious Paving

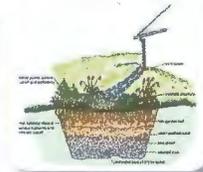
Criteria	Recommendations
Water Quality/ Volume Control (6 month 24 hour rainfall Capture)	<ul style="list-style-type: none"> <li>Minimum 300mm amended topsoil in grassed and 450mm in planted areas</li> <li>Disconnected roof leaders to pervious area</li> <li>Pervious paving for driveways, walkways and patio areas</li> <li>Rock pit installation in silt loam soils, but not required in sandy loam and loam soils Rock pit area = 5% development area Rock reservoir storage depth = 641mm</li> </ul> <p><i>Note: Required rock reservoir storage depth shall be verified based on the site specific geotechnical investigation for the subsurface soils and soil infiltration rates.</i></p>
Rate Control (Up to 10-year post-development flow to pre-development flow)	<ul style="list-style-type: none"> <li>Additional detention storage requirements Sandy Loam Soil Area: None Loam Soil Area: 18.3 m<sup>3</sup>/ha Silt Loam Soil Area: 41.3 m<sup>3</sup>/ha</li> </ul>
Groundwater Protection	<ul style="list-style-type: none"> <li>Groundwater impact assessment be conducted by a Hydro-geotechnical professional to determine groundwater protection measures</li> </ul>
Supplementary Stormwater Management Measures	<ul style="list-style-type: none"> <li>Maintenance (or retention) of high tree cover densities</li> <li>Maintenance of riparian setback as per the environmental requirements if applicable.</li> <li>Installation of daisy-chained stormwater management features (combination of bio-retention cells, wetted habitat channels and detention ponds/wetlands) if possible along the edge of the riparian setback boundaries</li> <li>Other source control measures that can achieve water quality, volume and rate controls in combination with, or in replacement of replacing rock pits</li> </ul>

## Cluster Residential/Multiplex

Maximum allowed imperviousness: 60%



Absorbent Landscape



Bio-Retention

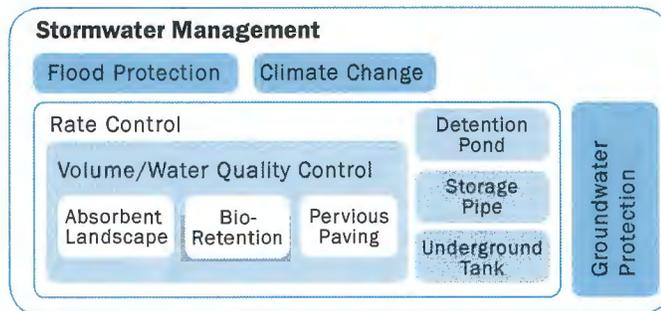
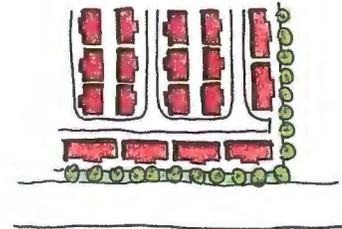


Pervious Paving

Criteria	Recommendations
Water Quality/ Volume Control (6 month 24 hour rainfall Capture)	<ul style="list-style-type: none"> <li>Minimum 300mm amended topsoil in grassed and 450mm in planted areas</li> <li>Disconnected roof leaders to pervious area</li> <li>Pervious paving for driveways, walkways, visitor parking areas</li> <li>Bio-retention devices installation in silt loam soils, but not required in sandy loam and loam soils                             <ul style="list-style-type: none"> <li>Bio-retention bottom area = 5% development area</li> <li>Rock reservoir storage depth = 910mm</li> </ul> </li> </ul> <p><i>Note: Required rock reservoir storage depth shall be verified based on the site specific geotechnical investigation for the subsurface soils and soil infiltration rates.</i></p>
Rate Control (Up to 10-year post-development flow to pre-development flow)	<ul style="list-style-type: none"> <li>Additional detention storage requirements                             <ul style="list-style-type: none"> <li>Sandy Loam Soil Area: None</li> <li>Loam Soil Area: 65.7m<sup>3</sup>/ha</li> <li>Silt Loam Soil Area: 64.5m<sup>3</sup>/ha</li> </ul> </li> </ul>
Groundwater Protection	<ul style="list-style-type: none"> <li>Groundwater impact assessment be conducted by a Hydro-geotechnical professional to determine groundwater protection measures</li> </ul>
Supplementary Stormwater Management Measures	<ul style="list-style-type: none"> <li>Maintenance (or retention) of high tree cover densities</li> <li>Maintenance of riparian setback as per the environmental requirements if applicable</li> <li>Installation of daisy-chained stormwater management features (combination of bio-retention cells, wetted habitat channels and detention ponds/wetlands) if possible along the edge of the riparian setback boundaries</li> <li>Other source control measures that can achieve water quality, volume and rate controls in combination with, or in replacement of bio-retention devices</li> </ul>

## Townhouse

Maximum allowed imperviousness: 65%



Absorbent Landscape



Bio-Retention

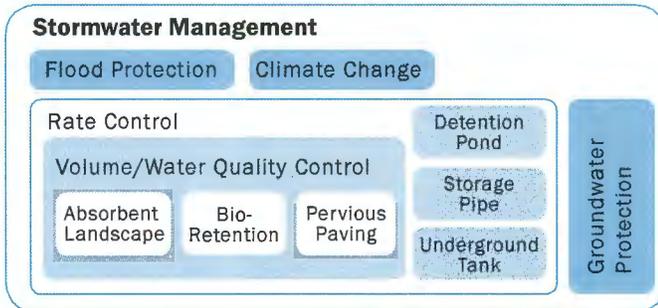
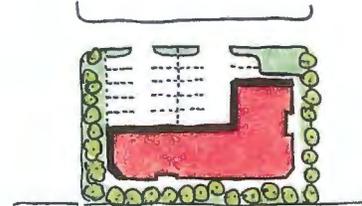


Pervious Paving

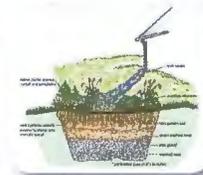
Criteria	Recommendations
Water Quality/ Volume Control (6 month 24 hour rainfall Capture)	<ul style="list-style-type: none"> <li>• Minimum 300mm amended topsoil in grassed and 450mm in planted areas</li> <li>• Disconnected roof leaders to pervious area</li> <li>• Pervious paving for driveways, walkways and visitor parking areas</li> <li>• Bio-retention devices installation in silt loam soils, but not required in sandy loam and loam soils</li> </ul> <p>    Bio-retention bottom area = 5% development area     Rock reservoir storage depth = 1,179mm</p> <p><i>Note: Required rock reservoir storage depth shall be verified based on the site specific geotechnical investigation for the subsurface soils and soil infiltration rates.</i></p>
Rate Control (Up to 10-year post-development flow to pre-development flow)	<ul style="list-style-type: none"> <li>• Additional detention storage requirements</li> </ul> <p>    Sandy Loam Soil Area: 13.3m<sup>3</sup>/ha     Loam Soil Area: 119.6m<sup>3</sup>/ha     Silt Loam Soil Area: 58.5m<sup>3</sup>/ha</p>
Groundwater Protection	<ul style="list-style-type: none"> <li>• Groundwater impact assessment be conducted by a Hydro-geotechnical professional to determine groundwater protection measures</li> </ul>
Supplementary Stormwater Management Measures	<ul style="list-style-type: none"> <li>• Maintenance (or retention) of high tree cover densities</li> <li>• Maintenance of riparian setback as per the environmental requirements if applicable</li> <li>• Installation of daisy-chained stormwater management features (combination of bio-retention cells, wetted habitat channels and detention ponds/wetlands) if possible along the edge of the riparian setback boundaries</li> <li>• Other source control measures that can achieve water quality, volume and rate controls in combination with, or in replacement of bio-retention devices</li> </ul>

## Institutional

Maximum allowed imperviousness: 80%  
(excluding fields)



Absorbent Landscape



Bio-Retention

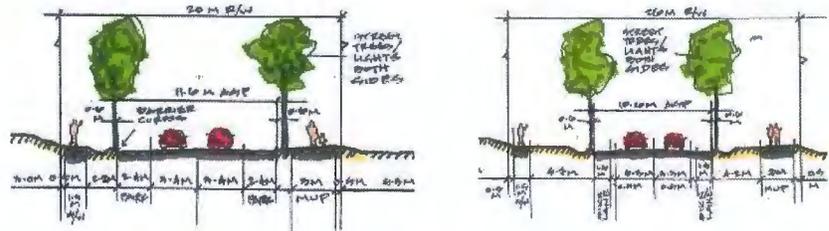


Pervious Paving

Criteria	Recommendations
Water Quality/ Volume Control (6 month 24 hour rainfall Capture)	<ul style="list-style-type: none"> <li>• Minimum 300mm amended topsoil in grassed and 450mm in planted areas</li> <li>• Disconnected roof leaders to pervious area</li> <li>• Pervious paving for walkways and parking areas</li> <li>• Bio-retention devices installation in loam and silt loam soils, but not required in sandy loam soils               <ul style="list-style-type: none"> <li>• Bio-retention bottom area = 5% development area</li> <li>• Rock reservoir storage depth = 1,109mm (Loam)/1,987mm (Silt Loam)</li> </ul> </li> </ul> <p><i>Note: Required rock reservoir storage depth shall be verified based on the site specific geotechnical investigation for the subsurface soils and soil infiltration rates.</i></p>
Rate Control (Up to 10-year post- development flow to pre- development flow)	<ul style="list-style-type: none"> <li>• Additional detention storage requirements               <ul style="list-style-type: none"> <li>• Sandy Loam Soil Area: 196.0m<sup>3</sup>/ha</li> <li>• Loam Soil Area: 271.1m<sup>3</sup>/ha</li> <li>• Silt Loam Soil Area: 35.3m<sup>3</sup>/ha</li> </ul> </li> </ul>
Groundwater Protection	<ul style="list-style-type: none"> <li>• Groundwater impact assessment be conducted by a Hydro-geotechnical professional to determine groundwater protection measures</li> <li>• Plan for the school sport field in the eastern portion of the school site and install perforated subsurface drainage system to allow for maximum ground infiltration and groundwater recharge in this area</li> </ul>
Supplementary Stormwater Management Measures	<ul style="list-style-type: none"> <li>• Maintenance (or retention) of high tree cover densities</li> <li>• Other source control measures that can achieve water quality, volume and rate controls in combination with, or in replacement of bio-retention devices</li> </ul>

## Road Right-of-Way

Maximum Design imperviousness: 78%



### Stormwater Management

Flood Protection

Climate Change

Rate Control

Volume/Water Quality Control

Storage Pipe

Absorbent Landscape

Bioswale + Infiltration Trench

Underground Tank

Groundwater Protection



Absorbent Landscape



Bioswale + Infiltration Trench

Criteria	Recommendations
Water Quality/ Volume Control (6 month 24 hour rainfall Capture)	<ul style="list-style-type: none"> <li>Minimum 300mm amended topsoil in grassed and 450mm in planted areas</li> <li>Bioswale in combination with infiltration trench system installation                             <ul style="list-style-type: none"> <li>Infiltration trench bottom width = 10% road ROW width</li> <li>Rock reservoir storage depth = 200mm (Sandy Loam)</li> <li>= 456mm (Loam)</li> <li>= 1,045mm (Silt Loam)</li> </ul> </li> </ul> <p><i>Note: Required rock reservoir storage depth shall be verified based on the site specific geotechnical investigation for the subsurface soils and soil infiltration rates.</i></p>
Rate Control (Up to 10-year post-development flow to pre-development flow)	<ul style="list-style-type: none"> <li>Additional detention storage requirements                             <ul style="list-style-type: none"> <li>Sandy Loam Sand Area: 167.4m<sup>3</sup>/ha</li> <li>Loam Sand Area: 267.5m<sup>3</sup>/ha</li> <li>Silt Loam Sand Area: 42.5m<sup>3</sup>/ha</li> </ul> </li> </ul>
Groundwater Protection	<ul style="list-style-type: none"> <li>Groundwater impact assessment be conducted by a Hydro-geotechnical professional to determine groundwater protection measures</li> </ul>
Supplementary Stormwater Management Measures	<ul style="list-style-type: none"> <li>Tree planting in boulevard</li> <li>Installation of trench dams at stream crossing locations</li> <li>Other source control measures that can achieve water quality, volume and rate controls in combination with, or in replacement of the proposed source control devices</li> </ul>

In addition to the source control design guidelines provided above, onsite and offsite storm sewer systems shall be designed to convey the peak 10-year flows and the major flow paths including major road crossings, designated overland flow paths and open channels shall be designed to convey the peak 100-year flows assuming no onsite source control measures with 2070 climate condition.

## 10.7 STORMWATER MANAGEMENT SYSTEM OPERATION, MAINTENANCE AND PERFORMANCE MONITORING

### Operation and Maintenance

Stormwater management source controls rely on appropriate operation and maintenance for performance and longevity. The lifespan of source controls will vary with the type, design and maintenance provided. **Table 8** provides the operation and maintenance requirements for various BMP devices for

use by landowners and subdivision strata management groups during and after construction and implementation of these stormwater management BMP features.

Table 8 – Stormwater BMP Operation and Maintenance Requirements

BMP Type	Required Operation and Maintenance Actions
Absorbent Landscape	<p><b>Construction Phase:</b></p> <ul style="list-style-type: none"> <li>- Inspection to ensure required depths and areas are constructed</li> <li>- Ensure topsoil installation area is properly scarified and prepared</li> </ul> <p><b>Operation Phase:</b></p> <ul style="list-style-type: none"> <li>- Hydro-seeding in areas where topsoil is exposed and eroded (on-going)</li> <li>- Minimum water supply to absorbent landscape areas during dry season (on-going)</li> <li>- Seeding and soil maintenance (bi-annual)</li> </ul>
Rock Pit	<p><b>Construction Phase:</b></p> <ul style="list-style-type: none"> <li>- Ensure rock infiltration area is protected from sediment</li> </ul> <p><b>Operation Phase:</b></p> <ul style="list-style-type: none"> <li>- Ensure vehicles are not driven or parked on the trenches unless proper support with pavement constructed on the top of the rock pit area for vehicle access is provided (on-going)</li> <li>- Avoid excessive compaction from equipment, vehicles and mowers (on-going)</li> <li>- Remove trash, leaves and other debris collected on the surface (on-going)</li> <li>- Inspect cleanouts of perforated drains (quarterly)</li> <li>- Remove debris from surfaces (quarterly)</li> <li>- Catch basins and inlets to be inspected and cleaned (annually)</li> <li>- Check and repair damages (e.g. sink holes) (as needed)</li> <li>- Check for signs of failure such as standing water in the observation well for more than 48 hours after a rain event, insects and/or odour, and clean and reinstall filter fabric and rock reservoir, as needed</li> <li>- Redirect drainage if runoff is conveyed over and across the trench but not into the facility (as needed)</li> </ul>

<p>Bio-Retention (e.g. rain gardens)</p>	<p><b>Construction Phase:</b></p> <ul style="list-style-type: none"> <li>- Inspection to ensure required amended topsoil depths being constructed</li> <li>- Ensure topsoil installation area is properly scarified and prepared</li> <li>- Ensure rock infiltration area is protected from sediments</li> </ul> <p><b>Operation Phase:</b></p> <ul style="list-style-type: none"> <li>- Plan in place for watering until plantings established (first year)</li> <li>- Plant and soil maintenance and weed control (bi-annual)</li> <li>- Inspection of surface conditions for uneven settling, water ponding, or potholes to determine if any remedial work is needed (bi-annual)</li> </ul>
<p>Pervious Paving</p>	<p><b>Construction Phase:</b></p> <ul style="list-style-type: none"> <li>- Ensure rock infiltration area is protected from sediments</li> </ul> <p><b>Operation Phase:</b></p> <ul style="list-style-type: none"> <li>- Provide remedial work when ponding of water is visible on the surface 48 hours after a rain event (on-going)</li> <li>- Avoid loading or placement of landscaping materials such as mulch, sand or topsoil on pervious paving (on-going)</li> <li>- Surface sweeping with a commercial vacuum sweeping unit or pressure washing of clogged surface (bi-annual or when accumulated sediment is found in between pavers)</li> <li>- Inspection of surface conditions for uneven settling, water ponding, or potholes to determine if any remedial work is needed (bi-annual)</li> <li>- Restrict use of de-icing chemicals and sand on pervious paving areas (winter)</li> </ul>
<p>Bioswale and Infiltration Trench in Road Right-of- Way</p>	<p><b>Construction Phase:</b></p> <ul style="list-style-type: none"> <li>- Inspection to ensure required amended topsoil depths being constructed within bioswale areas</li> <li>- Ensure topsoil installation area is properly scarified and prepared</li> <li>- Ensure infiltration trench area is protected from sediments</li> </ul> <p><b>Operation Phase:</b></p> <ul style="list-style-type: none"> <li>- Inspect cleanouts of perforated drains (quarterly)</li> <li>- Remove debris from surface to maintain proper function (quarterly or as needed)</li> <li>- Avoid excessive compaction from equipment and mowers (on-going)</li> <li>- Ensure vehicles are not driven or parked on trenches unless proper support with pavement constructed on the top of the infiltration area for vehicle access (on-going)</li> <li>- Catch basins and inlets to be inspected and cleaned (annual)</li> <li>- Repair when there is visible damage to the trench, e.g. sink holes (as needed)</li> <li>- Redirect drainage if runoff is conveyed over and across the trench but not into the facility (as needed)</li> </ul>

## Stormwater Performance Monitoring Program

A performance monitoring program will assist the City in answering the following two questions:

- If the development is negatively impacting the ecological health of creeks; and
- If stormwater management activities are resulting in no-net-loss of the overall health of the creeks.

Aplin Martin recommends that the City of Maple Ridge consider implementing a Stormwater Performance Monitoring Program for the North East Albion Concept Plan area according to the Monitoring and Adaptive Management Framework for Stormwater (MAMF) developed by Metro Vancouver in 2014. The proposed monitoring program should follow the MAMF protocols and includes the following:

- Conduct continuous flow monitoring in the selected ravine watercourses, e.g. KA2, KA3 and KA6 west;
- Water quality grab sampling to measure dissolved oxygen, water temperature, turbidity, pH, conductivity, nitrate, e. coli, fecal coliform, total iron, total copper, total lead, total zinc and total cadmium, once every five years;
- Annual erosion monitoring for all tributary ravine areas; and
- Desktop monitoring of changes in total impervious area, effective impervious area (EIA) and riparian forest integrity (RFI) using aerial photos and GIS, every five years.

## 11 | BC HYDRO, TELECOMM, CABLE & GAS

The area is generally currently serviced with BC Hydro, Telus and Fortis BC natural gas services. The existing subdivisions to the south and east of North East Albion are currently serviced with underground BC Hydro and Telus distribution systems.

It is proposed to extend the existing underground systems as required to service each individual development application within North East Albion.

Three phase BC Hydro servicing appears to currently terminate at the intersection of 112 Avenue and Lockwood Street. It is anticipated that three phase BC Hydro servicing will need to be extended via overhead service along 112 Avenue to service sanitary pump station PS-1.

## 12 | LARGE FORMAT DRAWING

The drawings referenced in Part 2 – Servicing Strategy are provided in the following section.

Roadworks drawings include:

- Drawing 101 – Roadworks Master Plan

Sanitary drawings include:

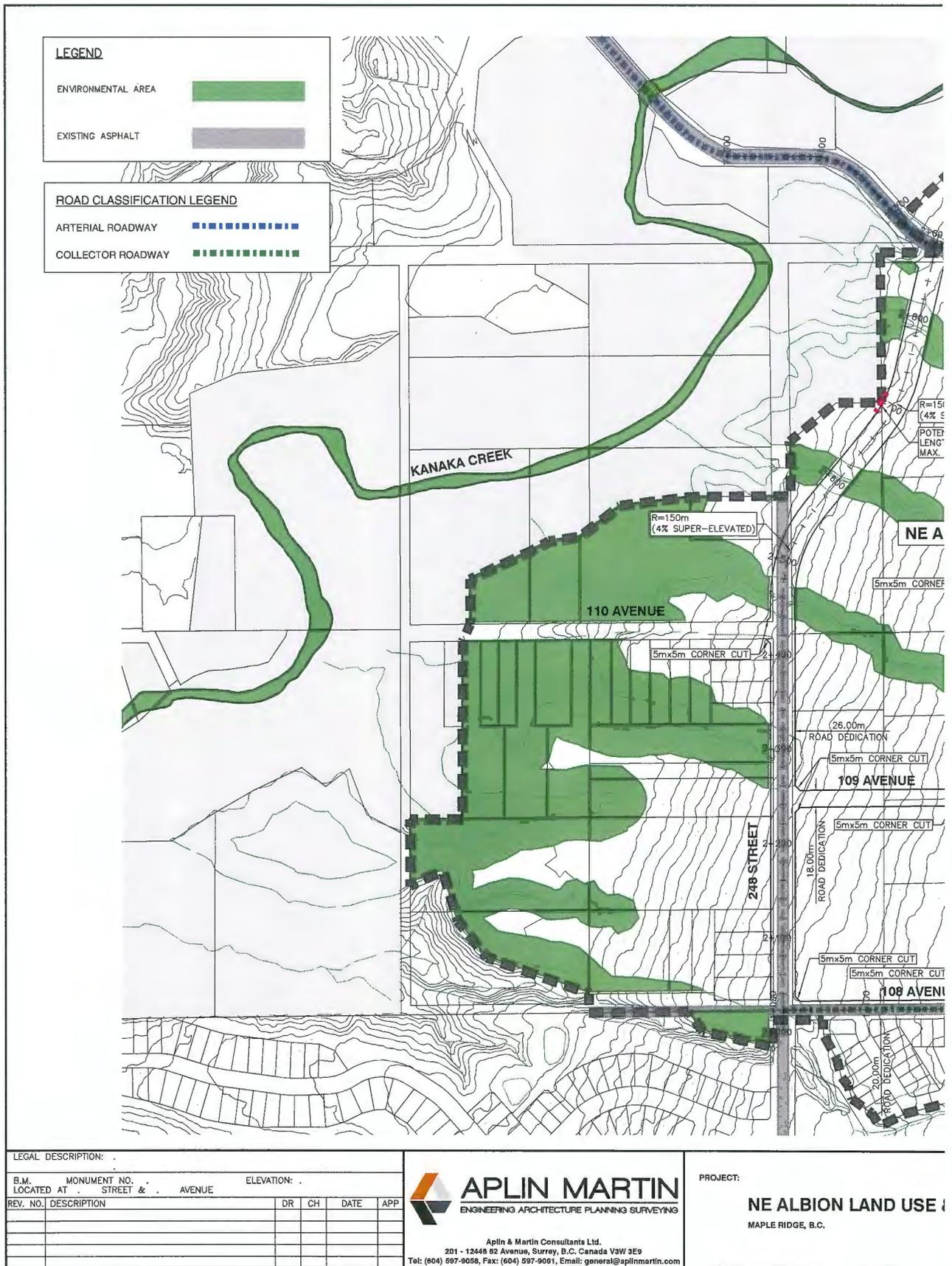
- Drawing 201 – Sanitary Master Plan
- Drawing 202 – North East Albion Sanitary Catchment Plan
- Drawing 203 – North East Albion Sanitary Catchment Plan - Calculations

Water drawings include:

- Drawing 301 – Water Master Plan

Stormwater drawings include:

- Drawing 401 – Land Use and Stormwater Catchment Plan - Existing
- Drawing 402 – Land Use and Stormwater Catchment Plan - Post Development
- Drawing 403 – Soil Map
- Drawing 404 – Stormwater Master Plan
- Drawing 405 – 100 Year Flow Paths



**LEGEND**

ENVIRONMENTAL AREA	
EXISTING ASPHALT	

**ROAD CLASSIFICATION LEGEND**

ARTERIAL ROADWAY	
COLLECTOR ROADWAY	

LEGAL DESCRIPTION: .

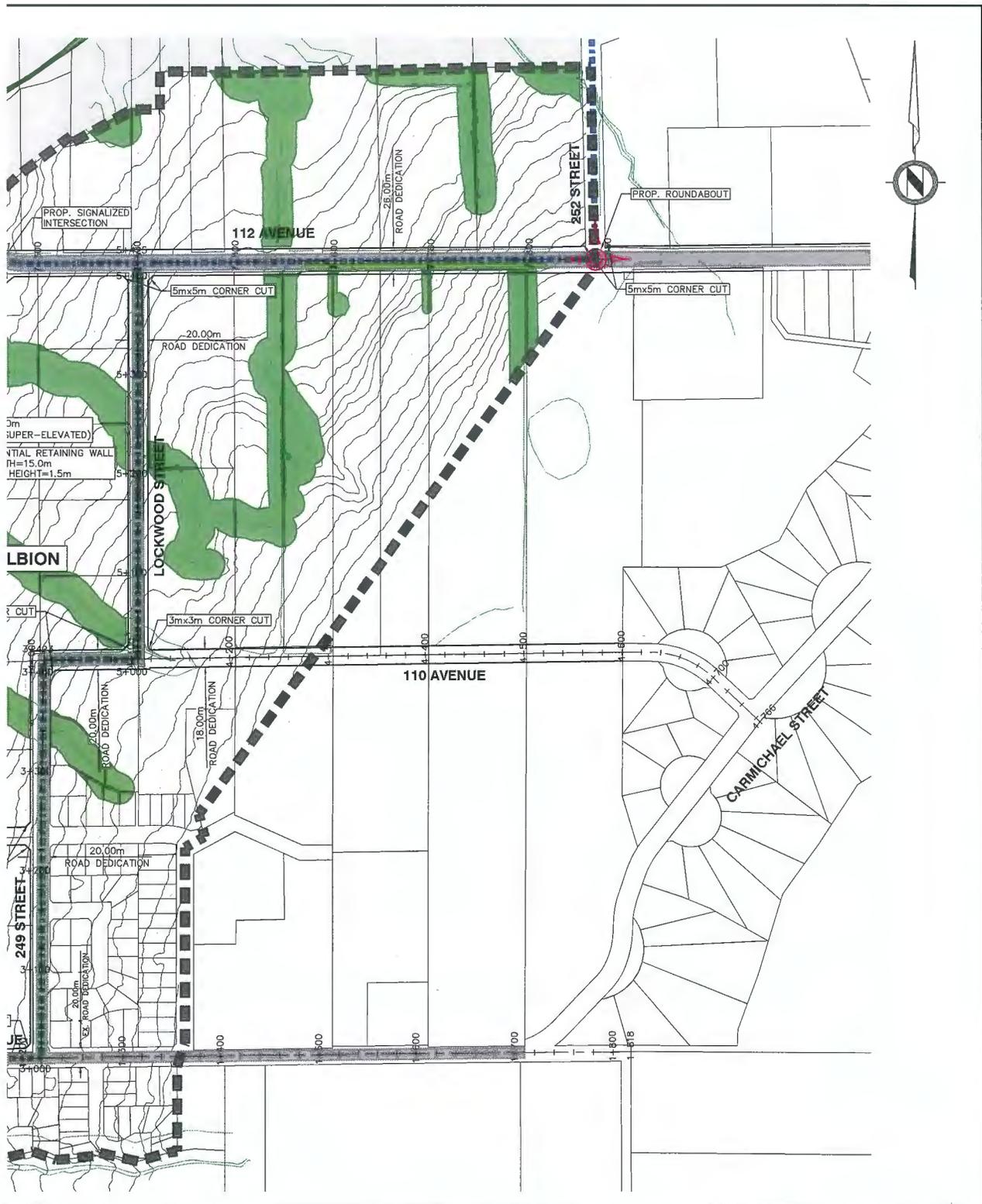
B.M. NO.	MONUMENT NO.	ELEVATION: .			
LOCATED AT . STREET & . AVENUE					
REV. NO.	DESCRIPTION	DR	CH	DATE	APP

**APLIN MARTIN**  
ENGINEERING ARCHITECTURE PLANNING SURVEYING

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PROJECT: **NE ALBION LAND USE**  
MAPLE RIDGE, B.C.

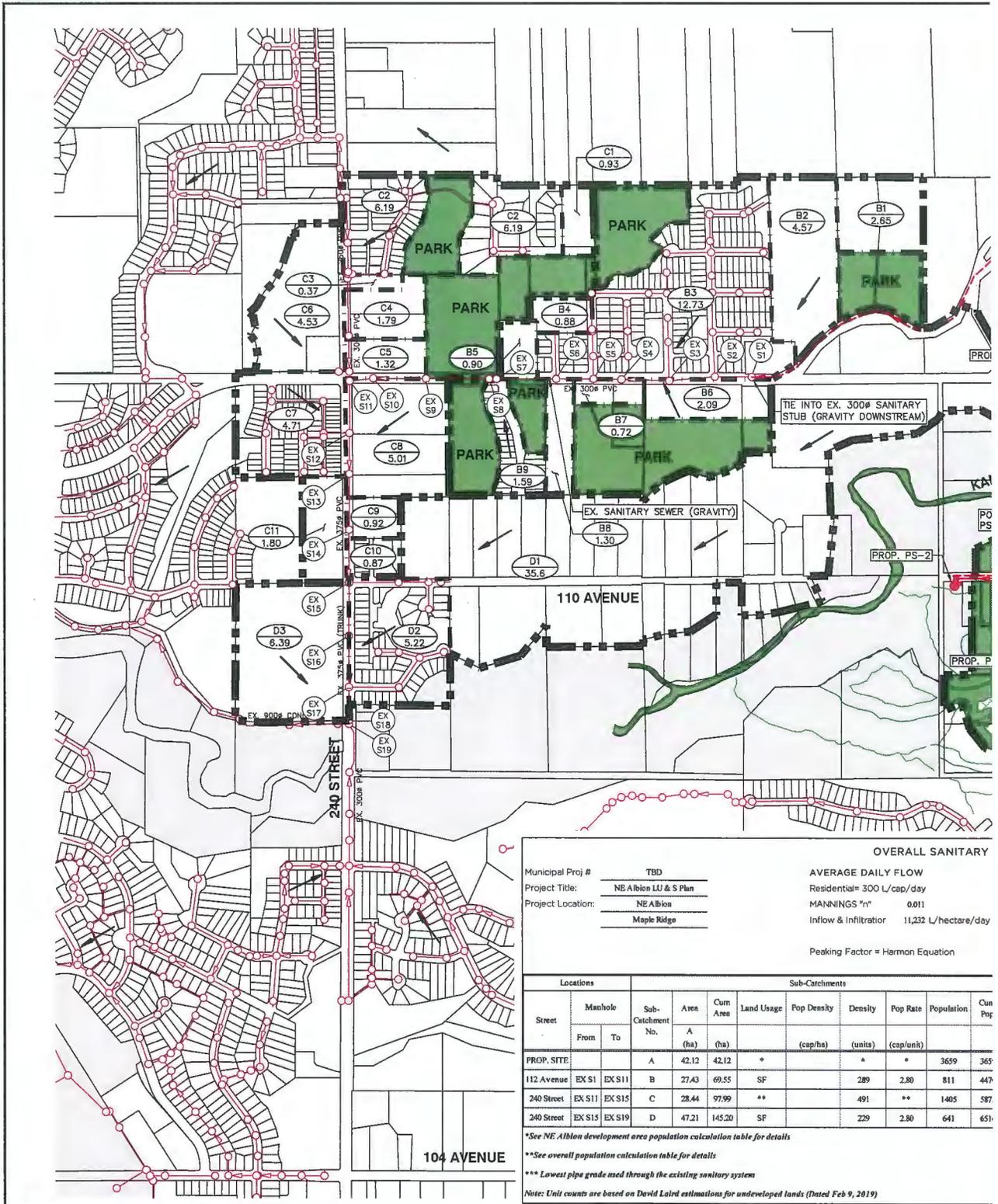
Drawing 101 – Roadworks Master Plan



M:\2018\18-1022A\DWG\PRELIMINARY MASTER PLANS\18-1022A-101 - Roadworks Master Plan.dwg/101 Preliminary Roadworks Master Plan YKim  
 Sep 24 2019 10:28am

<b>&amp; SERVICING PLAN</b>	The location of existing underground utilities are shown in an approximate way only if have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.		<b>TITLE:</b> <b>ROADWORKS MASTER PLAN</b>		DESIGN: YK      CHECK: DB DRAWN: KAL     APPR: DB	
	<b>PROJECT NO.</b> .		<b>SCALE :</b> HORZ. 1:2500 VERT. N/A		<b>A &amp; M FILE:</b> <b>18-1022A</b>	
	<b>DRAWING NO.</b> .		<b>A &amp; M DRAWING NO.</b> <b>18-1022A - 101</b>		<b>DRAWING DATE:</b> <b>FEBRUARY, 2019</b>	
				<b>SHEET NO.</b> <b>101</b>		<b>REV.</b> .





LEGAL DESCRIPTION:

B.M. LOCATED AT	MONUMENT NO.	STREET & AVENUE	ELEVATION:		
REV. NO.	DESCRIPTION	DR	CH	DATE	APP

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Project: **NE ALBION LAND USE**  
 MAPLE RIDGE, B.C.

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Drawing 201 - Sanitary Master Plan



**LEGEND**

- CATCHMENT BOUNDARY
- SUB-CATCHMENT BOUNDARY
- EX. SANITARY SEWER (GRAVITY)
- PROP. SANITARY SEWER (GRAVITY)
- PROP. SANITARY FORCEMAIN
- PROP. PUMP STATION
- PARK DR ENVIRONMENTAL AREA
- PROP. PS-2 CATCHMENT AREA (A=4.72ha)
- PROP. PS-3 CATCHMENT AREA (A=12.25ha)
- CATCHMENT FLOW DIRECTION
- CATCHMENT AREA (A) 65.07

**OVERALL POPULATION CALCULATION TABLE**

Area	Land Usage	Unit Count	Area (ha)	Pop Rate	Population
A	*	*	42.12	*	3659 *
B1	Fut. Single Family	15	2.65	2.8 (Cap/unit)	42
B2	Fut. Single Family	31	4.57	2.8 (Cap/unit)	87
B3	Ex. Single Family	172	12.73	2.8 (Cap/unit)	482
B4	Fut. Single Family	16	0.88	2.8 (Cap/unit)	45
B5	Fut. Single Family	2	0.90	2.8 (Cap/unit)	6
B6	Fut. Single Family	16	2.09	2.8 (Cap/unit)	45
B7	Fut. Single Family	2	0.72	2.8 (Cap/unit)	6
B8	Fut. Single Family	10	1.30	2.8 (Cap/unit)	28
B9	Ex. Single Family	25	1.59	2.8 (Cap/unit)	70
C1	Fut. Single Family	4	0.93	2.8 (Cap/unit)	12
C2	Ex. Single Family	58	6.19	2.8 (Cap/unit)	163
C3	Fut. Single Family	3	0.37	2.8 (Cap/unit)	9
C4	Fut. Single Family	5	1.79	2.8 (Cap/unit)	14
C5	Fut. Single Family	20	1.32	2.8 (Cap/unit)	56
C6	Ex. Townhouse (RM-1)	167	3.98	2.8 (Cap/unit)	468
	Fut. Commercial		0.55	50 (Cap/ha)	28 (2)
C7	Ex. Single Family	70	4.71	2.8 (Cap/unit)	196
C8	Fut. Townhouse (RM-1)	130	5.01	2.8 (Cap/unit)	364
C9	Fut. Single Family	5	0.92	2.8 (Cap/unit)	14
C10	Fut. Single Family	9	0.87	2.8 (Cap/unit)	25
C11	Fut. Single Family	20	1.80	2.8 (Cap/unit)	56
D1	Fut. Single Family	129	35.80	2.8 (Cap/unit)	361
D2	Ex. Single Family	50	5.22	2.8 (Cap/unit)	140
D3	Fut. Single Family	50	6.39	2.8 (Cap/unit)	140

**SYSTEM DESIGN - CALCULATION SHEET**

PIPE CAPACITY DESIGN CRITERIA

70% for Ex. Local (<40 L/s PWWF) Sewers (α/Q)

83.5% for Ex. Trunk (>40 L/s PWWF) Sewers (α/Q)

75% for New Sewers (α/D)

Consultant: APLIN MARTIN

A&M Proj # 18-1022A

Page: 1 of 1

Designed by: YK

Checked by: DB / DDH

Date: August-07-19

Usage Level	Flow Calculations					Pipe Parameters					Results				
	Avg Flow	Peaking Factor	Peak Flow	Inflow & Infiltration	PWWF (Design Flow)	Sewer Design					Flow Ratio	Partial Velocity	Velocity Check	Depth of Flow	
L/cap/day	ADWF (L/s)	Pf	PDWF (L/s)	I&I (L/s)	Q (L/s)	S %	DIA mm	L m	V <sub>min</sub> m/s	Q <sub>max</sub> (L/s)	Q/Q <sub>ave</sub> %	V <sub>ave</sub> 1 (m/s)	V <sub>ave</sub> 2 (m/s)	d/D %	
9	300	12.70	2.74	34.78	5.48	40.25									
9	300	15.52	2.68	41.56	9.04	50.60	0.59***	300	120.00	1.24	87.78	57.6%	1.29	OK	54%
5	300	20.40	2.60	53.01	12.74	65.75	1.10***	375	110.00	1.97	217.32	30.3%	1.72	OK	38%
6	300	22.63	2.57	58.12	18.88	77.00	0.50***	375	280.00	1.33	146.52	52.6%	1.34	OK	51%

**& SERVICING PLAN**

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TITLE: **SANITARY MASTER PLAN**

DESIGN: YK CHECK: DB

DRAWN: KAL APPR: DB

A & M FILE: **18-1022A**

DRAWING DATE: **FEBRUARY, 2019**

PROJECT NO. \_\_\_\_\_

SCALE: **HORIZ. 1:5000**

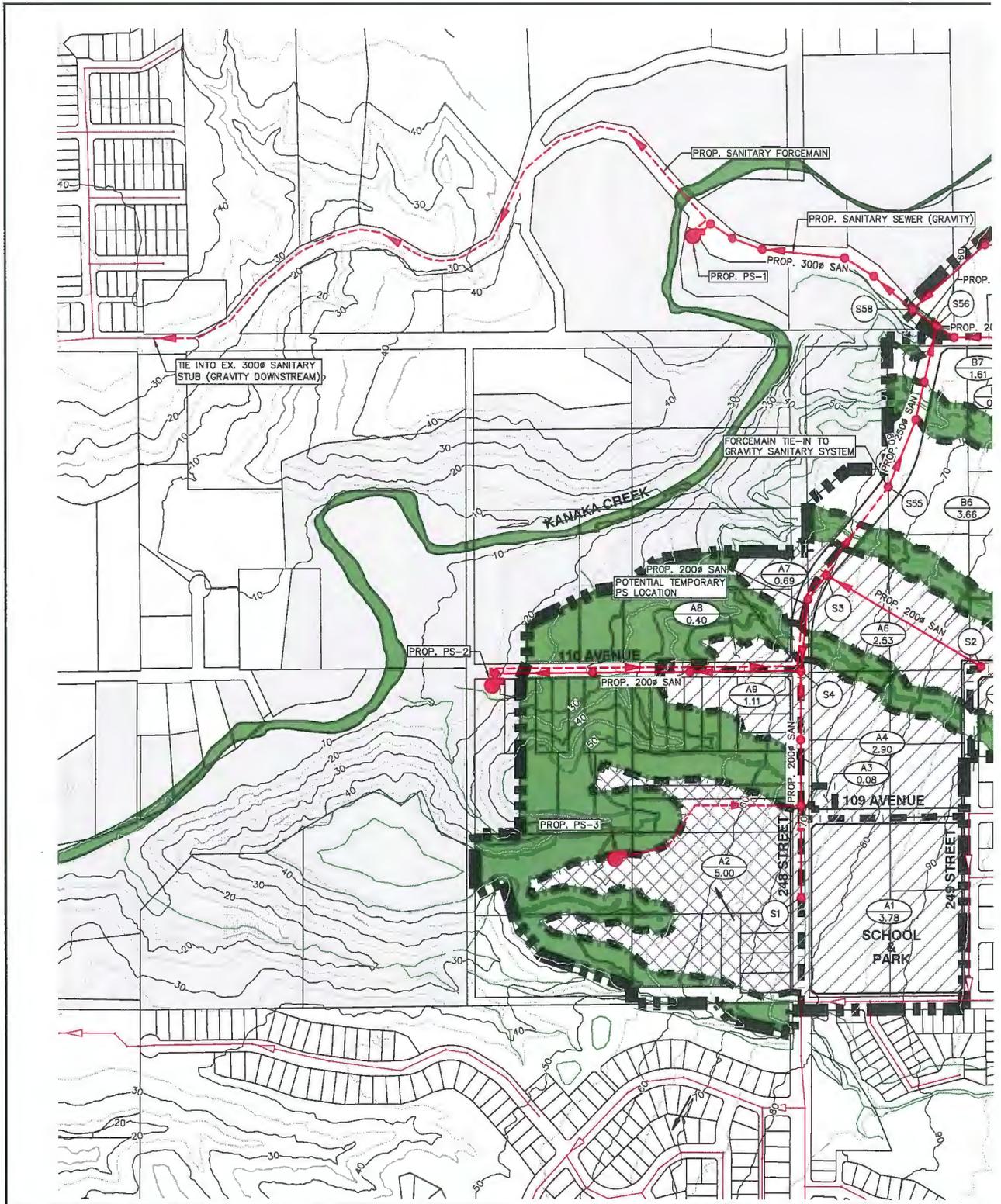
VERT. N/A

A & M DRAWING NO. **18-1022A - 201**

SHEET NO. **201**

DRAWING NO. \_\_\_\_\_

REV. \_\_\_\_\_



LEGAL DESCRIPTION:

B.M. LOCATED AT	MONUMENT NO.	STREET & AVENUE	ELEVATION:

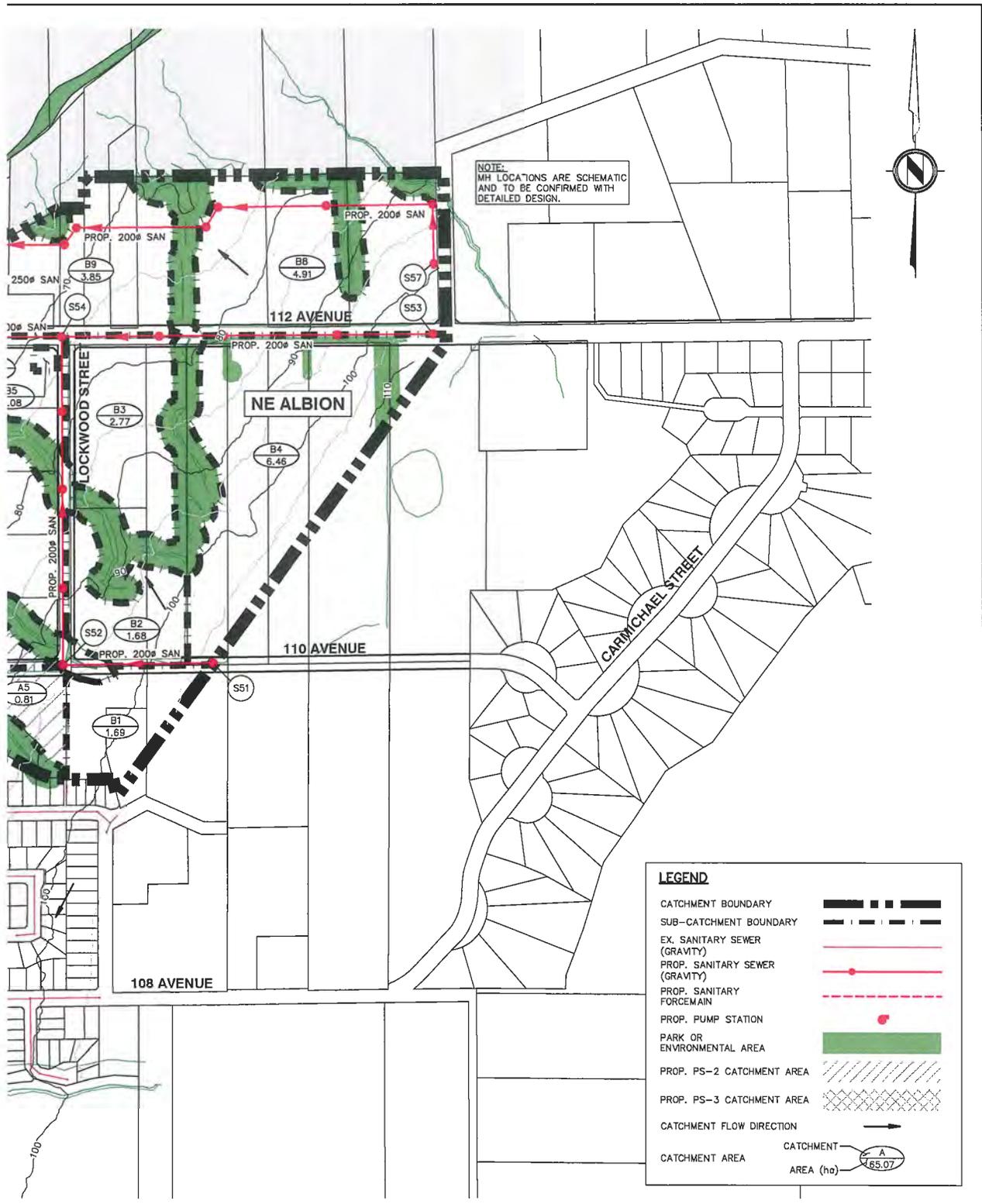
REV. NO.	DESCRIPTION	DR	CH	DATE	APP

**APLIN MARTIN**  
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PROJECT:  
**NE ALBION LAND USE**  
MAPLE RIDGE, B.C.

Drawing 202 – North East Albion Sanitary Catchment Plan

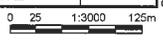


**LEGEND**

- CATCHMENT BOUNDARY: [Thick dashed line]
- SUB-CATCHMENT BOUNDARY: [Thin dashed line]
- EX. SANITARY SEWER (GRAVITY): [Solid black line]
- PROP. SANITARY SEWER (GRAVITY): [Red line with dots]
- PROP. SANITARY FORCEMAIN: [Red dashed line]
- PROP. PUMP STATION: [Red square]
- PARK OR ENVIRONMENTAL AREA: [Green shaded area]
- PROP. PS-2 CATCHMENT AREA: [Diagonal hatching]
- PROP. PS-3 CATCHMENT AREA: [Cross-hatching]
- CATCHMENT FLOW DIRECTION: [Arrow]
- CATCHMENT AREA: [Circle with 'A' and '165.07']

<b>&amp; SERVICING PLAN</b>	The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representatives. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.		TITLE: <b>NE ALBION SANITARY CATCHMENT PLAN</b>	DESIGN: YK    CHECK: DB DRAWN: KAL    APPR: DB
	PROJECT NO.	SCALE : HORIZ. : 1:3000 VERT. : N/A	A & M FILE: <b>18-1022A</b>	
	DRAWING NO.	A & M DRAWING NO. <b>18-1022A - 202</b>	DRAWING DATE: <b>FEBRUARY, 2019</b>	
			SHEET NO.    REV. <b>202</b>	

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NE ALBION SANITARY SYSTEM DESIGN - CALCULATION SHEET

Municipal Proj # TBD  
 Project Title: NE Albion L1J & S Plan  
 Project Location: NE Albion  
Maple Ridge

AVERAGE DAILY FLOW Residential = 300 L/cap/day  
 MANNINGS "n" 0.011  
 Inflow & Infiltration 11,232 L/hectare/day

PIPE CAPACITY DESIGN CRITERIA  
 70% for Ex. Local (<40 L/s PWWF) Sewers (a/Q)  
 83.5% for Ex. Trunk (>40 L/s PWWF) Sewers (a/Q)  
 75% for New Sewers (d/D)

Consultant: /



Peaking Factor = Harmon Equation

LOCATIONS				Sub-Catchments								Flow Calculations						Pipe Parameters		
Street	Manhole		Sub-Catchment No.	Area (ha)	Cum Area (ha)	Land Usage	Pop Density (cap/ha)	Density (units)	Pop Rate (cap/ha)	Population	Cum Pop	Usage Level (L/cap/day)	Avg Flow (L/s)	Peaking factor	Peak Flow (L/s)	Inflow & Infiltration (L/s)	PWWF (Design Flow) (L/s)	S %	DIA mm	L m
	From	To																		
248 Street	S1	S4	A1, A2, A3 & A4	9.87	9.17	*		183	*	685	685	300	2.31	3.29	7.83	1.28	9.11	4.50	200	458.0
	S2	S3	A5 & A6	3.34	3.34	SF/TH		95	*	265	265	300	0.91	3.65	3.36	0.43	3.80	12.00	200	370.0
248 Street	S3	S4	A7	0.69	4.03	Townhouse		35	2.80	97	362	300	1.21	3.53	4.44	0.52	4.96	2.80	200	210.0
110 Avenue	S4	PS-2	A8 & A9	1.51	15.41	SF/TH		70	*	118	1165	300	4.01	3.10	12.56	2.00	14.56	8.00	200	630.0
110 Avenue	S51	S52	B1	1.69	1.69	SF		34	2.80	95	95	300	0.33	4.09	1.35	0.22	1.57	7.00	200	310.0
Lockwood	S52	S54	B2 & B3	4.45	6.4	SF/TH		172	*	482	577	300	2.41	3.35	6.72	0.80	7.52	4.00	200	660.0
112 Avenue	S53	S54	B4	6.46	6.46	SF		129	2.80	362	362	300	1.21	3.53	4.44	0.84	5.28	2.00	200	760.0
112 Avenue	S54	S56	B5	0.08	12.08	Commercial				4	943	300	3.27	3.18	10.40	1.65	12.05	8.50	200	230.0
248 Street	S55	S56	A, B6 & B7	5.27	20.68	*		264	2.50	737	1902	300	6.61	2.94	19.43	2.69	22.12	0.50	250	340.0
112 Avenue	S56	S58			3336						2845	300	9.81	2.81	27.80	4.34	32.14	9.40	250	65.0
112 Avenue	S57	S58	B8 & B9	8.76	8.76	SF/TH		291	*	814	814	300	2.83	3.23	9.13	1.14	10.27	1.00	200	1100.0
112 Avenue	S58	PS-1			4212				*		3659	300	12.70	2.74	34.78	5.48	40.25	1.00	300	470.0

\* See NE Albi-a population calculation table for details

LEGAL DESCRIPTION:				
B.M.	MONUMENT NO.	ELEVATION:		
LOCATED AT STREET & AVENUE				
REV. NO.	DESCRIPTION	DR	CH	DATE

**APLIN MARTIN**  
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PROJECT:  
**NE ALBION LAND USE**  
 MAPLE RIDGE, B.C.

Drawing 203 - North East Albion Sanitary Catchment Plan - Calculations

A&M Proj # 18-1022A  
 Page: 1 of 1  
 Designed by: YK  
 Checked by: DB/DDH  
 Date: August-07-19

Design	Results					
	Flow Ratio	Partial Velocity	Velocity Check	Depth of Flow		
V <sub>cap</sub> m/s	Q <sub>cap</sub> L/s	Q/Q <sub>cap</sub> %	V <sub>act</sub> (m/s)	V <sub>act</sub> ≥ 0.75 (m/s)	d/D %	
0	2.62	82.23	11.1%	1.72	OK	22%
0	4.27	134.28	2.8%	1.88	OK	12%
0	2.06	64.86	7.6%	1.22	OK	19%
0	3.49	109.64	13.3%	2.42	OK	25%
0	3.26	102.55	1.5%	1.19	OK	9%
0	2.47	77.52	9.7%	1.56	OK	21%
0	1.74	54.82	9.6%	1.10	OK	21%
0	3.60	113.01	10.7%	2.34	OK	22%
0	1.01	49.70	44.5%	0.98	OK	47%
0	4.39	215.47	14.9%	3.15	OK	26%
0	1.23	38.76	26.5%	1.04	OK	35%
0	1.62	114.28	35.2%	1.48	OK	41%

Area	Land Usage	unit/ha	Area (ha)	Units	Pop Rate	Population
A1	Institutional		1.89		90 (Cap/ha)	170 <sup>(1)</sup>
A2	Single Family	20	5.00	100	2.8 (Cap/unit)	280
A3	Commercial		0.08		50 (Cap/ha)	4 <sup>(2)</sup>
A4	Duplex	28.5	2.90	83	2.8 (Cap/unit)	231
A5	Single Family	20	0.81	16	2.8 (Cap/unit)	45
A6	Cluster TH	31	2.53	78	2.8 (Cap/unit)	220
A7	Townhouse	50	0.69	35	2.8 (Cap/unit)	97
A8	Townhouse	50	0.40	20	2.8 (Cap/unit)	56
A9	Single Family	20	1.11	22	2.8 (Cap/unit)	62
B1	Single Family	20	1.69	34	2.8 (Cap/unit)	95
B2	Single Family	20	1.68	34	2.8 (Cap/unit)	94
B3	Townhouse	50	2.77	139	2.8 (Cap/unit)	388
B4	Single Family	20	6.46	129	2.8 (Cap/unit)	362
B5	Commercial		0.08		50 (Cap/ha)	4 <sup>(2)</sup>
B6	Townhouse	50	3.66	183	2.8 (Cap/unit)	512
B7	Townhouse	50	1.61	81	2.8 (Cap/unit)	225
B8	Single Family	20	4.91	98	2.8 (Cap/unit)	275
B9	Townhouse	50	3.85	193	2.8 (Cap/unit)	539

<sup>(1)</sup> Population density of 90 (cap/ha) used to determine institutional population  
<sup>(2)</sup> Population density of 50 (cap/ha) used to determine future commercial population

**& SERVICING PLAN**

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TITLE: **NE ALBION SANITARY CATCHMENT PLAN - CALCULATIONS**

PROJECT NO. \_\_\_\_\_

DRAWING NO. \_\_\_\_\_

SCALE: HORZ. N/A VERT. N/A

A & M DRAWING NO. **18-1022A - 203**

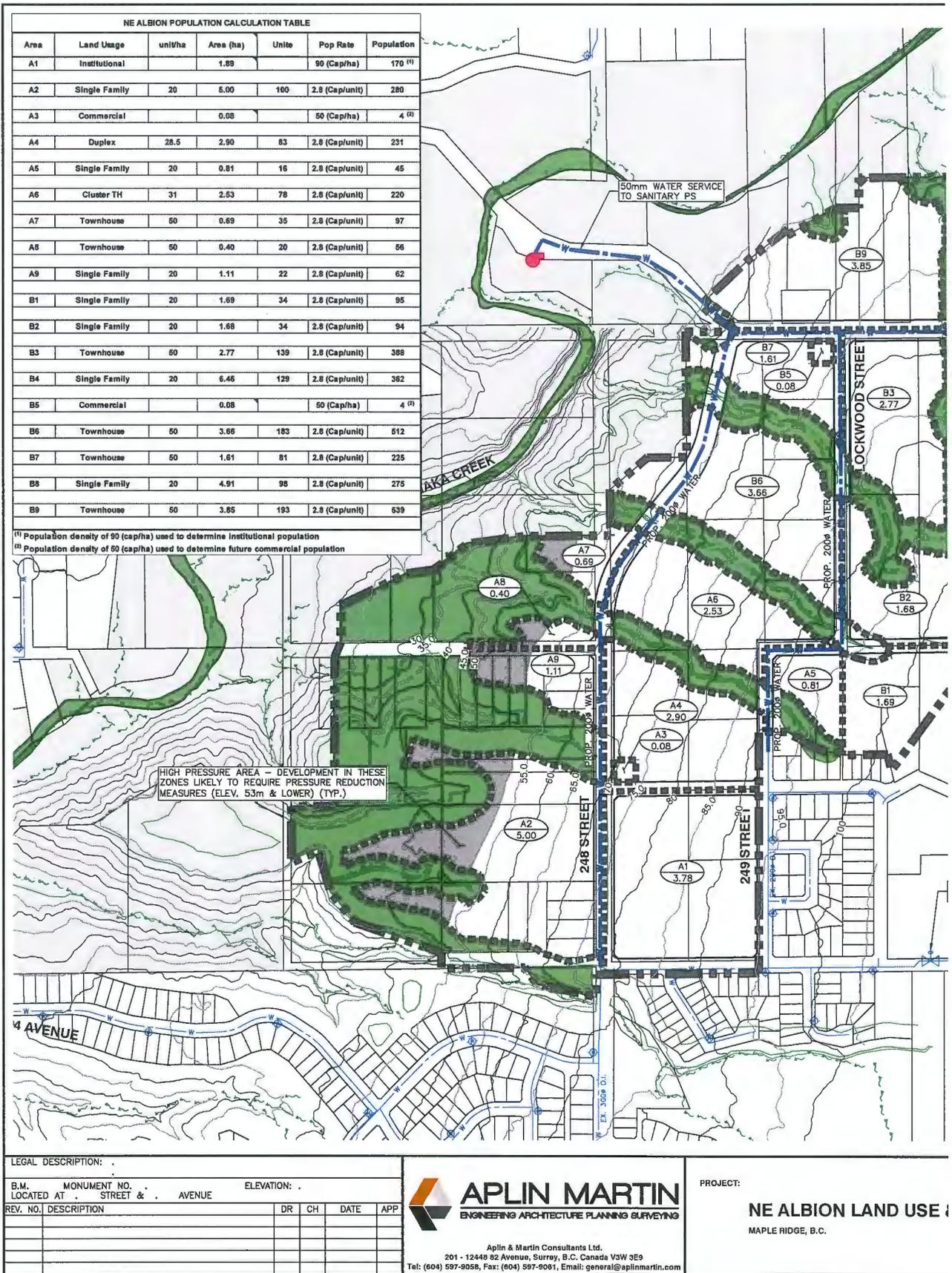
DESIGN: YK CHECK: DB  
 DRAWN: KAL APPR: DB

A & M FILE: **18-1022A**

DRAWING DATE: **FEBRUARY, 2019**

SHEET NO. **203** REV. \_\_\_\_\_

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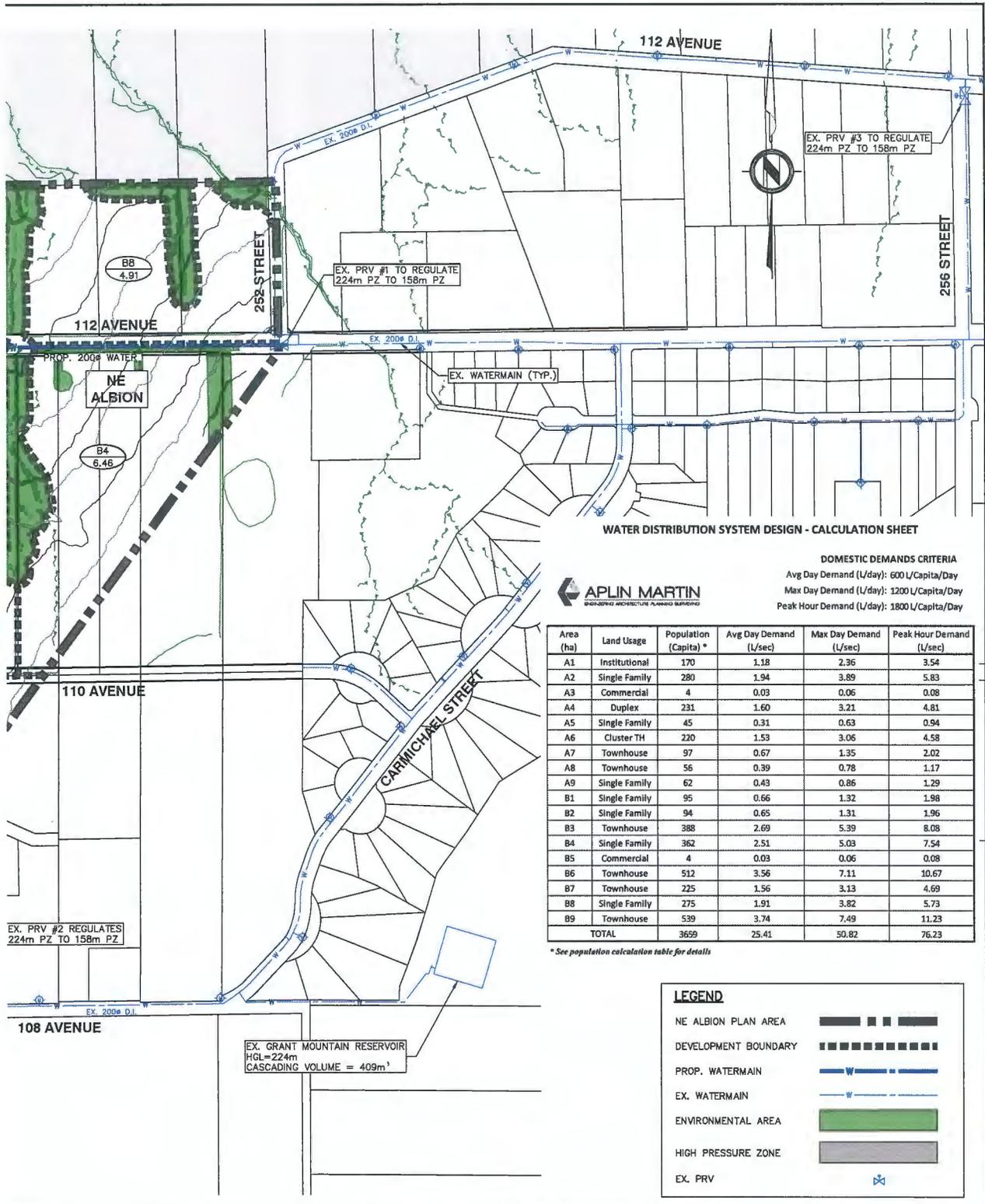
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**APLIN MARTIN**  
 ENGINEERING ARCHITECTURE PLANNING SURVEYING

Aplin & Martin Consultants Ltd.  
 201 - 12448 82 Avenue, Surrey, B.C. Canada V3W 3E9  
 Tel: (604) 597-9058, Fax: (604) 597-9061, Email: general@aplinmartin.com

PROJECT:  
**NE ALBIN LAND USE**  
 MAPLE RIDGE, B.C.

Drawing 301 - Water Master Plan



WATER DISTRIBUTION SYSTEM DESIGN - CALCULATION SHEET



**DOMESTIC DEMANDS CRITERIA**  
 Avg Day Demand (L/day): 600 L/Capita/Day  
 Max Day Demand (L/day): 1200 L/Capita/Day  
 Peak Hour Demand (L/day): 1800 L/Capita/Day

Area (ha)	Land Usage	Population (Capita) *	Avg Day Demand (L/sec)	Max Day Demand (L/sec)	Peak Hour Demand (L/sec)
A1	Institutional	170	1.18	2.36	3.54
A2	Single Family	280	1.94	3.89	5.83
A3	Commercial	4	0.03	0.06	0.08
A4	Duplex	231	1.60	3.21	4.81
A5	Single Family	45	0.31	0.63	0.94
A6	Cluster TH	220	1.53	3.06	4.58
A7	Townhouse	97	0.67	1.35	2.02
A8	Townhouse	56	0.39	0.78	1.17
A9	Single Family	62	0.43	0.86	1.29
B1	Single Family	95	0.66	1.32	1.98
B2	Single Family	94	0.65	1.31	1.96
B3	Townhouse	388	2.69	5.39	8.08
B4	Single Family	362	2.51	5.03	7.54
B5	Commercial	4	0.03	0.06	0.08
B6	Townhouse	512	3.56	7.11	10.67
B7	Townhouse	225	1.56	3.13	4.69
B8	Single Family	275	1.91	3.82	5.73
B9	Townhouse	539	3.74	7.49	11.23
<b>TOTAL</b>		<b>3659</b>	<b>25.41</b>	<b>50.82</b>	<b>76.23</b>

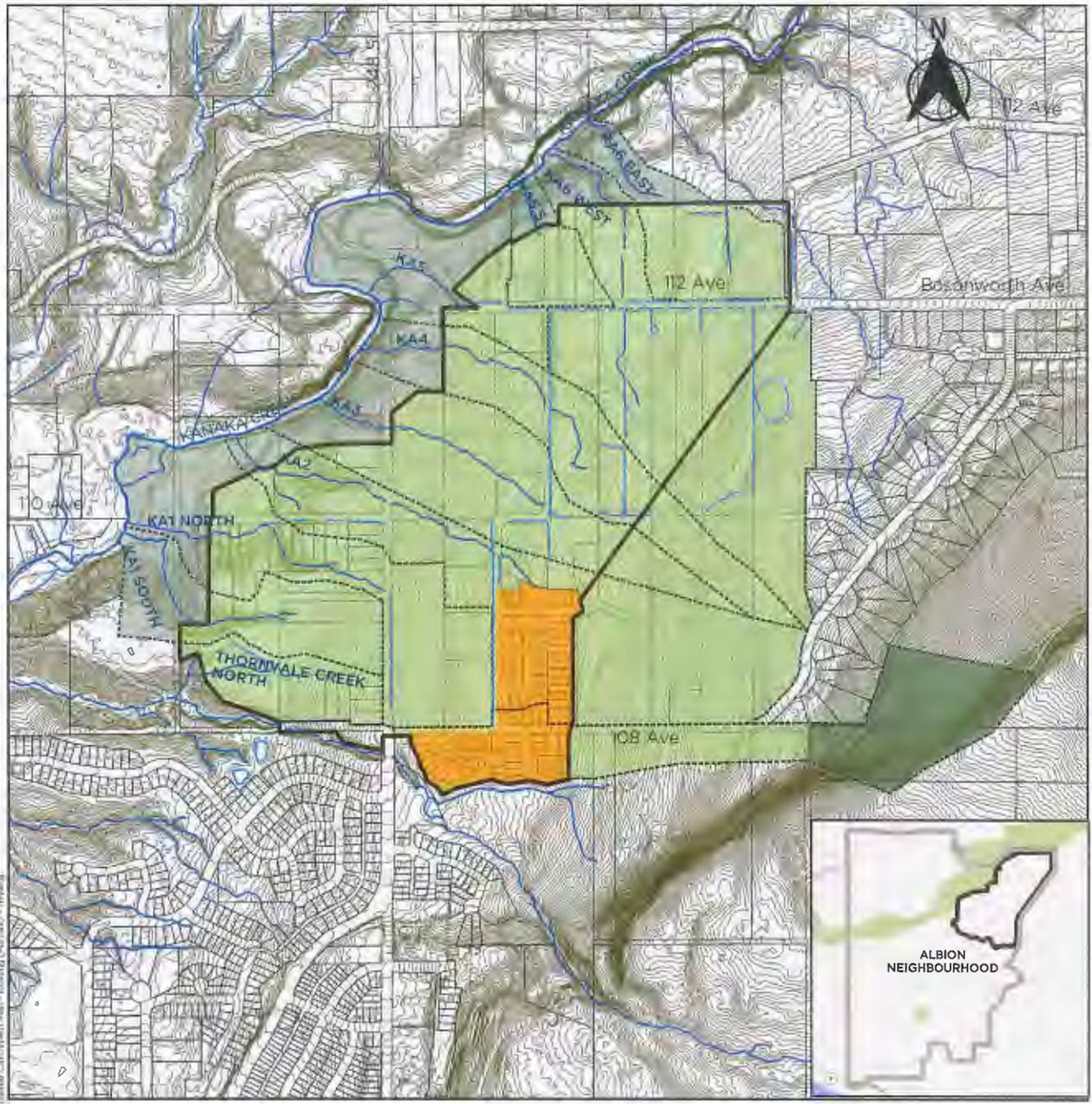
\* See population calculation table for details

LEGEND	
NE ALBION PLAN AREA	
DEVELOPMENT BOUNDARY	
PROP. WATERMAIN	
EX. WATERMAIN	
ENVIRONMENTAL AREA	
HIGH PRESSURE ZONE	
EX. PRV	

<b>&amp; SERVICING PLAN</b>	The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.	TITLE: <b>WATER MASTER PLAN</b>	DESIGN: YK DRAWN: KAL	CHECK: DB APPR: DE
		PROJECT NO. -	SCALE: HORZ. 1:3000 VERT. N/A	A & M FILE: <b>18-1022A</b> DRAWING DATE: <b>FEBRUARY, 2019</b>
DRAWING NO. -		A & M DRAWING NO. <b>18-1022A - 301</b>	SHEET NO. <b>301</b>	REV. -



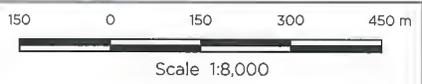
Sep 24 2019 10:28am M:\2018\18-1022A\DWG\PRELIMINARY MASTER PLANS\18-1022A-301 - Water Master Plan.dwg/301 DOMESTIC WATER LOADING DISTRIBUTION PLAN Y.km



41-2019138-1022A (18-1022A) - Final Land Use and Stormwater Catchment Plan - Existing (Draft) - 11/20/19

### Legend

- |                              |                                |
|------------------------------|--------------------------------|
| North-East Albion            | Existing Land Use              |
| Existing Drainage Boundaries | Metro Vancouver Park           |
| Contour (1m Interval)        | Agricultural                   |
| Watercourse                  | Rural                          |
| Ditches/Unconfirmed Streams  | Low Density Residential        |
|                              | Low/Medium Density Residential |
|                              | Medium Density Residential     |

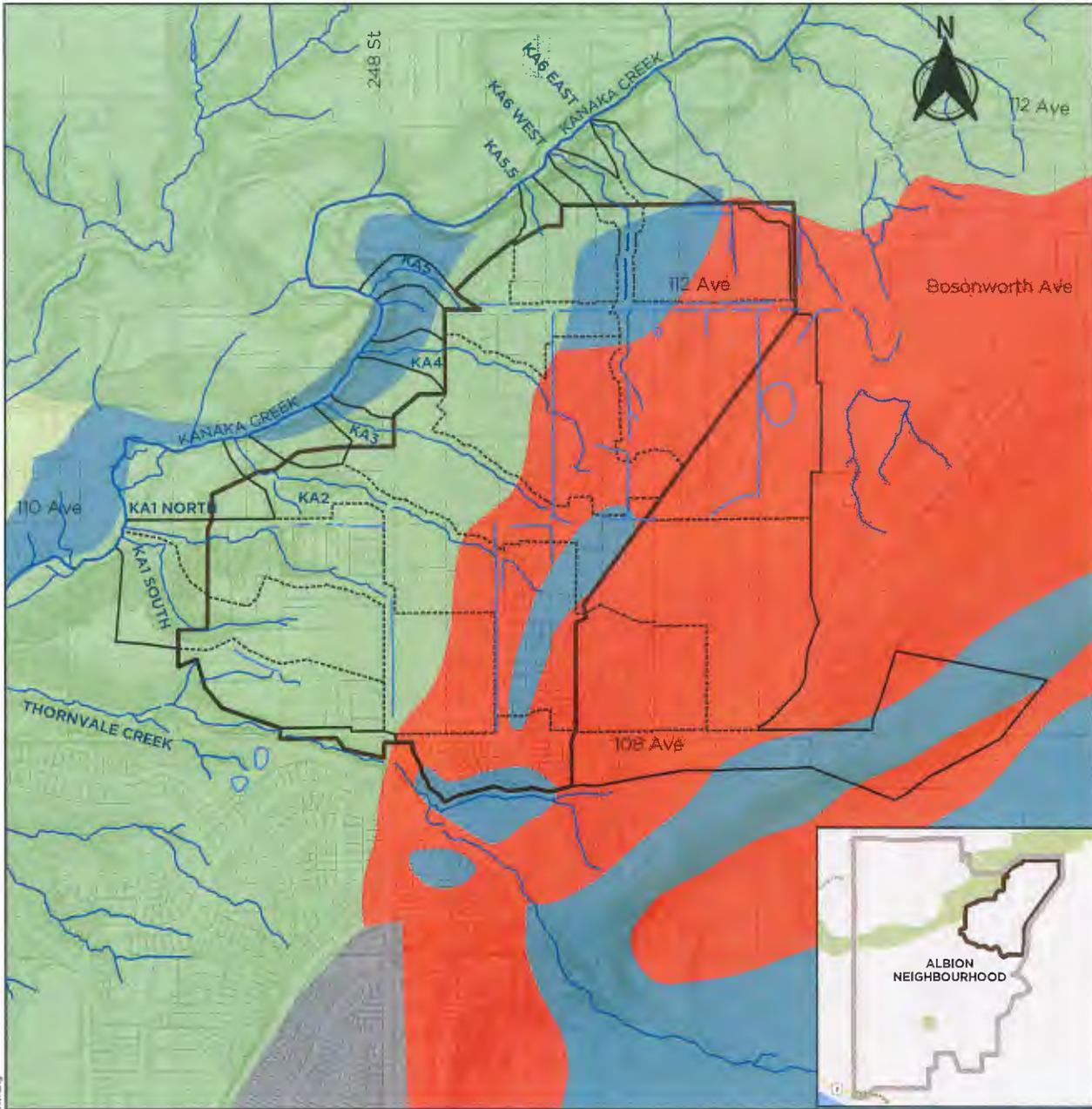


NE Albion  
Land Use and Stormwater  
Catchment Plan - Existing

Project #: 18-1022A Author: HW Checked: WXY Status: Draft Revision: A Date: 2019/09/19	 18-1022A - 401
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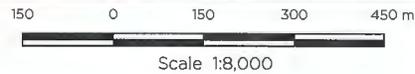
Drawing 401 – Land Use and Stormwater Catchment Plan - Existing





**Legend**

- |                                      |                        |
|--------------------------------------|------------------------|
| North-East Albion                    | L - Loam               |
| Contour (1m Interval)                | SL - Sandy Loam        |
| Extent of Drainage Boundaries        | SIL - Silt Loam        |
| Post Development Drainage Boundaries | SICL - Silty Clay Loam |
| Watercourse                          | Gravel Pit             |
| Ditches/ Unconfirmed Streams         |                        |

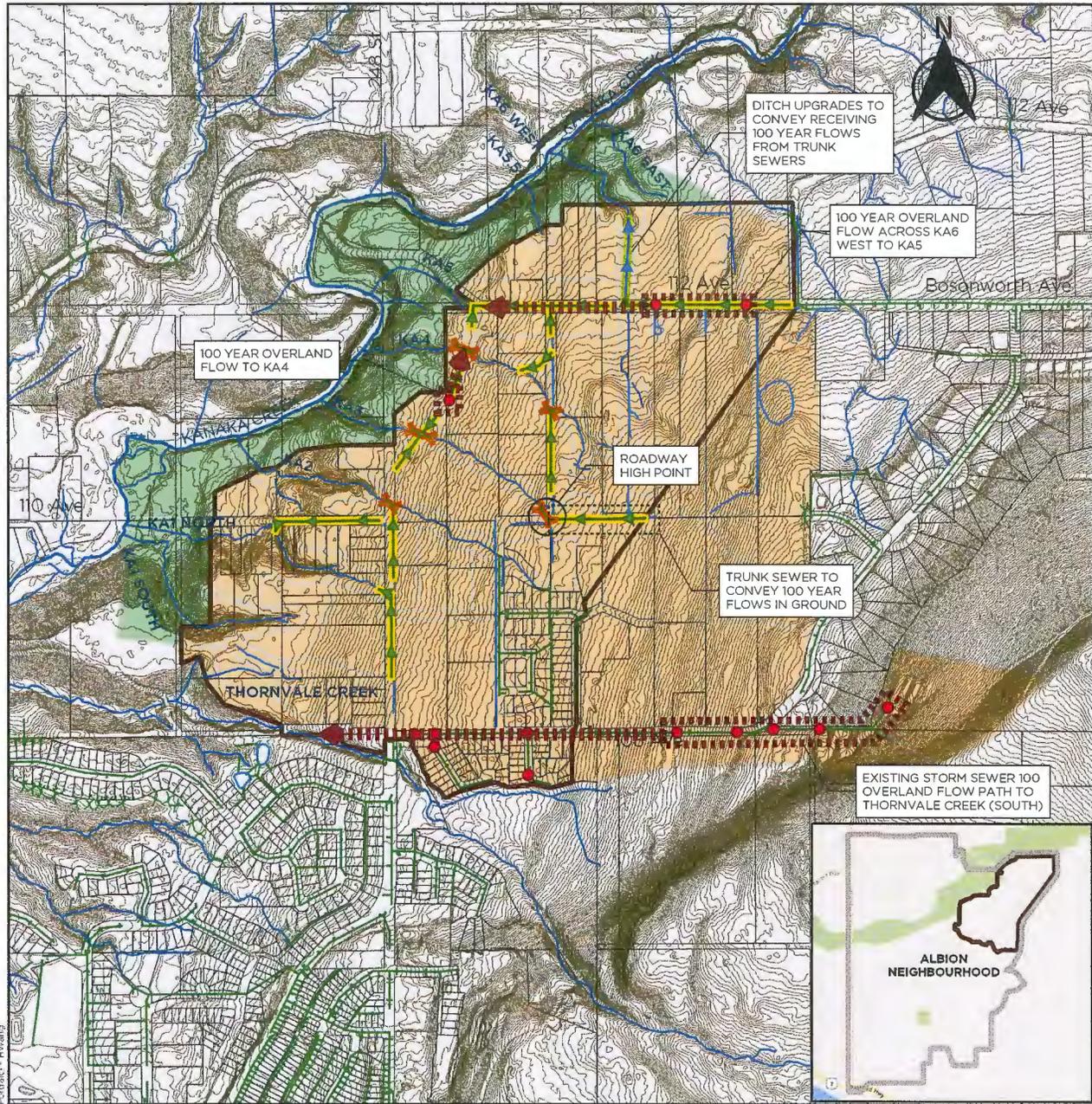


NE Albion Soil Map	
Project #: 18-1022A Author: HW Checked: WXY Status: Draft Revision: A Date: 2019/09/13	 18-1022A - 403

H:\2019\18-1022A\GIS\Map - Figures\City\Map - 18-1022A - 403 - Soil Map (Portrait) - HWang  
 Surficial Geology Information Source: Soils of the Langley - Vancouver Map Area - British Columbia Soil Survey (Luttmerding, 1981); FGDB published 2016-06-23 by British Columbia - Data Catalogue

Drawing 403 - Soil Map





M:\2019\18-1022A\GIS\Map1 - Figures\CYC.apz 18-1022A - 405 - 100 Year Flow Path (Plot) - HWain7

### Legend

- |  |                                 |  |                                              |
|--|---------------------------------|--|----------------------------------------------|
|  | North-East Albion               |  | Existing Storm Culvert                       |
|  | Contour (1m Interval)           |  | Proposed Trunk Main                          |
|  | Watercourse                     |  | Proposed Trunk Culvert                       |
|  | Ditches/<br>Unconfirmed Streams |  | Proposed Ditch Upgrades                      |
|  | Existing Storm Main             |  | Flooded Manhole under<br>100-year conditions |
|  |                                 |  | Overland Flow Path                           |



### NE Albion 100 Year Flow Paths

Project #: 18-1022A Author: HW Checked: WXY Status: Draft Revision: A Date: 2019/09/19	 <b>APLIN MARTIN</b>
18-1022A - 405	

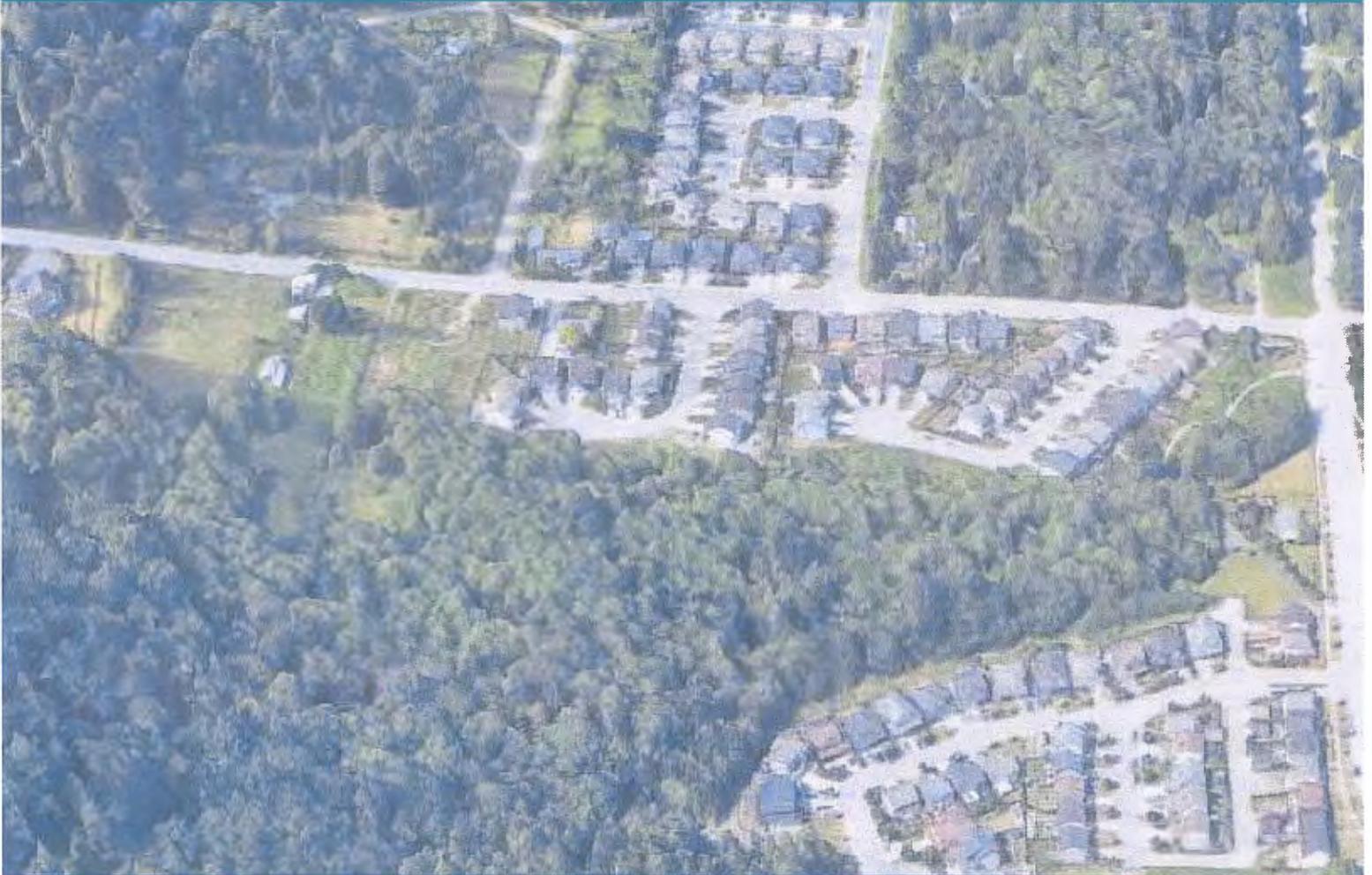
Drawing 405 - 100 Year Flow Paths

# PART 3 - CONCLUSION

## 13 | IMPLEMENTATION

Once the finalized North East Albion Land Use and Servicing Concept Plan is endorsed, Staff will prepare supporting policies, continue the discussion with the community, and ultimately initiate a formal process to adopt the Concept Plan into the Albion Area Plan as part of the OCP. The timeline for individual development applications will vary, but development applications may be submitted following Council endorsement of the North East Albion Concept Plan.

This report is preliminary in nature. Ground-truthing and detailed site analysis will be required in the future, on an application-by-application, site-by-site basis.



## Appendix B - Draft North East Albion Zoning Matrix

Land Use (Concept Plan)	Possible Zones
Mixed Use Commercial	C-5: Village Commercial **
Townhouse	RM-1: Townhouse ** "RT-2" Equivalent <b>NEW ZONE</b> RST: Street Townhouse R-2: Urban Residential District R-3: Special Amenity Residential District
Cluster Residential	RM-1: Townhouse ** "RT-2" Equivalent - <b>NEW ZONE</b> RST: Street Townhouse
X-Plex	"RT-1/RT-2" Equivalent - <b>NEW ZONE</b>
Single Family	R-1: Single Family Residential RS-1b: Single Family Residential ** RS-1: Single Family Residential
Single Family	RS-1c: Large Lot Residential RS-1d: Large Lot Residential **
School / Park	P1 through P6

\*\* Density Bonus Option

## **APPENDIX C - ENGAGEMENT SUMMARY:**

Engagement activities completed to-date can be broken down into three main themes: building resident awareness, local stakeholder and landowner engagement, and soliciting wider community input collected through two Open Houses.

### **a) Project Kick-Off**

To announce the North East Albion Planning Process, staff developed a unique colour scheme and project logo. These were used to develop a post-card announcing the project and upcoming public engagement opportunities. In March 2019, the post card was sent via direct mail to registered landowners in the North East Albion Area. The post card was also sent, via neighbourhood mail, to Albion Area residents. Approximately 3,775 post-cards were sent out announcing the project, upcoming public engagement opportunities, and directing residents to the City's website for more information. See the post card used to announce the process in Appendix C(1).

### **b) Pop-up with a Planner**

In March 2019, staff "popped-up" throughout Albion to build awareness about the North East Albion Planning Process. Through these Pop-Ups, staff were interested in hearing what types of housing forms, commercial services, and amenities the community envisioned for this area. At these Pop-Ups, attendees were able to ask questions, learn about the process, and sign-up for the project e-newsletter to stay up to date on the project. City staff and consultant representatives were available to answer questions on the process. Key messages heard through the Pop-Up events are outlined in Appendix C(1). The five Pop-Ups took place at the following:

- Wednesday March 13<sup>th</sup> 2019 at Kanaka Creek Coffee (#101-24155 102 Ave) 4:00 – 6:00pm
- Saturday March 16<sup>th</sup> 2019 at Save-On-Foods (23981 Dewdney Trunk Road) 11:00am – 2:00pm
- Monday March 25<sup>th</sup> 2019 at Samuel Robertson Technical Sports Fields (10445 245 Street) 9:00am – 12:30pm
- Wednesday March 27<sup>th</sup> 2019 at Kanaka Creek Coffee (#101-24155 102 Ave) 5:00 – 8:00pm
- Sunday March 31<sup>st</sup> 2019 at Bell Irving Hatchery (11450 256 Street) 1:00 – 4:00pm

### **c) Stakeholder Meetings**

Throughout March and April 2019, staff and the consultant team sought to engage a number of local and regional stakeholders. Meetings took place with School District No. 42, Metro Vancouver, as well as KEEPS (Kanaka Education & Environmental Partnership Society). Additional stakeholders, such as the Haney Horsemen have been informed and engaged in the process through regular City communication channels.

### **d) Landowners' Workshop**

Recognizing that landowners have specific interests in area planning processes, landowners were invited to participate at a Landowners' Workshop on Wednesday, April 17<sup>th</sup> at Samuel Robertson Technical Secondary School. Registered landowners were sent a letter through the post inviting them to attend. Approximately 201 letters were sent out, 28 people RSVP'd with 16 people attending the Landowners' Workshop.

The Landowners' Workshop, facilitated by Michael Von Hausen Urban Planning & Design, identified what landowners consider instrumental to building a great neighbourhood, as well as the opportunities and challenges for the North East Albion Area. Overall, it was articulated that participants are

interested in a diversity of housing types, comfortable streetscapes, recreational opportunities, trail networks, and walkable small-scale commercial opportunities.

Participants also articulated concerns with increased development impacts on the environment, as well as local infrastructure capacity, including servicing, parking and traffic. A summary of the conversation and dialogue at the Landowners' Workshop is available in Appendix C(2).

#### **e) Technical Design Charrette**

Staff and institutional stakeholders (School District 42 and Metro Vancouver) undertook a facilitated Technical Design Charrette on Wednesday April 24<sup>th</sup> and Thursday April 25<sup>th</sup> in collaboration with the team of consultants. The Charrette took place at City Hall and was a technical exercise that explored and refined possible land uses and development forms, based on the background research done to-date as well as what was heard through the consultation activities.

The focus of the Technical Design Charrette, in keeping with the public's key message, was the creation of a more 'complete community' where residents can live, work and play. Through the earlier outreach events, it was heard clearly from participating residents and landowners that few opportunities exist in Albion for convenient shopping, neighbourhood-oriented gather spaces, and pedestrian and cycling connections. To support a more complete vision for the area, a number of elements were explored through the Design Charrette. This included a mix of housing opportunities, as staff recognize from a technical perspective the need to provide a variety of housing options in order to support the desired amenities and commercial opportunities. As well, staff also heard that housing affordability is a concern, which further emphasizes the importance of offering a wider array of housing choices in North East Albion.

Other key design drivers were examined through the Technical Design Charrette and served as the building blocks for the development of draft North East Albion Concept Plans. These included: the identification of environmental features and significant tree clusters to be preserved; the celebration of surface water by incorporating stormwater management features along multi-use pathways; integrating and enhancing existing trail networks for pedestrians, cyclists and equestrians as a way to retain the current rural character of the area; the protection and enhancement of existing watercourses as well as groundwater and aquifer re-charge sources; the provision of wildlife management corridors to allow wildlife to move through the area while reducing the possibility of wildlife encounters; clustering housing forms such as multi-family residential around either the co-located Neighbourhood Park and Elementary School and/or the village commercial node; and incorporating additional Neighbourhood Park opportunities to help serve the recreational needs of North East Albion residents. In addition, the earlier research indicated that the proposed servicing strategy provided sufficient servicing capacity for the proposed new development in the area.

The outcome of the technical design charrette resulted in two initial neighbourhood concept plans: Concept #1: Thornvale Village; and Concept #2: Kanaka Gateway. Both concepts include the co-located neighbourhood park and elementary school, a second neighbourhood park, and a recreational trail network through the neighbourhood. The two concepts are available in Appendix C(3).

- Concept #1: Thornvale Village proposes a Village Commercial Node at 109<sup>th</sup> Ave and 248<sup>th</sup> Street, near the proposed Elementary School, with multi-family residential units clustered around the School to provide local retail support. The concept also proposes single family homes east of Lockwood Street in order to facilitate the transition to multi-family developments along or near 248<sup>th</sup> Street.

- Concept #2: Kanaka Gateway proposes a Village Commercial Node at 112<sup>th</sup> Ave and 248<sup>th</sup> Street. The concept proposes clustering multi-family residential units around the Village Commercial Node as well as apartment over commercial uses in the node itself. Single family homes are located adjacent to the co-located Neighbourhood Park and Elementary School.

While the Technical Design Charrette was a valuable exercise in helping to assemble the various research insights and public interests that were revealed to this point in the process, several technical questions remained following the Charrette. In particular, the road network and specifically the alignment of 112 Avenue was identified for further evaluation noting that the City's Strategic Transportation Plan identifies the policy need for a 112 Avenue - 108 Street Connector, potentially along the slope of Grant Hill, to provide a complete east-west route. Beyond functionality, the route is also premised on providing enhanced access for the City's emergency services and the route has been identified as a future bicycle route. As well, additional work on the placement of the proposed sanitary pump station on 112<sup>th</sup> Avenue was identified as needing more evaluation and discussion.

#### **f) Landowners "Sneak Peek"**

As a further effort to ensure Landowners were kept informed of the North East Albion process, they were invited to view the initial outcomes of the Technical Design Charrette at a North East Albion Post-Charrette "Sneak Peek" on Thursday, April 25<sup>th</sup> at Samuel Robertson Technical School. Approximately 201 letters were mailed out, with approximately 20 people attending the Landowners "Sneak Peek".

At the Sneak Peek, information boards summarizing the background research and review done to-date were available. The two initial Land Use Concepts Plans were presented and landowner input was solicited. Broadly, the landowner attendees were in support of the proposed school site and trail network. In addition, broad levels of support were received for the proposed small scale commercial services and uses within walking distance, the improved streetscapes for pedestrians, maintaining and enhancing access to nature and existing greenways, as well as the improved options for housing choice and affordability. Questions were raised about the number of future residents proposed for the area and how that would fit with the area and services available. Questions were also raised over parking, traffic, the viability of commercial services, and the protection of greenspaces. Copies of the comments received at the Sneak Peek are available in Appendix C(4).

#### **g) Emerging Ideas Open House**

Based on the initial landowners' feedback, along with more detailed information from the areas identified as needing further study, the two land use concepts were then evolved. To ensure broad input from the Albion community was integrated in the proposed land use concept plans, the refined land use concepts were subsequently presented to the community through an Emerging Ideas Open House, which took place on Thursday, May 16<sup>th</sup> 2019 from 5:30 - 8:30pm at Samuel Robertson Technical School. The intent of the Open House was to solicit wider Albion community feedback on the two land use concepts emerging from the Charrette. Approximately 3,775 post-cards were mailed out announcing the Open House, an e-mail invitation was sent out to 80 individuals who had expressed interest at previous events to stay informed, two newspaper ads ran in the Maple Ridge Pitt Meadows News, as well as promotion through the City's website and social media channels. Approximately 60 people attended the Emerging Ideas Open House.

At the Emerging Ideas Open House, detailed information boards summarizing the background research were augmented with more information from the on-going consultant studies to provide greater clarity. In particular, more information was made available on the trail network, the types of proposed housing forms, and potential alignment options for the Strategic Transportation Plan's 112 Avenue - 108 Street Connector.

Throughout the Open House, there were interactive opportunities for participants to share their thoughts on the proposed plans. A community survey was also available at the Open House and was available online until May 31<sup>st</sup>, 2019.

### i) Survey Response

Approximately 55 people completed the North East Albion Survey, 23 surveys were completed at the Open House on May 16, 2019 and 27 surveys were completed using the online platform.

From the responses received, 89% of the participants identified that they live in Maple Ridge and of that group, 35% of the respondents stated that they lived in the North East Albion Area.

### ii) Residential Lot Size, Housing Type and Tenure

Survey participants were asked to identify how they felt about the lot size of single family homes in the future of North East Albion; the options for the types of lots and general lot size are summarized in the table on the following page. The survey results indicated the most support for Medium Lot Single Family (63% either strongly agree or agree) and Small Lot Single Family (62% either strongly agree or agree). In comparison, the Large Lot Single Family received the least amount of general support (51% either strongly agree or agree).

Single Family Lot Size	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Large Lot Single Family (1,200 sq m - 4,000 sq m / 0.5 - 1 ac)	32%	19%	11%	19%	20%
Medium Lot Single Family (550 - 1,200 sq m / 5,900 - 12,900 sq ft)	22%	41%	13%	7%	17%
Small Lot Single Family (200 - 550 sq m / 2,100 - 5,900 sq ft )	32%	30%	6%	13%	19%

Respondents were asked to identify how they felt about the proposed multi-family residential units clustered around key areas of the North East Albion area. The housing form that received the highest level of general support was Duplex (52% either strongly agree or agree) and Triplex/ Fourplex/ Courtyard Developments (52% either strongly agree or agree), followed by Townhouse/ Rowhouse (49%) and Apartments over Commercial (43%), and Low-Rise Apartments (36%). The results suggest that participants felt comfortable with up to 3 storey heights and a mix of housing types within the North East Albion area.

Multi-Family Housing Type	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Duplex (up to 2.5 stories)	24%	28%	26%	9%	13%
Triplex/ Fourplex/ Courtyard Developments (up to 2.5 storeys)	32%	20%	17%	11%	19%
Townhouse/ Rowhouse (up to 3-4 storeys)	32%	17%	9%	15%	26%
Low-Rise Apartments (up to 4 storeys)	13%	23%	15%	13%	36%
Apartments over Commercial (up to 4 storeys)	26%	17%	17%	15%	26%

Respondents were also asked where multi-family residential units could be clustered. Respondents strongly agreed that multi-family units could be located adjacent to the future elementary school site and co-located neighbourhood park (63% either strongly agree or agree) or located adjacent to the commercial node (60% either strongly agree or agree). The results also indicated support for clustering multi-family near the 112<sup>th</sup> Avenue / 248<sup>th</sup> Street intersection (52% either strongly agreed or agreed) with many participants indicating that they generally agree with clustering multi-family along major roads (35%).

Additionally, respondents were asked to identify what housing priorities should be incorporated into the future planning of North East Albion. The responses received indicated the highest support for

housing for growing families (52%), followed by housing for seniors (23%), and rental and affordable housing (including secondary suites and detached garden suites (15%).

### **iii) Village Commercial Node**

Respondents were asked to identify the most appropriate siting of the Village Commercial Node; two options were identified in the preliminary concept plans: (a) adjacent to the future elementary school site and co-located neighbourhood park or (b) adjacent to 112th Avenue & 248th Street.

The survey results indicated the highest level of support for option (a); 59% of participants strongly agree or agree with locating the Village Commercial Node adjacent to the future school/park site. In comparison, 45% strongly agreed or agreed with the siting location adjacent to 112th Avenue & 248th Street.

Survey participants were also asked to identify the types of uses that they would like to see incorporated into the Village Commercial Node. The results are as follows: 27% for more restaurants, pubs, or coffee shops, 25% for more shopping opportunities (i.e. local shops and services), 17% for more opportunities for arts & culture, 15% for more childcare services, 9% for more office/ local employment, and 7% other.

### **iv) Respondent Breakdown**

Survey results indicated that the majority of participants were aged between 35 – 44 years (30%) and 55 – 64 years (27%), followed by 16% between 45 – 54 years of age, 10% over the age of 65. Additionally, 9% preferred not to answer.

A majority of participants also indicated that they currently live in a Single Family Home (92%). The remaining 8% was equally distributed among Duplex, Triplex or Fourplex, Townhouse/ Rowhouse, Apartment, Secondary Suite/ Temporary Residential Unit, or Preferred Not to Answer.

Additionally, a majority of the respondents identified that they heard about the Open House event from the mailed out post-card (32%); other successful outreach methods included newspaper ads (15%), City of Maple Ridge Website (13%) and email notifications (12%).

Copies of the information boards, interactive activities, and community survey are available for viewing in Appendix C(5).

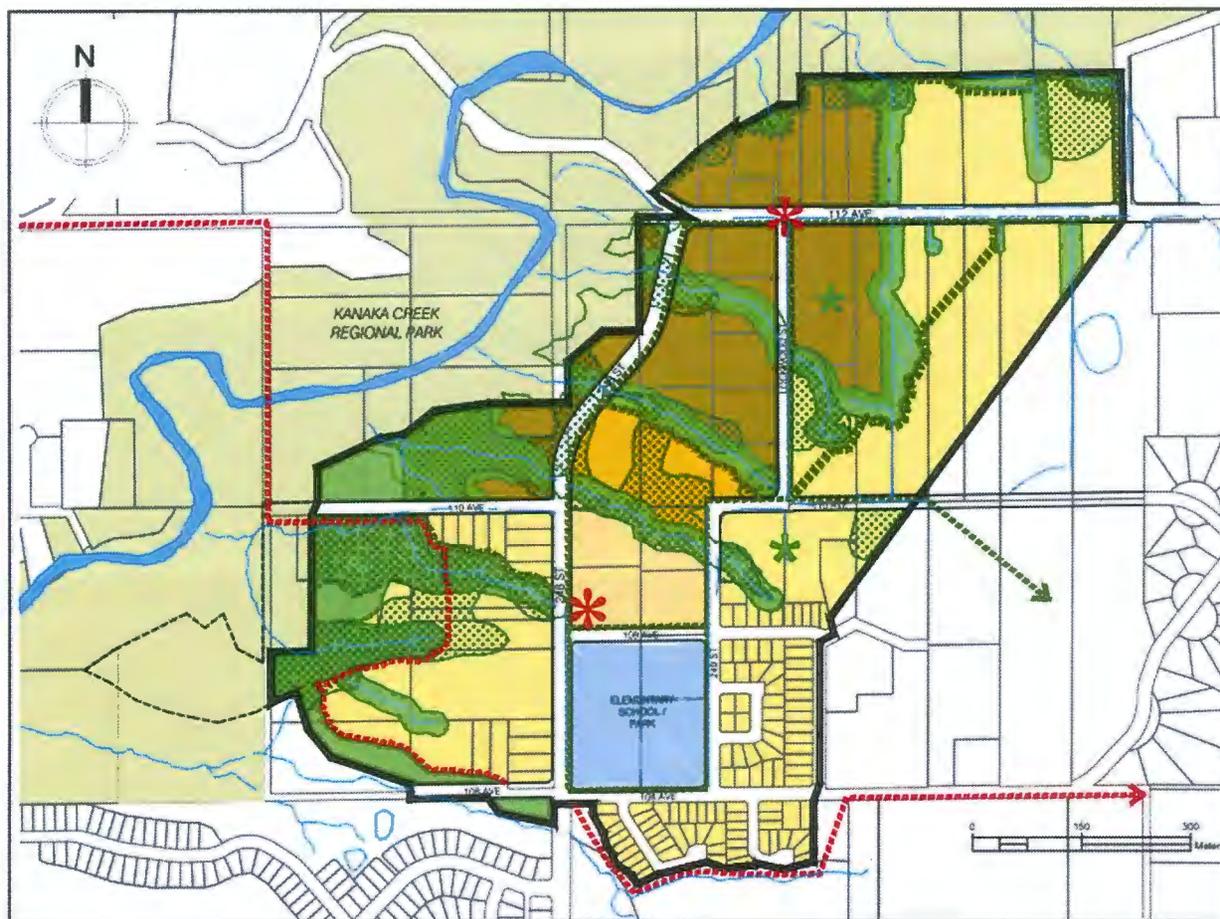
### **h) North East Albion Open House**

On Monday, June 24<sup>th</sup> 2019 from 5:30 – 8:30pm, a community-wide North East Albion Open House was held at Samuel Robertson Technical School, where a preferred concept plan incorporating earlier community and stakeholder input was presented for community review. The draft North East Albion Concept Plan (see next page) represents a combination of publically preferred elements from the two land use concepts presented at the May 16<sup>th</sup> Open House, based on the key messages heard through the Emerging Ideas community survey. It also incorporates further staff and consultant analysis and the findings of the ongoing research. The intent of the North East Albion Open House was to solicit wider community feedback on the proposed directions of the emerging North East Albion Neighbourhood Concept Plan.

Approximately 4,000 post-cards were sent out announcing the Open House. For this event, staff widened the distribution given some comments received from Grant Hill area residents at the prior Open House regarding the road alignment options. An e-mail invitation was also sent out to 150 interested individuals. In addition, two newspaper ads ran in the Maple Ridge Pitt Meadows News, as well as promotion on through the City's website social media channels. There were interactive opportunities for participants to share their thoughts on the proposed plans. A community survey was

also available at the Open House and was available online until July 12<sup>th</sup>, 2019. Approximately 80 people attended the North East Albion Open House.

## Draft North East Albion Neighbourhood Concept Plan



### Legend

- SINGLE FAMILY
- DUPLEX, TRIPLEX, FOURPLEX
- CLUSTER TOWNHOUSE
- TOWNHOUSE
- SCHOOL / PARK
- METRO VANCOUVER PARK
- ENVIRONMENTALLY SENSITIVE AREAS
- SIGNIFICANT TREE CLUSTERS
- MULTI-USE TRAIL
- EQUESTRIAN TRAIL
- POTENTIAL PARK SITE
- VILLAGE COMMERCIAL NODE (GROUND-LEVEL RETAIL)

The draft North East Albion Neighbourhood Concept Plan integrates pieces from both Concept Plans presented at the May 16<sup>th</sup> Open House as well as elements of what was heard through the community survey. Broadly, the concept includes:

- General location for up to two Neighbourhood Parks with play features for a range of ages.
- A co-located neighbourhood park and Elementary School with a full-sized sportsfield as well as looping trails and playgrounds.
- Multi-use pathways that connect North East Albion with South Albion as well as Kanaka Creek Regional Park, including Cliff Falls.
- Maintaining equestrian connections through the area.
- Protecting the health and integrity of the watercourses that flow into Kanaka Creek.
- Two locations for village commercial nodes that may include low-rise townhouse or apartments above ground-level commercial space allowing for market response to build overtime.
- Multi-family residential units around the proposed northern village commercial node.
- Integrating clustered townhome developments to maximize environmental preservation and significant tree stands in specific environmentally sensitive areas.
- Including ground-oriented multi-family homes that appear as single family to sensitively add density to the area and provide more housing choice for future residents.
- Locate larger lot single family homes adjacent to existing single family neighbourhoods and along the Urban Area Boundary, lessening development pressures for the rural areas.

To help evaluate the proposed land use concept, staff have also identified that the draft North East Albion Concept Plan offers approximately 60% of the land area to single family development and about 40% of the area for multi-family residential uses, including ground-oriented triplex/fourplex units, cluster townhouses, and townhouse developments. For comparison purposes, this land use mix appears to be consistent with the range of uses outlined generally across the broader Albion Area, where the land use mix is about 65% single family and 35% multi-family. It is noted, however, that the original land use focus for the North East Albion area was mainly single-family, with a focus on medium-sized lots and small lot sizes. In light of that, and as discussed with the community, staff acknowledge that the introduction of greater medium density ground oriented multi-family uses to the North East Albion area is a departure from the earlier policy base. However, staff also point out that the land uses previously identified for North East Albion were considered as placeholders, as policy indicated that more study would be needed to determine the appropriate land use mix, levels of amenities, and servicing strategies.

### **i) Survey Responses**

Of the 4,000 postcards and 200 letters sent to known property owners in the Albion Area, approximately 40 people completed the North East Albion Survey. From that group, 34% of the participants identified that they live in North East Albion, 32% in Albion (Outside of North East Albion), and 27% within Maple Ridge (Outside of Albion).

Respondent were asked to identify up to three things they liked about the draft North East Albion Neighbourhood Concept. Common responses included:

- Location of the co-located Elementary School and Neighbourhood Park.
- Integration of community amenities, including local parks and trail network.
- How natural features served as a key element of the draft Concept Plan, including bordering environmental areas with multi-family development for stewardship purposes and the identification of significant tree clusters.
- Creating local hubs and clustering community amenities (i.e. park and commercial services).

- Incorporating a variety of housing types to improve housing choice and opportunity for residents.

Respondents were also asked to identify areas that they felt needed improvement in the draft North East Albion Neighbourhood Concepts. Common responses include:

- Questions about the proposed transportation network, given current commute and parking challenges faced by Albion residents today, the potential for traffic control/calming, and the road capacity and design of 112th through Kanaka Creek Park.
- Discussion over the appropriate size and location of the proposed Village Commercial Node(s). Some clearly identified a preference of one location over another and identified different sizes that they felt would be more appropriate for the area given the current landscape. Others provided more general comments.
- Uncertainty about the proposed densities of future land uses and the impact to the existing and rural neighbourhoods. Questions have been raised regarding the 'fit' of townhomes in this area. Contrastingly, comments have also been received regarding more townhomes (or smaller residential units) to improve homeownership opportunities in the area and specifically call for some currently designated single-family areas to have a multi-family future.
- Comments calling for additional wildlife corridors, given particular concern for the resident bear population, and greenspaces for the area.
- Interest in the sort of services that may be available at the Commercial Node(s) and through the Neighbourhood Parks.

Other comments received through the survey include:

- Consideration of the impacts of any future east-west connectivity through to Grant Hill and request for consultation on this strategic transportation connection.
- Consideration that development in the Town Center may be more appropriate than in the North East Albion.
- Consideration for a range of commercial uses at the Village Commercial Node(s), including childcare facilities, to service the future residents of North East Albion.
- Consideration of traffic safety at Jackson Road & 104th Ave as well as at 112th & Palmer Rolph.
- Consideration for additional wildlife corridors and greenspace within the plan area.
- Frustration with expansive development trends within the City without the employment and transportation infrastructure to support the future residents.
- Acceleration of the co-located park & elementary school planning process as well as consideration for future secondary school capacity.
- Appreciation for the proposed storm water management strategy and focus on environmental features.
- Appreciation for the consultation process and efforts to integrate community and stakeholder comments.

Despite the generally positive feedback heard at the Open House, and throughout the process to-date, staff noted one instance where contradictory feedback was received. Namely, the June survey indicated that only 27% of respondents either strongly agree or agree with the plan, while 24% indicated neutrality, and 48% either disagree or strongly disagree with the proposed concept plan.

Given the contradictory nature of the comments received, staff examined the survey and the responses in more detail. From that review, and again based on discussions held at the June 24<sup>th</sup> Open House, there appears to be a heightened concern from residents around the Grant Hill neighbourhood about the potential for an 112<sup>th</sup> Avenue – 108 Street Connector as a result of the North East Albion planning process.

Specifically, Grant Hill residents were encouraged through a letter (available for review in Appendix C) circulated by private residents in the Grant Hill/Whonnock areas to attend the June 24<sup>th</sup> Open House and provide comment. As noted earlier, the exploration of the 112<sup>th</sup> Avenue – 108 Street Connector was rooted in policy direction under the City's Strategic Transportation Plan and Official Community Plan, and the intent of the North East Albion assessment was to satisfy that any land use or servicing concept plan did not rule out the potential for a future connector. As part of the servicing review for the North East Albion Area, the consultants did review the road alignment options for 112<sup>th</sup>, and have determined that 112<sup>th</sup> will follow its existing route. As identified at the Open House, the exact alignment of any future Connector has not been determined, and would be the subject of a future process and analysis. However, despite such information, it appears that many attendees have expressed concern about the route alignment, the process, and would like an update on the preliminary road alignment. Noting this interest, Engineering have indicated that the topic of a future 112<sup>th</sup> Ave – 108<sup>th</sup> Street Connector alignment will be incorporated in the pending review of the Strategic Transportation Plan. Copies of the information boards and community survey are available for viewing in Appendix C(6).

**j) Additional Correspondence**

In addition to the comments received through the online survey, the City has received a few pieces of correspondence (available for review in Appendix C(7)). Staff have also received comments over the phone, including development inquiries, pending the outcome of the North East Albion Land Use and Servicing Concept Plan.



# Appendix C(2) - Landowners Workshop Material

## WHAT WE HEARD FROM LOCAL RESIDENTS

Here is a summary of the discussion with local residents during the North East Albion Landowners Workshop on Wednesday April 17th, 2019:

### WHAT MAKES A GREAT NEIGHBOURHOOD?

- **Knowing your neighbours**
  - ◆ Establishing a long term social network with residents
  - ◆ Friendly encounters
- **Commercial**
  - ◆ Small scale retail within walking distance
  - ◆ Large scale retail located within 10 min drive
- **Housing Types**
  - ◆ Diversity in housing types (not cookie-cutter)
  - ◆ Designed for privacy and noise reduction
- **Transportation, Infrastructure, Servicing**
  - ◆ Sufficient infrastructure to support population
  - ◆ Adequate street lighting and sidewalks
  - ◆ Ease of traffic and sufficient parking
  - ◆ Improve transit service
  - ◆ Connections to municipal sewer and water services
- **Amenities**
  - ◆ Parks, Recreation
    - ◆ Safe and well-maintained parks for all ages (including playgrounds)
    - ◆ Greenery and shade as well as preservation of forested areas
  - ◆ Trails & connections
  - ◆ Fire Station located nearby
  - ◆ Daycare
  - ◆ Schools
  - ◆ Library
- **Affordability**

### WHAT ARE THE OPPORTUNITIES IN NORTH EAST ALBION?

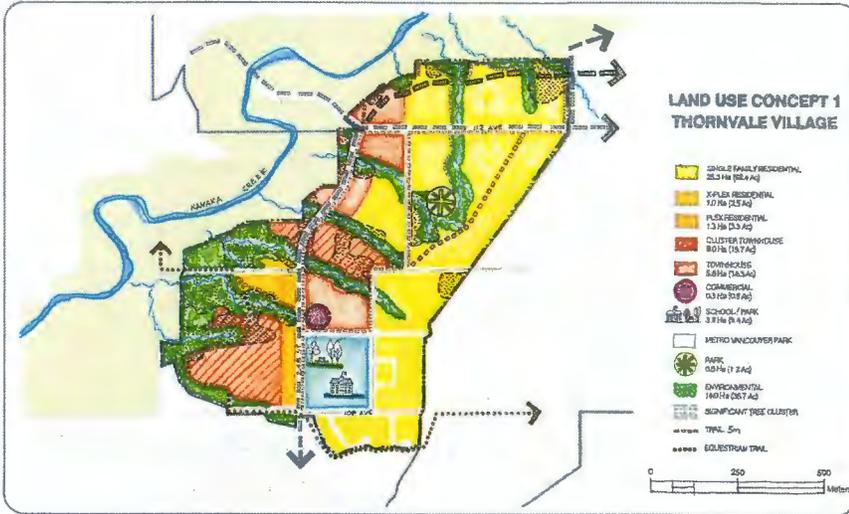
- **Streetscape**
  - ◆ Ornamental street lighting
  - ◆ Improved streetscapes with greenery
- **Transportation**
  - ◆ Improved transit to the West Coast Express
  - ◆ Creation of a Park & Ride nearby
- **Environment**
  - ◆ Protection of groundwater
  - ◆ Protection wildlife corridors
  - ◆ Improve and preserve access to nature
  - ◆ Keep the duck pond (Thornvale area)
- **Housing**
  - ◆ Townhouses with adequate green space
  - ◆ Remove derelict houses
  - ◆ Creating a diverse neighbourhood (low–medium density; large lot single family)
  - ◆ Plan sightlines for safety and privacy
- **Connected Trail Network**
  - ◆ Improvement of long standing equestrian trails.
  - ◆ Multi-modal (non-vehicular) pathways between developments
  - ◆ Improve access to Kanaka Creek Park
- **Commercial**
  - ◆ Small scale neighbourhood commercial
- **Multi-functional park and recreation spaces**
  - ◆ Sports fields & playgrounds
  - ◆ Spaces for dogs
  - ◆ Viewpoints

### WHAT CHALLENGES DO WE HAVE FOR NEW DEVELOPMENT?

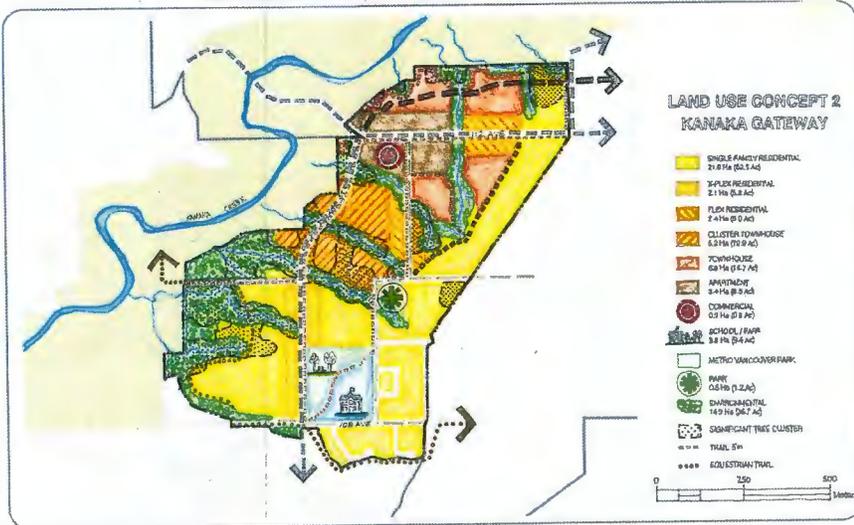
- **Traffic**
  - ◆ Traffic flow on Lougheed Hwy during peak hours
  - ◆ Limited local parking
  - ◆ Emergency routes and improved access
- **Crime**
  - ◆ Increased crime rates associated with development
- **112th Street**
  - ◆ Limited lighting and visibility through the park
- **Environmental threats**
  - ◆ Threats to pollution of ground water and wells
- **Development challenges**
  - ◆ Steep grades may impact housing designs
- **Other Resident Concerns**
  - ◆ General disruption to existing residents during construction
  - ◆ Loss of green space, natural assets, rural character
  - ◆ Balancing the scale of new amenities

# Appendix C(3) - Technical Design Charrette

## Concept #1: Thornvale Village

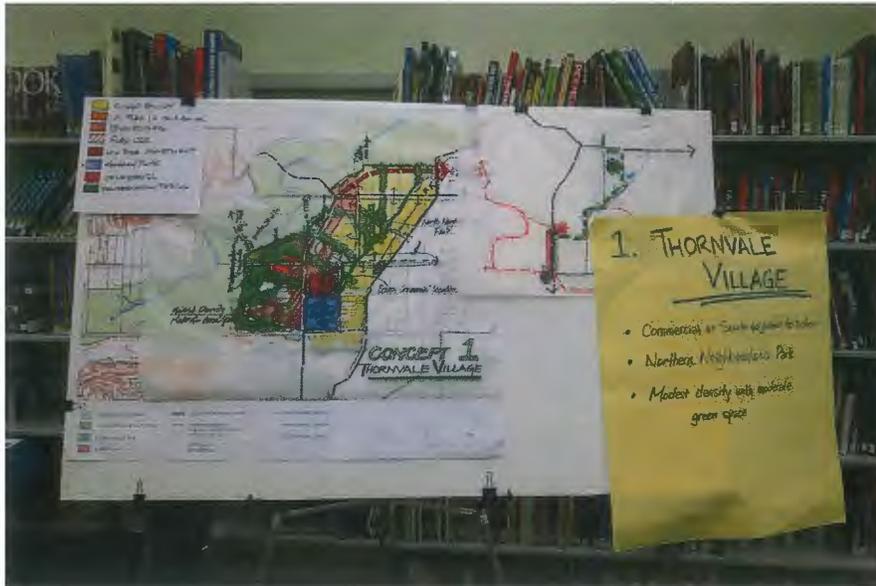


## Concept #2: Kanaka Gateway



# Appendix C(4) - Landowners "Sneek Peek"

## Concept #1: Thornvale Village



### What do you like about this concept?

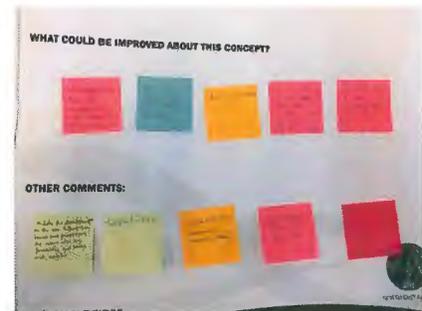
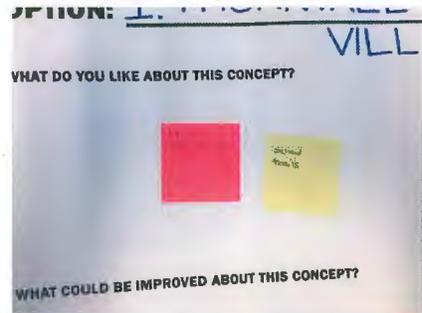
- Trails
- School
- Daycare

### What could be improved about this concept?

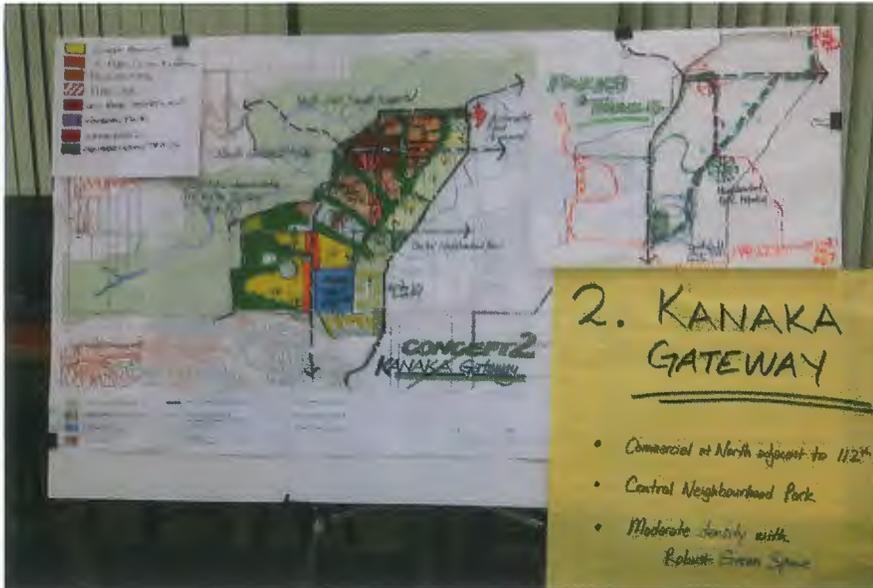
- No apartments - do not make area high density like Albion
- Preserve "Rural" Character that attracted us to buy in the first place.
- Don't overpopulate
- This is a poor area for commercial property. Next to a school is a bad idea. Too much land impact for a rural area.
- High density buildings / Apartments will ruin the natural / rural feel of this area.

### Other comments:

- Like the development in the area. Support more homes and preserving the nature also by protecting the trees and creeks.
- Conjested feeling.
- Concerns over commcerial business ideas
- Quality housing.
- Do not create another nightmare like lower Albion!



## Concept #2: Kanaka Gateway



### What do you like about this concept?

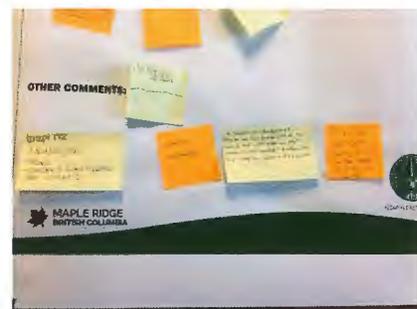
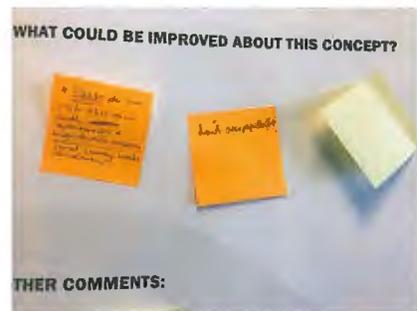
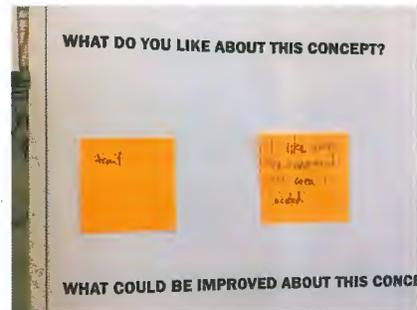
- Trails
- I like where the commercial use is located

### What could be improved about this concept?

- Please do not ruin this area with apartments and high density housing. Rural country roads, farming (hobby).
- Don't overpopulate
- No highrise condos

### Other comments:

- Concept 1 & 2: School / Day Care, Trails. Concept 2 functions better than Concept 1.
- Parks
- Walkways
- Support the development
- Do not like high density housing. This will ruin the natural feel of the area / rural feel.



# Appendix C(5) - Emerging Ideas Open House



**NORTH EAST ALBION EMERGING IDEAS**  
 Thursday, May 16<sup>th</sup>, 2019 from 5:30 - 8:30 p.m. at Samuel Robertson Technical Secondary School



Live



Play



Grow

## SHAPING THE FUTURE OF NORTH EAST ALBION

The City has been popping up across Albion to talk with residents, hearing from land-owners, and connecting with local and regional stakeholders. Based on these comments and the outcomes of technical studies, you are invited to view the initial neighbourhood concepts on May 16<sup>th</sup>, 2019.

### North East Albion Emerging Ideas Open House

**Thursday, May 16<sup>th</sup>, 2019**

Drop by between 5:30 – 8:30 p.m.

at

Samuel Robertson Technical Secondary School

10445 245 Street, Maple Ridge, BC

Please join us to learn more about the project, share your thoughts and provide input on the initial ideas.

For more information, please visit our website at [www.mapleridge.ca/2214](http://www.mapleridge.ca/2214) or email

[northeastalbion@mapleridge.ca](mailto:northeastalbion@mapleridge.ca)

Connect with us:  
 @YourMapleRidge  
 #LivePlayGrowNEAlbion



 **MAPLE RIDGE  
 BRITISH COLUMBIA**



**NORTH EAST ALBION**

**SHAPING THE FUTURE OF NORTH EAST ALBION**  
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 For more information, please visit our website at [www.mapleridge.ca/2214](http://www.mapleridge.ca/2214) or email

# WELCOME

To the City of Maple Ridge  
North East Albion Area  
EMERGING IDEAS OPEN HOUSE



NORTH EAST ALBION

Thank you for attending this Open House.  
At today's event you can:

**Learn More:** You are invited to review the boards we have on display to learn about the technical information gathered so far to inform this planning process.

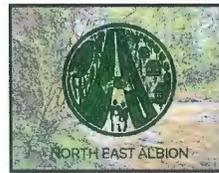
**Explore Ideas:** You are invited to explore our emerging ideas for the North East Albion area, including options for land use, trails and parks, retail location, and the kinds of residential housing forms.

**Ask Questions:** City Staff and members of Aplin Martin Consultants are here today to answer any questions you may have.

Fill out a survey! Paper and online surveys are available today. They are also available online at [www.mapleridge.ca/2214](http://www.mapleridge.ca/2214)



## PLANNING PROCESS



- JANUARY 2019 – PROJECT INITIATED BY COUNCIL**
- FEBRUARY – BACKGROUND REVIEW**
- MARCH & APRIL – POP-UP COMMUNITY OUTREACH**
  - 5 pop-up events were held around Albion to gain initial ideas and interest from Albion residents
    - March 13<sup>th</sup> at Kanaka Creek Coffee
    - March 16<sup>th</sup> at Save-On-Foods
    - March 20<sup>th</sup> at Samuel Robertson Technical
    - March 27<sup>th</sup> at Kanaka Creek Coffee
    - March 31<sup>st</sup> at Bell Irving Hatchery
- APRIL 17 – LANDOWNERS WORKSHOP**
  - A roundtable workshop was held for landowners in North East Albion to gather ideas and thoughts on the future of development in this area.
- APRIL 25/26 – DESIGN CHARRETTE & SNEAK PEEK**
  - Based on the community input gathered and the outcomes of a series of technical studies, a set of design principles and two draft land use concepts were created and later revealed to landowners on the same day.
- WE ARE HERE**
- MAY 16 – EMERGING IDEAS OPEN HOUSE**
  - Seeking input from Albion residents on some emerging ideas and preliminary concepts.
- EARLY SUMMER – PUBLIC OPEN HOUSE**
  - A refined draft plan will be prepared for public input, based on the input gathered today.
- LATE SUMMER / EARLY FALL – COUNCIL MEETING**
  - A final report and recommended plan will be presented to Council for endorsement.



## NORTH EAST ALBION AREA

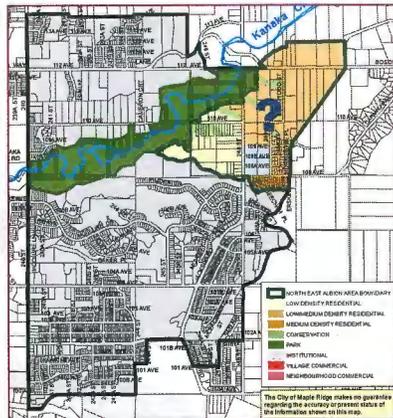
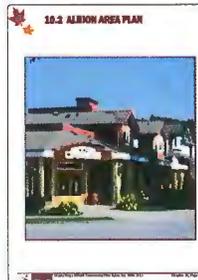
### WHY ARE WE HERE?

The Albion Area Plan was completed in 2011. At that time, the North East was identified as an area that would require further study and refinement in the future. In recent years, City of Maple Ridge has noticed increasing interest in North East Albion, including development inquiries and most recently, a development application submission.

In 2019, the City of Maple Ridge received approval and direction from Council to begin a Land Use and Servicing Concept Planning Process for North East Albion.

Over the past few months, the City has worked with several consultants to better understand the land use and servicing needs in this plan area, including amenity opportunities, housing diversity, environmental protection, school needs, parks and recreation, and servicing.

Today, we are looking for your input on some emerging ideas as illustrated on two preliminary concepts.

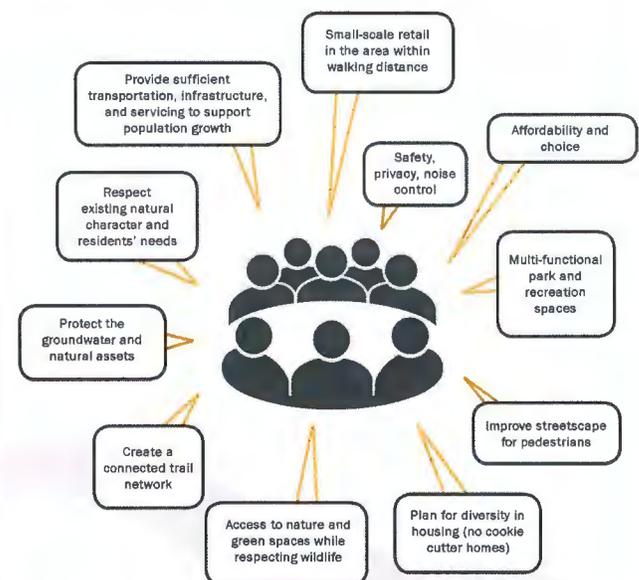


How do we want to live, work, play, and grow in North East Albion?



## WHAT WE HEARD

Feedback from previous engagement events:



## GUIDING PRINCIPLES

- 1 • **CELEBRATE KANAKA REGIONAL PARK**
  - Recognize it serves as a gateway to North East Albion
  - Incorporate wildlife management
- 2 • **MAINTAIN THE COMMUNITY'S ACCESS TO NATURE**
  - Work with the natural system
  - Positively affect the natural systems with innovative design
- 3 • **NURTURE A PLACE WHERE PEOPLE CAN LIVE, WORK AND PLAY**
  - Work with the land (i.e. topography, environment, stormwater management)
- 4 • **RESPECT EXISTING CHARACTER** (i.e. topography, environment, stormwater management, rural and natural character)
  - Maintain privacy through thoughtful design
  - Include noise reduction mechanisms
- 5 • **INVOLVE DIVERSE HOUSING, IN TERMS OF FORM, CHARACTER, TENURE, AND AFFORDABILITY**
- 6 • **PROVIDE ACTIVE OUTDOOR RECREATIONAL OPPORTUNITIES THAT MEET RESIDENT NEEDS** (i.e. within 5 minute walk)
- 7 • **INCORPORATE MULTI-MODAL TRANSPORTATION CHOICES**
  - Convenient
  - Inclusive for all-ages
  - Active opportunities: walking, running, equestrian, cycling
- 8 • **RECOGNIZE THE NEW SCHOOL AS AN IMPORTANT NODE OR HUB FOR THE AREA**
- 9 • **PROVIDE COMMUNITY SERVICES**
  - Appropriate commercial services
  - Include gathering places
- 10 • **SERVICED BY REALISTIC AND EFFICIENT SYSTEMS**

## TOPOGRAPHIC FEATURES



### STEEP SLOPES

From our studies of the land, we have learned that North East Albion is characterized primarily by a mix of moderate to significant slopes (10 to +25% grade) with smaller patches of relatively flat lands along the northern and western extent of the development area along the Kanaka Park interface.



The slopes in the NE Albion area will be an important consideration in the design and form of future proposed development and infrastructure in this area, as governed by the City's Hillside Management policies. According to the policy, slopes greater than 25% are to be preserved and will inform future development.



## NATURAL FEATURES

The following 3 boards provide an overview of physical site analysis, including:

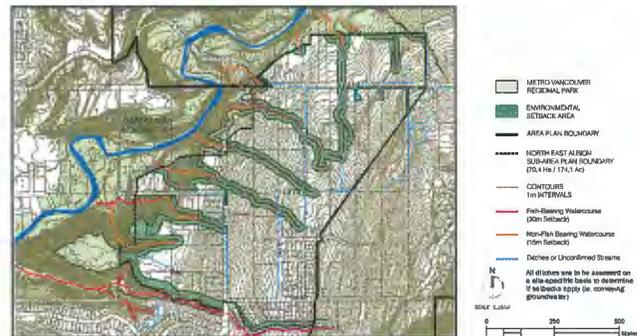
- Topographic Features
- Environmental Values
- Vegetation and Wildlife

These elements make up the baseline information used to understand the lands and habitat. This informs how the neighbourhood should be planned to protect the ecosystem and develop around important environmental assets.

Please note that the technical findings provided tonight are based on preliminary assessments at a conceptual planning level.

Future rezoning and development applications will require further ground-truthing and detailed design review at the time of application.

## ENVIRONMENTAL VALUES



### WATERCOURSES & RIPARIAN AREAS

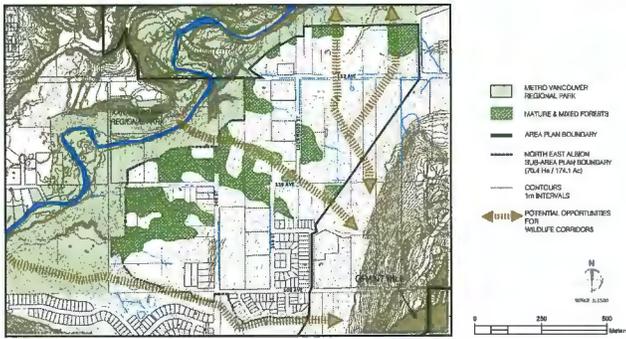
North East Albion slopes northwest and contains numerous tributaries/watercourses that feed into Kanaka Creek. The watercourses are primarily groundwater fed from the Grant Hill aquifer. Significant watercourses are proposed to be protected from development through riparian setbacks from the top-of-bank, as shown above.



These setbacks are important to preserve the quality and quantity of water and nutrients flowing from the area into Kanaka Creek Regional Park. Kanaka Creek provides vital ecological value and is to be protected and preserved.



# VEGETATION & WILDLIFE



## VEGETATION & WILDLIFE MOVEMENT

Environmentally-valuable features such as riparian and forested areas are considered "high-value vegetation".

The high-value vegetation in North East Albion is primarily along the watercourses. Additional pockets of forest are nearer to Kanaka Creek Regional Park.

It is important to establish and maintain habitat corridors in and around the North East Albion area. This allows wildlife to move between Kanaka Creek Park and Grant Hill, and reduces the risk of dangerous wildlife encounters.



Image: Black bear



Image: Moose



Image: Forested area example



Image: Cougar



# STORMWATER MANAGEMENT STRATEGY



## THE PROPOSED STORMWATER MANAGEMENT STRATEGY WILL:

- Protect fish and fish habitat by maintaining baseflows to Kanaka Creek and water quality in watercourses.
- Minimize potential for stream erosion by implementing drainage control measures that will best mimic pre-development conditions (1:10-year return period).
- Minimize frequent surface runoff by implementing a storm conveyance system that includes underground storm sewers, detentions, and culverts to safely convey drainage to watercourses (1:10-year return period).
- Ensure major storm conveyance system, including major road crossings, overland flow paths, and stream channels, are capable of safely conveying significant flows to minimize damage to life and property under extreme flood conditions (1:100-year return period).



Image: Stormwater example



Image: Storm sewer pipes example



Image: Site river rock ditch example



Image: Ditch infiltration and retention example



# INFRASTRUCTURE PROPOSED

The following 3 boards provide an overview of the infrastructure needed based on studies completed to date. These infrastructure strategies include:

- Stormwater Management Strategy
- Servicing Strategy: Sewer and Water
- Preliminary Road Alignment Options

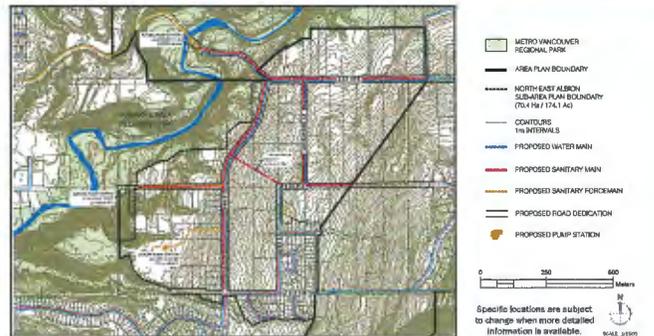
These strategies are designed to meet municipal engineering objectives and standards. Details and plans will be refined in the next stage of planning.

Please note that the maps and graphics provided tonight are based on conceptual designs at a land use planning level, setting the upper limits and feasible ranges.

Preliminary design will be completed after appropriate land use is determined, and detailed design will occur at the time of development.



# SERVICING STRATEGY



## WATER AND SANITARY SERVICES

This servicing strategy is based on a preliminary engineering review. Once the land use plan is finalized, the details of the servicing strategy will be confirmed.

Currently, North East Albion is primarily serviced by well water and septic sewer. New development will be responsible for bringing in municipal trunk infrastructure to service future development.

Both land use plans can be serviced by the servicing strategy illustrated above.



Image: Drinking water from tap



Image: Toilet flush



Image: Sample Sanitary Pump Station



# PRELIMINARY ROAD ALIGNMENT OPTIONS

## EXPLORING POTENTIAL ROAD ALIGNMENTS TO IMPROVE CIRCULATION IN NORTH EAST ALBION

As part of the North East Albion Land Use and Servicing Analysis, the arterial road connection along 112 Ave east to Grant Avenue is being reviewed.

This east-west connection is highlighted in the Maple Ridge Strategic Transportation Plan and the Maple Ridge Official Community Plan but the exact alignment is not confirmed.

Both alignments have unique challenges with regard to:

- Environmental Impacts
- Operation and Maintenance implications over the life cycle of the roadway
- Transportation Function
- Land Acquisition
- Construction Cost

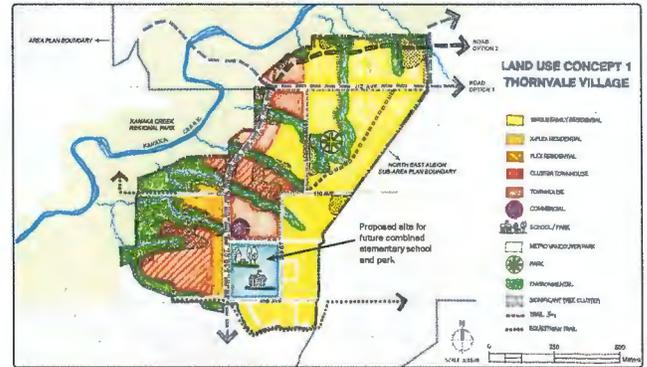


Image: Roundabout example



Image: Creek crossing example

# CONCEPT 1: THORNVALE VILLAGE



Natural features are preserved to maintain ecological assets and the existing character of the area.



VILLAGE NODE PROPOSED AT 109 AVE AND 248 STREET, CLOSE TO THE SCHOOL



SINGLE-FAMILY PROPOSED EAST OF LOCKWOOD STREET TRANSITIONING TO MULTI-FAMILY TOWARDS 248 STREET



MULTI-FAMILY RESIDENTIAL PROPOSED NEAR THE SCHOOL TO HELP SUSTAIN RETAIL AT THIS LOCATION



NEIGHBOURHOOD AMENITIES (PARKS AND TRAILS) PROPOSED TO PROVIDE GATHERING SPACES AND MOBILITY OPTIONS

The concept above was created through a Technical Design Charette. Municipal Staff and Consultants studied, reviewed and fused information gained from neighbourhood and stakeholder outreach with professional studies of lands, water, habitat and community in North East Albion and greater Maple Ridge.

# PRELIMINARY CONCEPTS

The following 5 boards provide an overview of our emerging land use concepts, including ideas and preliminary plans for:

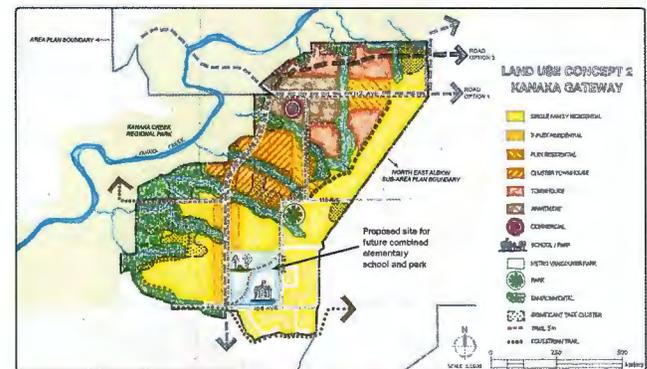
- Housing Typologies
- Commercial Node
- Parks and Trails

We are seeking your input of these three land use elements, and invite you to share your thoughts with us in the dotted area.

Please note that the maps and graphics provided tonight are based on conceptual designs at a land use planning level.

The specific land areas, densities, and exact plans will be determined in the next few weeks with your input in mind.

# CONCEPT 2: KANAKA GATEWAY



Natural features are preserved to maintain ecological assets and the existing character of the area.



VILLAGE NODE PROPOSED AT 112 AVENUE AND 248 STREET



SINGLE-FAMILY HDMS PROPOSED ADJACENT TO EXISTING ALBION NEIGHBOURHOOD, TRANSITIONING TO MULTI-FAMILY TOWARD 112 STREET



TOWNHOUSE AND/OR LOW-RISE APARTMENT PROVIDES INCREASED HOUSING CHOICES AND POTENTIAL FOR MIXED-TENURE HOMES TO HELP SUSTAIN RETAIL AT THIS LOCATION



NEIGHBOURHOOD AMENITIES (PARKS AND TRAILS) PROPOSED TO PROVIDE GATHERING SPACES AND MOBILITY OPTIONS

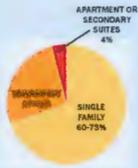
The concept above was created through a Technical Design Charette. Municipal Staff and Consultants studied, reviewed and fused information gained from neighbourhood and stakeholder outreach with professional studies of lands, water, habitat and community in North East Albion and greater Maple Ridge.

# HOUSING TYPOLOGIES

## MAPLE RIDGE HOUSING SPLIT

In areas outside of the town centre, housing has typically been developed in the following way

Based on data obtained from CMHC and City of Maple Ridge Building Permit records



## AFFORDABILITY THROUGH HOUSING DIVERSITY AND CHOICE

We are a family-oriented community with a high proportion of children and youth. Allowing for more diverse forms of housing is a priority to ensure that people are able to choose and afford homes that meet their needs in all stages of life.

## Potential Range of Housing Forms:

Place a sticker beside each housing form you think would meet the housing needs of North East Albin.

What housing types should North East Albin include? Share your thoughts with us!

- SINGLE FAMILY**  
 Detached single family residential development of low densities
- X-PLEX RESIDENTIAL**  
 Includes duplex, triplex, and fourplex housing types. X-plex development introduces multiple units with a single building
- FLEX RESIDENTIAL**  
 Includes courtyard residential, co-house, and other forms of multi-unit housing that allows for built form to be shaped by natural slopes and services.
- CLUSTER TOWNHOUSES**  
 Multi-family townhouse units clustered to minimize development footprint and maximize environmental protection
- TOWNHOUSES**  
 2-3 storey multi-family homes on strata roads with visitor parking
- APARTMENTS**  
 Low-rise multi-family housing (market or rental) proposed adjacent to the commercial hub to support the retail establishments nearby.

### Did you know?

- Strata buildings help to protect the park buffer better than single-family developments
- Multi-family homes can help to make the provision of community amenities possible in a neighbourhood

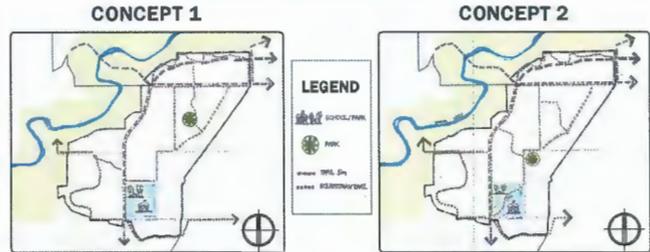


# PARKS AND TRAILS

## PROVIDING OUTDOOR AMENITY SPACES AND RECREATION OPPORTUNITIES

New parks and open spaces are important components of a green, liveable, connected neighbourhood. The concept plans propose a co-located neighbourhood park and elementary school with a full-sized sports field, playground, pathways and a second neighbourhood park to meet the future needs of a growing community.

The plan also proposes multi-use paths adjacent to protected riparian areas to provide a safe and enjoyable trail network which provides connections to Kanaka Creek Regional Park and other recreation destinations in the broader area.



Share your thoughts with us!

- What outdoor recreation opportunities would you like to see in North East Albin?
- What do you think of the proposed trail network and location of the proposed parks?



# COMMERCIAL NODE

## HOW POPULATION INFORMS SCALE OF RETAIL

The types of retail a neighbourhood can support is driven by population. For example, a large scale grocery store would require a large population within its trade area to thrive.

Based on a retail demand analysis, a village commercial node with convenient types of retail was identified as the appropriate scale for North East Albin. In order to support this node, there are recommended population targets within its trade area to support the businesses, such as:

3 - 4 shops	4,500 - 6,000 sq ft (if incl. convenience store)	3,000 people 4,000 people
4 - 6 shops	6,000 - 9,000 sq ft (max)	4,000 + people

In Maple Ridge, the Village Commercial designation fulfills the scale proposed.

## VILLAGE COMMERCIAL

is characterized as businesses that meet the day-to-day needs of neighbourhood residents.

A village commercial node in North East Albin could include 3-6 storefronts, with potential tenants such as:

- Cafe
- Take-out restaurant
- Hair salon
- Daycare
- Flower shop
- Convenience store

## HERE ARE SOME EXAMPLES OF VILLAGE COMMERCIAL NODES FROM AROUND THE REGION



What do you think of this scale of retail? Share your thoughts with us!



What kinds of commercial services would you be interested in having in your community?



# THANK YOU

For taking the time to learn more about the North East Albin Land Use and Servicing Planning Process



NORTH EAST ALBIN

## WE WANT TO HEAR FROM YOU!

Please take the opportunity to provide your thoughts and comments through our survey available today or online at

[www.mapleridge.ca/2214](http://www.mapleridge.ca/2214)

### STAY IN TOUCH

Phone: 604-463-5221

Website: [www.mapleridge.ca/2214](http://www.mapleridge.ca/2214)

Email: [northeastalbin@mapleridge.ca](mailto:northeastalbin@mapleridge.ca)



# GAME STATION

## Show us your ideas!

We have templates of different land use footprints for you to place and play with on the map. They are drawn to scale and are colour-coded to the legend on the table for your reference.

### SEE HOW IT ALL FITS TOGETHER!

- Explore the proposed land use concepts using the footprints provided to see how it all forms a neighbourhood
- Show us your own ideas using a different combination of footprints on the base plan
- Draw your ideas on the trace paper provided

### HAVE A PHOTO TAKEN TO DOCUMENT AND SHARE YOUR IDEAS

These are the kinds of tools we use to explore how different housing types may fit and form a neighbourhood.

# Emerging Ideas Open House Survey

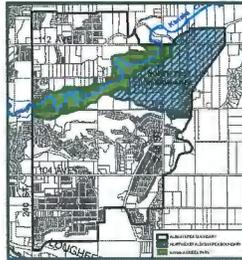
## Shaping the Future of North East Albion

The City of Maple Ridge has a planning process underway that is looking at how we want to live, work, play, and ultimately grow, into the North East Albion Area. This process is exploring land use and servicing options for the area, noting that the Albion Area Plan had always envisioned that further study of the area was needed at the time when redevelopment begins to occur in this area.

The survey should take less than 10 minutes. With your feedback, the information gathered through this survey will inform the North East Albion Land Use and Servicing Concept Planning Process. The survey will close Friday, May 31<sup>st</sup>, 2019.

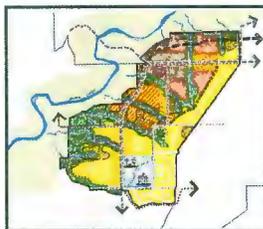
Copies of the Information Boards presented at the North East Albion Emerging Ideas Open House on May 16th, 2019 are available for review at [www.mapleridge.ca/2114](http://www.mapleridge.ca/2114).

Two draft land use concept plans were presented at the North East Albion Emerging Ideas Open House and form the basis for many of the questions in this survey.



Concept 1: Thornvale Village

Concept 2: Kanaka Gateway



After taking a moment to familiarize yourself with each of the two concepts - let's get started!

4. How do you feel about the following types of housing priorities in the future of North East Albion?  
Select all that apply
- Housing for Seniors
  - Housing for Growing Families (i.e. 3+ bedrooms)
  - Rental and Affordable Housing (including Secondary Suites and Detached Garden Suites)
- Other: \_\_\_\_\_

5. How do you feel about locating the Village Commercial Node:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Adjacent to the future elementary school site and co-located neighbourhood park?					
Adjacent to 112 <sup>nd</sup> Ave & 248 <sup>th</sup> Street?					

6. What type of uses would you like to see in the North East Albion Commercial Node?  
Select all that apply
- More childcare services
  - More shopping opportunities (i.e. local shops & services)
  - More restaurants, pubs, or coffee shops
  - More office / employment opportunities
  - More opportunities for arts & culture
- Other: \_\_\_\_\_

### Tell us about yourself

7. Where do you live?  
See map on front page
- North East Albion Area
  - Albion Area (Outside of North East Albion)
  - Within Maple Ridge (Outside of Albion)
  - Outside of Maple Ridge
  - Prefer not to answer
8. How did you hear about the North East Albion Emerging Ideas Open House?
- Pop-Up with a Planner Event
  - City of Maple Ridge website
  - Email from an organization
  - Social Media
  - Newspaper Ad
  - None of the above
  - Post-card in the Mail
- Other: \_\_\_\_\_

1. How do you feel about having the following types of single family lots in the future of North East Albion? (These types of homes could be located in the yellow shaded areas in both concepts.)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Large Lot Single Family 1,200 - 4,000 m <sup>2</sup> / 0.5 - 1 ac					
Medium Lot Single Family 550 - 1,200 m <sup>2</sup> / 5,900 - 12,900 ft <sup>2</sup>					
Small Lot Single Family 200 - 550 m <sup>2</sup> / 2,100 - 5,900 ft <sup>2</sup>					

2. How do you feel about having the following types of multi-family buildings in the future of North East Albion? (These types of homes could be located in the orange and brown shaded areas in both concepts.)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Duplex (up to 2.5 storeys)					
Triplex / Fourplex / Courtyard Developments (up to 2.5 storeys)					
Townhouse / Rowhouse (up to 3-4 storeys)					
Low-Rise Apartments (up to 4 storeys)					
Apartments over Commercial (up to 4 storeys)					

3. How do you feel about multi-family residential units clustered around:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The future elementary school site and co-located neighbourhood park?					
The commercial node?					
Major roads?					
The 112 <sup>nd</sup> Ave / 248 <sup>th</sup> Street Intersection					

9. What is your age?
- 19 or younger
  - 20-24
  - 25-34
  - 35-44
  - 45-54
  - 55-64
  - 65 or above
  - Prefer not to answer
10. What type of housing do you currently live in?
- Single Family House
  - Duplex, Triplex or Fourplex
  - Townhouse / Rowhouse
  - Apartment
  - Secondary Suite / Temporary Residential Unit
  - Detached Garden Suite
  - No fixed address
  - Prefer not to answer
- Other: \_\_\_\_\_
11. Please provide any other comments or information you would like us to have. Thank you.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Thank you!

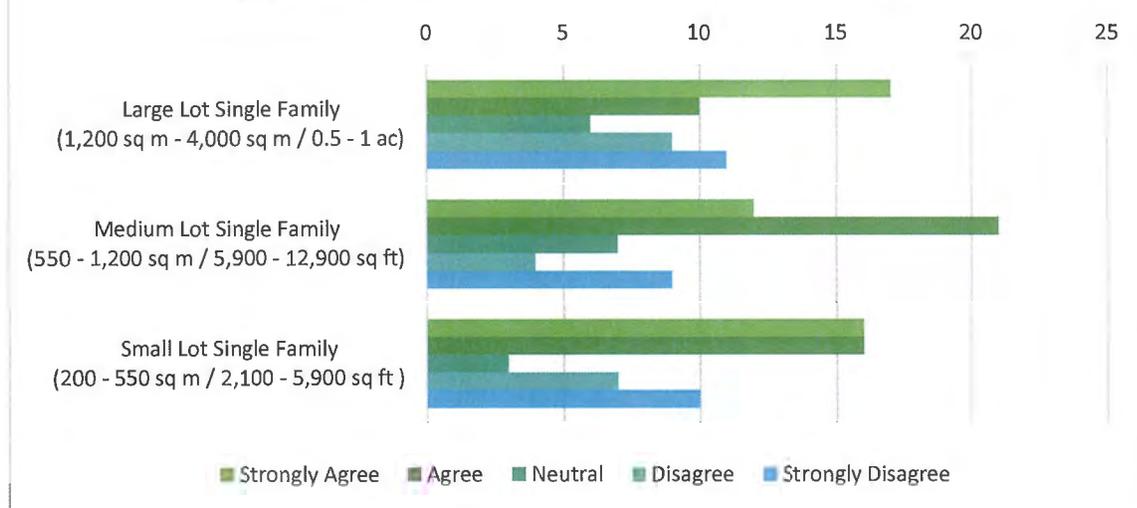
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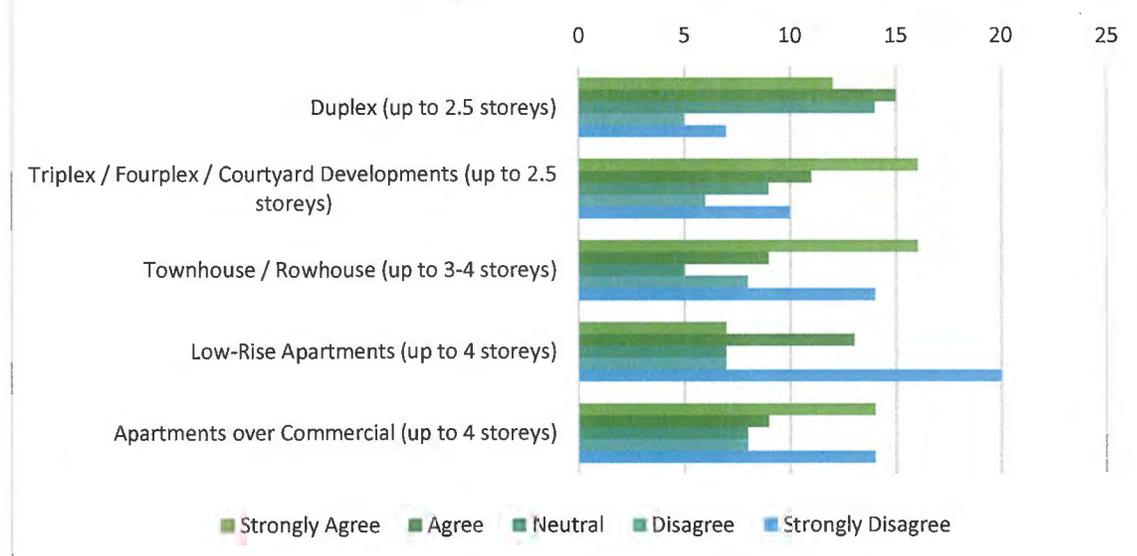
NORTH EAST ALBION

## North East Albion Emerging Ideas Open House Survey - Results

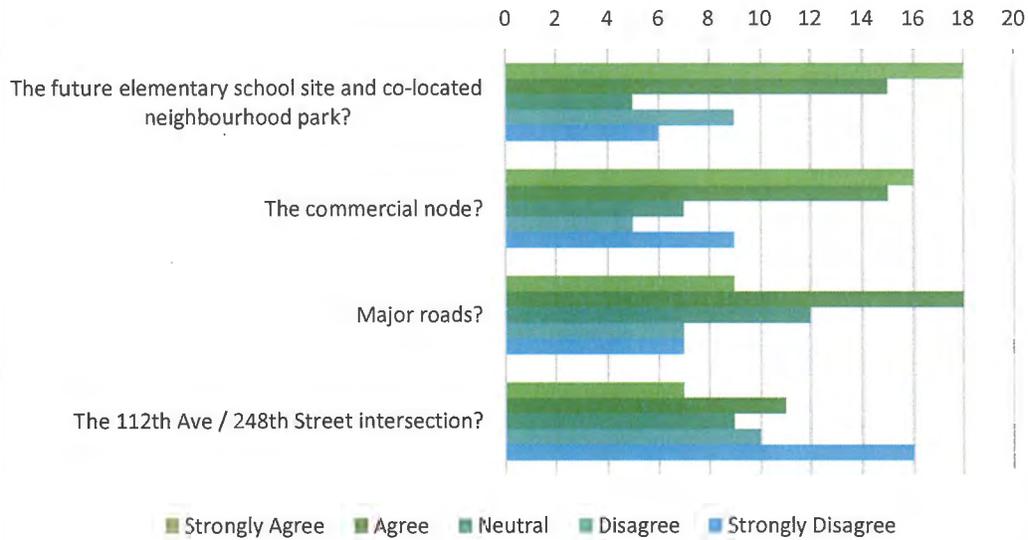
Q1. How do you feel about having the following types of single family lots in the future of North East Albion?



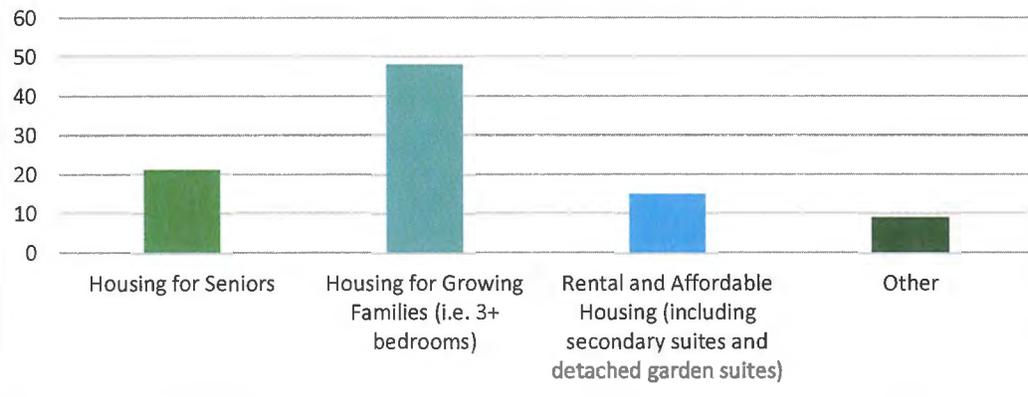
Q2. How do you feel about having the following types of multi-family buildings in the future of North East Albion?



**Q3. How do you feel about multi-family residential units clustered around:**



**Q4. Please indicate which of the following types of housing priorities you believe should be in the future of North East Albion? Select all that apply.**



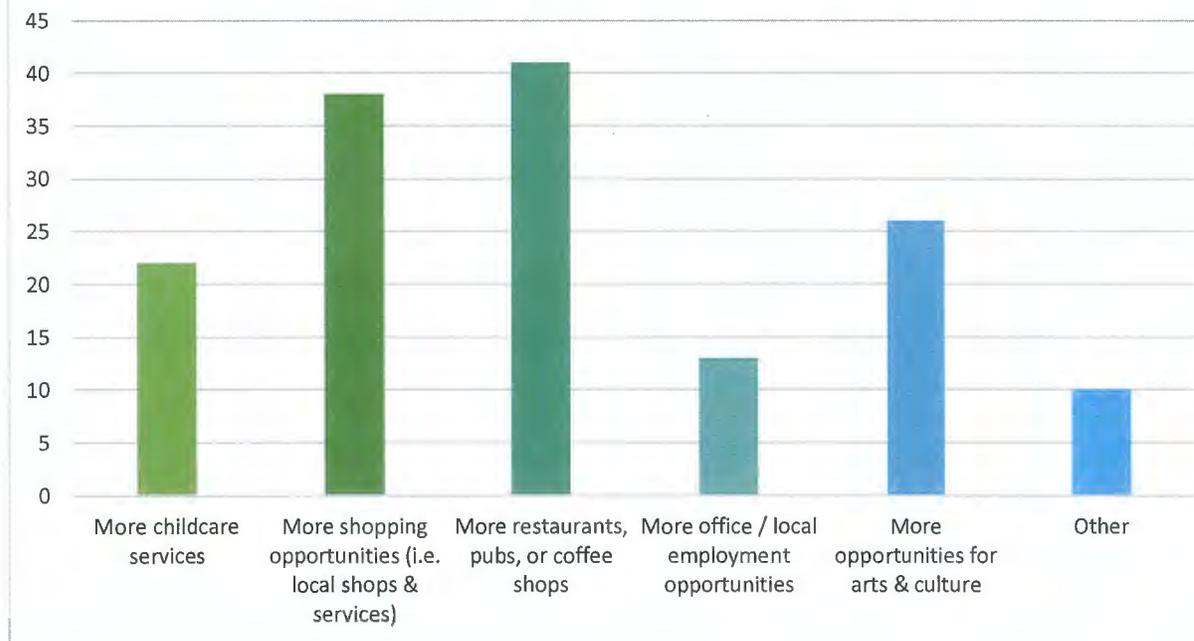
**Other Comments:**

- Rental & Affordable Housing is very important.
- Mix it up!
- Senior housing if near the middle of town 'city' etc. Secondary Suites a must, due to the price of renting apts or buying a house.
- Housing that is affordable on local incomes.
- Maintaining current large lots
- Ranchers

**Q5. How do you feel about locating the Village Commercial Node:**



**Q6. In the North East Albion Village Commercial Node, what type of uses would you like to see? Select all that apply.**

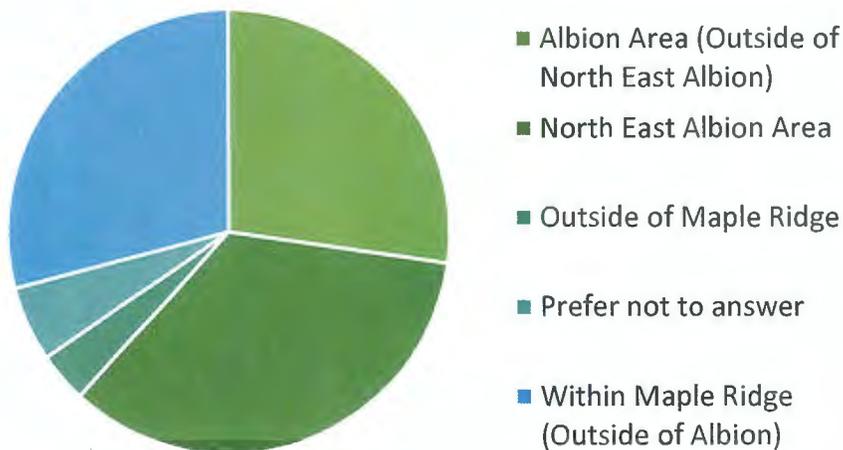


**Other Comments:**

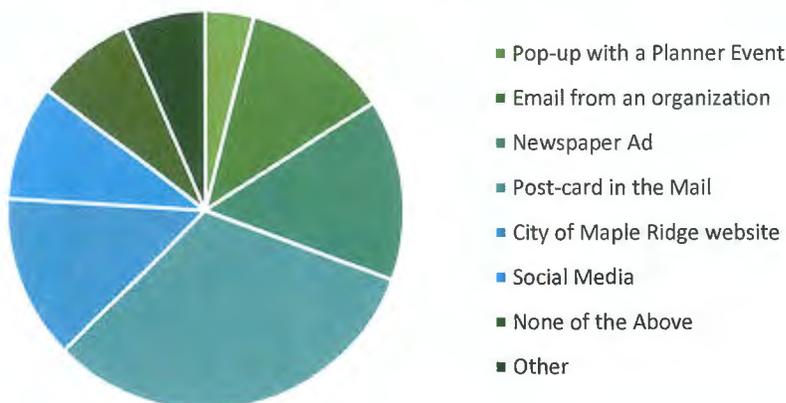
- Too many strip malls already.
- Pubs, coffee shops
- Coffee shops
- Brewery
- Small retail setting that can be supported by future population of NE Albion

- The area needs to be developed with a walking / bike greenway with smaller picnic areas at several places. This way people can have a direct connection with nature. This will help keep the residents away from the protected streams and wildlife. Please retain the large mature trees for the future generations to enjoy.
- More wildlife corridors / nature centres / ecotourism / more large trees retained.
- Horseback riding trails, I do not want to see 112<sup>th</sup> Ave and 248<sup>th</sup> Street connected as this will ruin too much natural environment right by Kanaka Creek.
- Ecotourism

Q7. Where do you live?

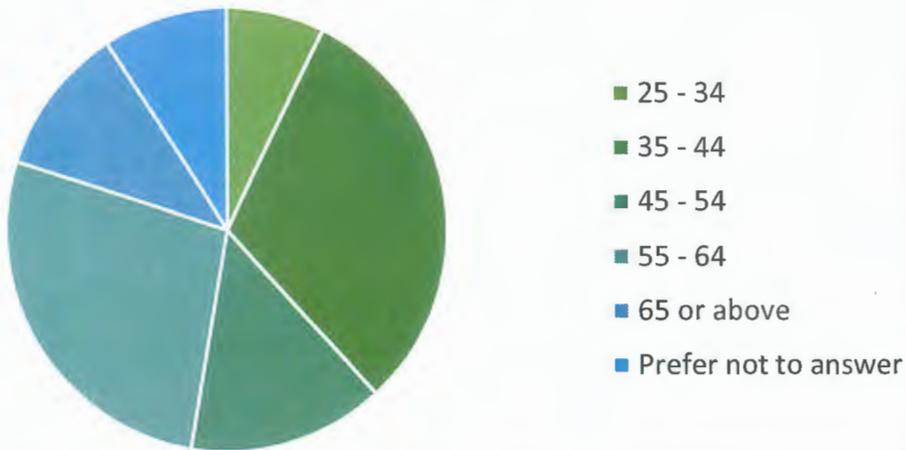


Q8. How did you hear about the North East Albion Emerging Ideas Open House?

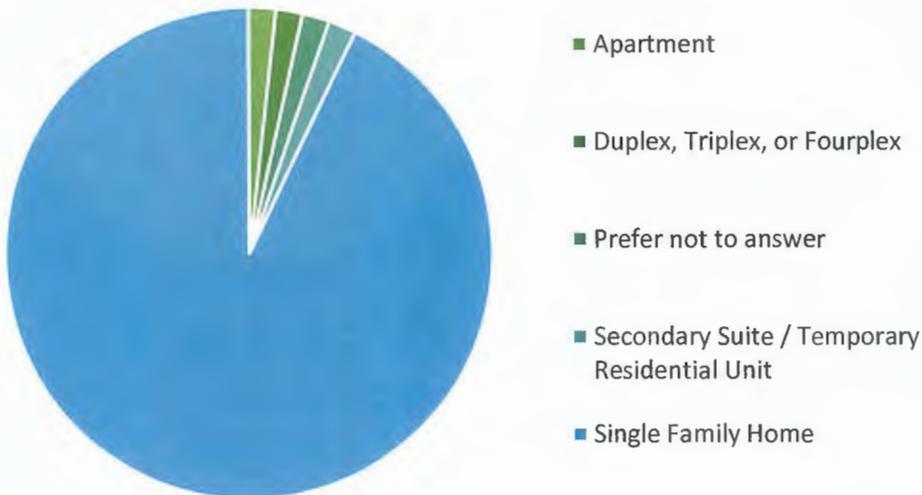


- Contacted by Mail
- Letter from the City
- City worker

Q9. What is your age range?



Q10. What type of housing do you currently live in?



Q11. Please provide any other comments or information you would like us to have about the North East Albion Area Planning Process and/or initial neighbourhood concepts.

This area has potential to emerge as a desirable family / youth oriented complete neighbourhood having schools, parks, neighbourhood shopping combined with the nearby SRT , all together combined will be an appealing place for young to mid aged families to reside and enjoy. the commercial Node nearby to the sports park and school is a Great idea like the Albion area along 102 Ave and Bruces market ideas, Great idea by planning, we had neighbourhood conveniences yrs ago in Haney and seems to be a new revival. By Densifying the Residential housing growth for the area , this will help reduce housing costs and be more affordable. A mix of compact lots 3000 +- to 4000 , attached row housing, garden carriage suites all together will help to bring costs down to the buyer.

We must stop thinking only about the number of tax dollars per square meter or whatever is the formula for city land available for development and start thinking about how livable is each new development going to be for the new residents. Must factor in this northeast albion development the huge amount of run off water that comes down this hill. its hard to believe the volume of water flowing through the permeable soil layer of 3 to 4 ft below visible sight on top of the non permeable clay base. Must force developers to properly address this major drainage concern in this area and not stick the new home owners with the problem after the developer has left as has happened already in this north east albion area. Also must make all homes built in this area have a foundation water wrap protection as a mandatory condition as its not in the building code from what I understand. critical to have in this area and not just the spray on tar that was allowed in previous developments in this area. Again think of the livability of the home owners after the developer leaves. As for the density of this new development, the 112 road that leads west out of this area over kanaka creek cannot handle the huge volume of traffic that would come with high density options. Its already busy now with the additions in the Carmichael street area let alone high density townhomes. its a dangerous road in the winter as ice forms in the much cooler lower areas and on the sharp curves and adding extra amounts of brine solution to the road because of high traffic volume only puts more brine into the fish bearing kanaka creek through run off. Many animals live in this area and high density housing to boost tax revenues is a shameful way to lose our natural wildlife. at some point in time it has to be more than just dollars and cents. somebody in authority has to take a stand. I'm not saying we cant build in new areas. If someone didn't approve development of our home we wouldn't be here I get that. Just factor in what and how increased density choices for tax revenue does to the livability of an area for both human and animal residents. Thank you.

Some of my answers in the survey depend on the overall design as well as the road system, so take them with a grain of salt. Generally I find the design of the major roads in Maple Ridge an insult to the people living on them. These roads are designed as traffic sewers and do nothing for livability. I pity the people that have to live on them. There is more to safety than just fire safety, which apparently is the main reason for building our roads, including intersections, to accommodate speed. I see so many comments about speeding and dangerous and irresponsible driver behaviour on social media. Road safety for vulnerable road users needs to be improved. More and more cities around the world show it can be done, so why not in Maple Ridge? I would strongly encourage raising the (bi-directional) multi-use paths across intersections and driveways to improve safety for users. I have often spoken out about the danger of bi-directional cycling infrastructure on one side of the road, both as a member of HUB Cycling Maple Ridge/Pitt Meadows and personally. If the choice is made to make cycling and pedestrian infrastructure bi-directional on one side of the road, then the best efforts should be made to make this infrastructure as safe as possible, recognizing that bi-directional infrastructure has proven to be challenging to deal with for drivers. We want to avoid people on bikes to pay the price. It should be about improving ACTUAL safety, not just PERCEIVED safety. I also believe that it's high time for a review of the OCP. Our last OCP dates from 2006 and is already 13 years old. Much has changed since. There's much more urgency now to address the need for sustainable urban design. We need an overall plan, because I believe we can't do it through area plans alone. How do we address our car dependence just by expanding on the fringes and increasing density there when there isn't any transit yet to speak of, and a few recreational trails aren't going to get people on their bikes because they still can't get to where they want to go because the network has so many gaps? I would like to see this addressed not only through a review of the OCP, but also through a review of the cycling network. Cycling has the ability to greatly enhance the reach of transit. Also, there is great potential for e-bikes. We need the infrastructure (safe for all ages and abilities) to take advantage of that. I appreciate that clearly an effort has been made to provide trail connections throughout this small area. It's a great start. Council is now looking at the Lougheed corridor, but I believe more density can be incrementally achieved in a wider area in west Maple Ridge. By improving cycling and walking connections, the reach of transit could be significantly improved in that area. That's where we're

<p>already getting improved transit and where higher density, improved cycling infrastructure and the necessary carrots and sticks can and will lead to higher transit usage.</p>
<p>I really liked everything about plan 2 except for the commercial part. I believe that should be located near the school. I strongly disagree with plan 1 because there is a lot of townhouses located near Kanaka creek. One of the top priorities is to protect and have less impact on wildlife. I believe that putting a townhouse will significantly affect the wildlife as how plan 1 shows it compared to plan 2 where it is located away from Kanaka creek.</p>
<p>Tired of Dump Trucks + Construction in Albion. Physically damaging my property as they go by. Need better infrastructure + facilities before new residential build. Need to fix current poor infrastructure before build here. 1</p>
<p>Prefer concept 1 Thorvale Village Best commercial location. 2</p>
<p>The Albion neighbourhood along 104th is completely ruined. Too dense, too much garbage, noise and lack of community. No thought to Infrastructure with 1 road and literally a raceway. Don't create another one. 3</p>
<p>How are you planning to get everybody in &amp; everybody out? Traffic is already very poorly planned in the area. 4</p>
<p>It's very important to consider the unfinished areas around this plan. 104th St is a mess. Unfinished sidewalks and no safe pedestrian crosswalk from the bus stop to cross 104th by SRT. These types of areas need to be addressed. As well as parking especially around the sports fields. Major parking issues around the field. This needs to be addressed as it will affect existing residence or new residence. Enough parking around any future sports fields. SRT is an example of something that doesn't work. Ensuring proper sidewalks are in place for walkability by 104th another example. Ensuring pedestrian crosswalks are in place around school, commercial, bus stops. 104th is an example of poorly designed roadway. 5</p>
<p>Strongly prefer concept #2 request a more streamlined + non-residential trucking route *not 108! 8</p>
<p>Respect the area, people purchased homes in this area for a reason! No high density housing. Re: School development plans. SD 42 must address development plans of neighborhood (school on 104+) potential school on 108th. This (area) 108 and Becham Erskine 249 is in walking distance to SRT but not in the catchment. We are sending our kids to 104 elem. but not able to go to high school literally around the corner. * Re-examine catchments* Expand SRT - Add wing as seen on school plan *In order to achieve a "community" children need to be able to go to school in their neighborhood. 9</p>
<p>Thanks for the opportunity to give feedback</p>
<p>process appreciated. Environment, multiple creeks, nature at foremost concern. many neighbourhoods have not been right. let's get it right this time! 11</p>
<p>I really like how concept two is. The townhomes are away from the school, which will keep the school area safer with less cars. 13</p>
<p>The City continues to build residential homes, condos on the east side but there's no shopping. Why do we need to travel min of 10 minutes to get basic necessities with all this urban development parking is becoming an issue. people are parking dangerously on corners, narrow streets etc. There should be more signage in place to control this issue. 14</p>
<p>Put B line from Albion to RMH Hospital. Need Pub walking distance! 15</p>
<p>-Not happy about 248th becoming a busy through-road. If this is done, roundabouts should be at every intersection on 248th -Also not happy about making our neighborhood a high density area. The peace and nature we enjoy will be ruined. 17</p>
<p>-Stroller friendly connected sidewalk/trail system -Play ground that has opportunities for children of all ages to play -Rock climbing rock for play area -Increase transit -Spray Park -Dog off lease area 18</p>
<p>need Gas stations, corner stores 19</p>

<p>I grew up on 112th near 272nd, and spent a lot of time in two houses near 112th and Lockwood. My impression is that most of the people living there like how isolated it is, so densifying hubs makes way more sense than just tearing down the bush and throwing up a bunch of sprawling single family homes. I've always loved the stretch of 112th that winds above the creek, and I think it would be a shame to urbanize right there, but maybe that's selfish.</p>
<p>I would like to see more multifamily most likely covictional townhouses thx for giving me opportunities explore ideas</p>
<p>The neighborhood commercial and highest density should be located near the school location at 108 Ave rather than on the fringe of 112 Ave</p>
<p>Like to see the area soon to provide available housing</p>
<p>Would like to see small lots and town homes with commercial near the school site. These types of homes will help with affordable house needs in the community. Thank You</p>
<p>-designated walking path along 112 from 240 to Cliff Park -a Coquitlam Crunch style hike/path at the foot of Palmer Rolph rd. that goes up the top of Grant Hill. It could be connected to Cliff Park as well. -make the road on 112 from 240 to Lockwood safer to walk on and drive.</p>
<p>Preserving areas for wild life should be given high priority. Against Marijuana or liquor sales close to residential areas and schools.</p>
<p>I feel the density around the park and school will best buffer the two, as well the added density will assist with the Village Commercial Node to lie adjacent to the SChool / Park site, the Node should be similar to the Albion Node on 102 Ave though larger in size to provide added diverse options. A mix of residential over the Commercial seems to be a good option maximizing on the use of the available lands. Perhaps a care taker suite could be incorporated at the Commercial Node for the park and rec facility. Services must be brought in and the City needs to assist with this in order to encourage the growth to occur.</p>
<p>You need to drastically improve the major road arteries (Loughee, Haney bypass, golden wars way) before ANY further housing development occurs. Traffic is absolutely ridiculous and the current improvements are laughable. Add multiple lanes, overpasses, etc. You cannot continue growth without improving road arteries. You always say "you need to develop before you improve" but I'm sorry that's a LOAD, because I am witness to other communities like Mission, Langley, and Surrey making these sorts of improvements in a timely and reasonable fashion, and Maple Ridge is sorely, sorely lagging behind. Show us you care about your community members instead of only your real estate investors.</p>
<p>Would like to see smaller lots for affordability and commercial designated areas.</p>
<p>There needs to be transit! Trails throughout for walking.</p>
<p>My biggest concern is the traffic on Lougheed and Dewdney. The infrastructure on these routes has not kept up with the increases in population and should be a priority before anymore residential and commercial development.</p>
<p>Albion is growing, Maple Ridge is growing and the infrastructure does not support that growth. The more homes mean more traffic with the same amount of road space, and instead of brining new vibrant commercial opportunities to our city we have more liquor stores and more fast food restaurants popping up on every corner. This city is changing. More young families are coming here, and we have to go elsewhere to work, get good food, and for commercial opportunities. My husband and I commute 2-3 hours daily to get to work and back. The worst part of that commute is getting from the Pitt River Bridge to Albion. Putting a light in on the Haney Bypass is only going to congest traffic even more. Instead of building more triplexes and fourplexes on these beautiful lots that make this area so charming and what brought us here in the first place, perhaps we could look at creating more opportunities for small businesses, new restaurants, arts &amp; culture, and leaving space green. The development of this area will impact all of the resources around it (more people = more traffic &amp; less space), which means that our</p>

lakes and resources are going to be taxed that much more. Single family homes on larger lots offer people the type of lifestyle they come here for.

The area needs to be developed with a walking/bike green way with smaller picnic areas with two or three tables at several places. This way people can have a direct connection with nature for a picnic lunch or to just sit and relax. This will help keep the residents away from the protected streams and wildlife. Please retain the large mature trees for the future generations to enjoy.

I would like to see more Wildlife corridors as well as nature centres to promote education on environmental topics and caring for nature/living with wildlife as this is very important in this area. I would also like to see more ecotourism opportunities and more large trees saved to provide their environmental benefits into the future. It takes many small trees to provide the services of one large, mature tree. Parks can be built around mature tree stands and incorporate green infrastructure, natural water features, open green spaces, and the trees can provide shade for all to enjoy. We need to respect our environment and the future generations need to be taught how to respect it.

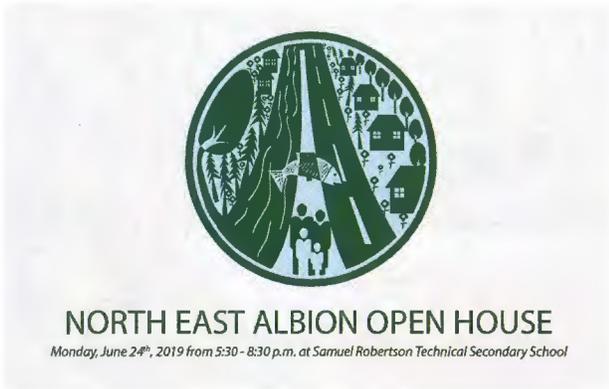
Use the natural resources that Maple Ridge has and everyone wants to move out here to enjoy, such as heritage trees, streams, creeks, etc. Please keep the natural character that goes along with Maple Ridge. Now is the time to preserve what we have before it is too late and everything has been destroyed (we won't have a choice then). We don't want to create another downtown in that area, we want to promote and encourage the opportunities in the current downtown of Maple Ridge. We don't want to have a steady stream of townhouses and apartments. The area of 240th St. is already full of rowhouses with no character, right by the road.

I would like to promote ecotourism and perhaps have some experts come in and provide us with suggestions on how to build a community around the beautiful trees and landscapes that Maple Ridge already has to preserve. The idea is to minimize the amount of invasion towards the wildlife and the environment. There are way too many huge forests being cut down in this area already. Thanks for listening!

School district needs to work with city and needs to get organized to meet growing neighbourhood demands with lots of young families that SRT can't accommodate. New elementary school(s) Build the addition to SRT No high density Traffic concerns already too much traffic too fast

The traffic in and out of this area is already congested. To add this many homes and people would be irresponsible. It's all about putting money in the pockets of developers and city council members.

# Appendix C(6) - North East Albion Open House



Live



Play



Grow

## SHAPING THE FUTURE OF NORTH EAST ALBION

The City of Maple Ridge has a planning process underway that is looking at how we want to live, work, play, and grow, into the North East Albion Area. Since our last Open House, the community input and stakeholder feedback along with the outcomes of the technical studies have informed the evolution of a draft neighbourhood concept plan.

Please join us on Monday, June 24<sup>th</sup> to learn more about the draft neighbourhood concept plan for North East Albion.

**North East Albion Open House**  
**Monday, June 24<sup>th</sup>, 2019 from 5:30 - 8:30 p.m.**  
 at  
 Samuel Robertson Technical Secondary School  
 10445 245 Street, Maple Ridge, BC

Your input through the Open House will help inform City Council's consideration of the draft neighbourhood concept plan.

For more information, please visit our website at  
[www.mapleridge.ca/2214](http://www.mapleridge.ca/2214)  
 or email  
[northeastalbion@mapleridge.ca](mailto:northeastalbion@mapleridge.ca)

Connect with us:  
 @YourMapleRidge  
 #LivePlayGrowNEAlbion



Live

Play

Grow

## SHAPING THE FUTURE OF NORTH EAST ALBION

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# North East Albion Open House

Draft Land Use Concept

June 24th, 2019  
Samuel Robertson  
Technical Secondary  
Inside the Library  
5:30 - 8:30pm

## Welcome!

Welcome to the City of Maple Ridge North East Albion Open House. We are working on a land use and servicing concept planning process that will help guide growth in our community.

Today's open house will bring you up to date on where we are in the process. We will also show you our proposed Land Use Concept Plan based on technical analyses and community input from the Emerging Ideas Open House.

There are 5 stations around the room. We invite you to visit each station, talk to Staff and consultants, join our discussion table, and complete the survey provided to share your feedback.



## 5 OPEN HOUSE STATIONS

- #1 Who, What, Why
- #2 What We Heard
- #3 Proposed Concept Plan
- #4 Refinements Explained
- #5 Discussion & Survey



NORTH EAST ALBION  
JUNE 2019 OPEN HOUSE  
BOARD # 1

# Sign In Here

Where do You Live?

Place a dot on the map

## Why do we ask?

Understanding where people live provides context for our consultation summary.

It helps us understand who we are engaging with and allows us to reflect on our notification and communication methods.

Please indicate where you live on the map by placing a sticker near the location of your home.



If you live outside this map area, tell us where you are coming from:

NORTH EAST ALBION  
JUNE 2019 OPEN HOUSE  
BOARD # 2

## STATION 1: WHO, WHAT, WHY

# Community Planning: Who is involved?

Places and Spaces to Live, Work and Play.

A development application submitted in 2018 started the North East Albion Land Use and Servicing Concept Planning Process. Per the Albion Area Plan, a review of the land uses and servicing was required to ensure that development responds to the community's changing needs.

With oversight from the City of Maple Ridge, **Aplin Martin Consultants** was engaged by Epic Homes, to lead the planning process and develop a recommended North East Albion Land Use and Servicing Concept for Council consideration.

**Introducing the Planning Team**  
We have been working with City Staff across several departments to review technical work prepared by outside consultants and input feedback from the community.

### City Departments Involved:

- Planning
- Environment
- Parks, Recreation & Culture
- Engineering

### Other Subconsultants:

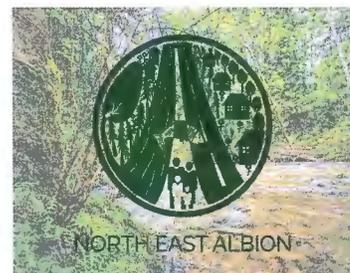
- Coriolis Consulting (Economics)
- Phoenix Environmental Services
- Creative Transportation Solutions

### Introducing our Facilitator

To ensure process transparency and authenticity, the team has been working closely with a professional facilitator specializing in sensitive land development planning and urban design.

### MVH Urban Planning & Design

Michael Von Neussen brings over 30 years of experience from across North America.



NORTH EAST ALBION  
JUNE 2019 OPEN HOUSE  
BOARD # 3

## STATION 1: WHO, WHAT, WHY

# What does this planning process mean?

Frequently Asked Questions

### What is the Official Community Plan (OCP)? What is the Albion Area Plan?

The OCP outlines the long term vision for growth and development in Maple Ridge. Within the OCP is the Albion Area Plan that characterizes the future land uses that the City would like to see over the next twenty years or more to achieve planned growth and development in the community.

### Why do we need a North East Albion Plan?

The Albion Area Plan envisioned that further study of the north east quadrant would be needed when the area begins to develop. Over the past couple of years, there has been increasing interest in North East Albion from the development community. A new plan is needed to guide anticipated growth to ensure that it meets the needs of our community.

### How will the plan improve my neighbourhood?

Land use plans ensure that public amenities such as parks, trails, and social spaces are considered and accounted for in advance of development. These amenities are provided at the time of development for the benefit of existing and future residents. The plan also provides opportunity to revisit current residential and commercial needs.

### What does it mean if my property is a new colour?

The colours indicate future land uses intended for your property at the time of redevelopment. Until development occurs, property owners may continue to reside, as well as renovate or rebuild within the existing development footprint, per the current zoning requirements. This includes properties designated as future residential, commercial and environmental protection areas.

### Does this process rezone my property?

No. Land use plans identify uses, densities and high-level services to provide guidance for future development. Should a property owner wish to redevelop, a formal rezoning application will need to be submitted to the City that matches the high-level land uses identified within the plan.

### How long will this planning process take?

The finalized land use plan is expected to be before Council for endorsement in the Fall. Once the plan is endorsed, Staff will prepare supporting policies, continue the discussion with the community and ultimately initiate a formal process to adopt the Land Use Plan into the Albion Area Plan as part of the Maple Ridge Official Community Plan. The timeline for individual development applications will vary, but development approvals and construction may begin next year.

NORTH EAST ALBION  
JUNE 2019 OPEN HOUSE  
BOARD # 4

STATION 1: WHO, WHAT, WHY

# Why are we here Today?

Where **We Are Now** in the Planning Process

**Today's Objectives**

- Summarize what we heard from previously-held public consultation events, including survey results
- Share the updated land use concept plan with the public for review, comment and consideration
- Demonstrate the technical planning and design rationale behind the land uses proposed
- Solicit feedback from participants through a facilitated dialogue and survey questionnaire



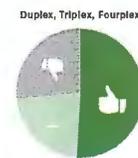
STATION 2: WHAT WE HEARD

# Your Thoughts on our Emerging Ideas

**What We Heard from the Community**

Based on our survey from the May 16<sup>th</sup> Open House, below is a summary of key findings.

How participants feels about different housing typologies:



**General Overview and Key Highlights:**

- Support for including housing types for growing families, seniors and opportunities for rental/affordable housing in North East Albion.
- More support for small- and medium-sized single-family lots over large single-family lots.
- Support for duplex, triplex and fourplex housing forms.
- Support for locating multi-family housing near destinations, like the school, park, commercial nodes and along major roads.
- Support for putting commercial near the school and multi-family residential.
- Support for more services, like shopping opportunities and restaurants, pubs and coffee shops in North East Albion.

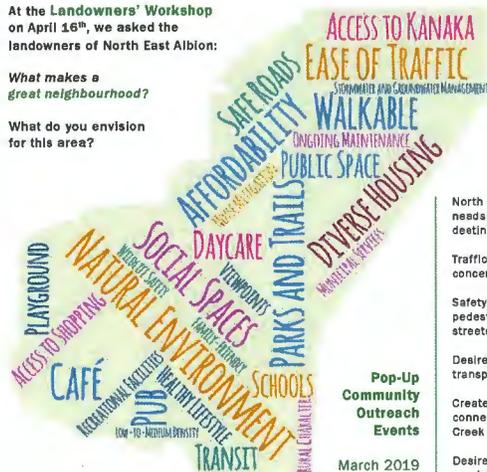
STATION 2: WHAT WE HEARD

# Your Vision for North East Albion

At the Landowners' Workshop on April 16<sup>th</sup>, we asked the landowners of North East Albion:

What makes a great neighbourhood?

What do you envision for this area?



- North East Albion needs a local destination
- Traffic and parking concerns
- Safety first... pedestrian-friendly streets
- Desire for multi-modal transportation
- Create better connections to Kanaka Creek trails
- Desire to access municipal water
- Critical to maintain groundwater quality
- Pop-Up Community Outreach Events**  
March 2019  
Additional Comments

STATION 3: PROPOSED CONCEPT PLAN

# Technical Design Principles

The following set of principles were developed based on what we heard from the community. These principles are used to guide urban design decisions and to evaluate the merits of various land use options.

<p><b>Celebrate Kanaka Regional Park</b></p>	<p><b>Maintain Community's Access to Nature</b></p>	<p><b>Realistic and Efficient Systems</b></p>
<p><b>Respect Existing Rural Character</b></p>	<p><b>Provide Diverse Housing Options</b></p>	<p><b>Multi-Modal Transportation</b></p>
<p><b>Outdoor Recreational Opportunities</b></p>	<p><b>Recognize the New School as a Hub</b></p>	<p><b>Introduce Commercial at a Village Scale</b></p>

# Proposed Housing Typology Mix

## How it may look: Examples of Future Building Forms

Land Use Designation	Single Family	Duplex, Triplex, Fourplex	Cluster Townhouse	Townhouse	Mixed Use Commercial
<b>Design Principle</b>	Single family homes that serve as a continuation of existing character in the area. May also include duplex, triplex, and fourplex in select locations	Ground-oriented, multi-family homes that appear as a single-family home. Increases housing diversity and maintains existing character	Multi-family townhouse units clustered to minimize development footprint and maximize environmental protection in sensitive areas	Multi-family homes at densities that support new commercial and park amenities	Community nodes that mixes retail options and residential units with an opportunity for rental options
<b>Ownership</b>	Fee Simple	Fee Simple or Strata	Strata	Strata	Strata or Rental
<b>Building Form Options</b>	2-3 storey detached homes  Large lots with front garages and exits. Small lots with rear or front garages	2-3 storey house with multiple units  Units may vary in configuration: stacked, front-to-back, side-by-side	2-3 storey townhouse units with private strata parking	2-3 storey townhouse units with private strata parking  3-4 storey stacked townhouse units may be located on 112 Ave	2-4 storey with apartment or stacked townhouse units  Market or rental apartment units above retail
<b>Illustrative Example</b>					
<b>Concept Design Illustration</b>					
<b>Photo Example</b>					

# Proposed Neighbourhood Parks & Trails

## LINKING PARKS AND AMENITIES WITH GREEN CONNECTORS

New Neighbourhood Parks will ensure that all residents have a park within a 5-minute walk.

North East Albion will provide active and passive recreational opportunities woven into the neighbourhood through a network of trails and multi-use pathways.

### Park Design Principles

- A joint school-park site with the proposed elementary school could include an active use sports field, looping trails, sports courts and playgrounds.
- Neighbourhood parks form the visual, physical and social focus of the neighbourhood and are typically a minimum of 1.2 acres in size.



Image: Conceptual map of neighbourhood parks and trails

### Park Programming

Park amenities are typically determined through the design process which includes neighbourhood consultation several months prior to park development.

Typical neighbourhood park amenities include:

- Playgrounds
- Sports courts
- Small water play area
- Looping pathways
- Open grass
- Picnicking & seating areas

### Neighbourhood Greenways

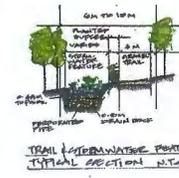


Image: Cross-section diagram of a greenway

This plan also features off-street trails in residential areas that act as a greenway and buffer to nearby sensitive environmental areas.

The proposed greenways are designed to include surface-flow stormwater management features, complete with landscaping to celebrate the natural systems that serve our community.

# Proposed Village Commercial

## TRANSFORMING FROM SPACE TO PLACE

Two Village Commercial nodes are proposed in the North East Albion Area. The nodes are envisioned as anchors for community activity, connected by trails, adjacent to new neighbourhood parks and a short walk away from Kanaka Regional Park.

### Key Highlights

Two Village Commercial Locations  
Each location with capacity for 4-8 shops, 6,000-9,000 sqft

Two locations have been identified, one at the intersection of 112<sup>nd</sup> Avenue and Lookwood St., and one adjacent to the proposed Elementary School at 248 Street. Having two nodes will serve existing and future needs, providing opportunities for retail space to grow as the population grows.

Retail uses at this scale could include: Café, Take-out restaurant, Hair salon, Daycare, Flower shop, Convenience store, and other Small Businesses.

**Note: Actual uses to be determined by future tenants**

### Mixed Use Development Low-Rise Residential over Retail

2-4 storey condominiums or apartments stacked above ground-level commercial could allow for both affordable ownership or rental housing to be introduced in the North East Albion area.

## Examples of Mixed-Use Typology



Image: Standard Housing, Callwood BC

Image: Walkable Village, University of British Columbia

### Potential Commercial Uses



Image: Cafe

Image: Takeout Restaurant

Image: Flower Shop

Image: Hair Salon

Image: Daycare

Image: Convenience Store

Image: Small Business

Image: Small Business

### Planning Intentions

- Blends commercial, residential, and institutional uses to create an activated and animated street presence.
- Sized appropriately to meet the needs of the growing community with additional room to expand should demand be present.
- Located in close proximity to future multi-family units to help support commercial, so it can thrive in this location.
- Co-locating commercial with residential and park space to create a centre of activity and gathering.
- Within a 5-10 min walk of the future School Hub and meet future residents: easy access from an arterial road, to respect future car travel routes.

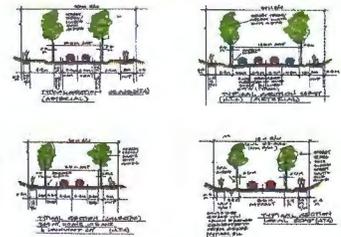
# Proposed Transportation Strategy

## PLANNING FOR MOBILITY

The proposed transportation network is designed to foster interconnection between streets, trails and greenways to promote cycling, walking and horse-back riding.

New roads essential to a functional street grid are identified, such as the 248 Street connection. Any new local roads required for housing will be determined at the time of development.

A network of high-quality trail loops will link neighbourhood parks, open spaces, commercial and key destinations.



### Road Network - Major Connections

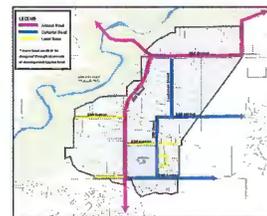


Image: Major road connections through North East Albion

### Bike Lanes, Multi-Use Paths and Trails



Image: Multi-modal lanes and connections

# Proposed Environmental Integration

## A NEIGHBOURHOOD WOVEN INTO THE ENVIRONMENT

The existing network of environmental features will form the green backbone of the neighbourhood. The plan will protect watercourses, important forested areas and maintain connections for wildlife movement through this evolving neighbourhood.

### Watercourses and Setbacks

Setbacks have been established to preserve the health and integrity of significant watercourses throughout the Plan Area. These watercourses feed into the Regional Park and support the health and integrity of the Kanaka Creek ecosystem. Innovative Stormwater Management techniques will be integrated into the design of the area to maintain water quality entering Kanaka Creek.



Image: Kanaka Creek Watercourse

### Water Management

Per Maple Ridge development requirements, development applications must demonstrate that proposed construction activities are designed to maintain or re-instate pre-construction groundwater flow rates.



Image: Stormwater Pans and Biofiltration Features

### Agquifers and Groundwater Protection

Natural open-water features woven between public-use spaces will be integrated into development guidelines. Open-water features aim to protect water quality as well as preserve habitats sustained by these water sources. Overall, the stormwater management strategy will:

- Protect receiving watercourses from erosion
- Maintain base flows in creeks
- Maintain water quality in creeks, ditches and storm systems
- Safely convey runoff to Kanaka Creek
- Protect the natural environment adjacent to watercourses

### Wildlife Movement and Forest Habitat

Significant tree stands and other environmental features that are not already protected through existing legislation, Bylaws, or policies may be preserved through thoughtful development design. In some instances higher density concepts may be considered where environmental protection emphasized.



Image: Forest Habitat

Habitat preservation will also allow wildlife to continue traveling between Grant Hill and Kanaka Creek. Thornvale Creek currently serves as a wildlife movement corridor. This corridor is to be protected and supplemented with additional watercourse setback areas to facilitate wildlife movement through secondary corridors.

# Sub-Area East of Lockwood Street

## We updated the Plan Based on Your Comments

**North Village Commercial Node**  
A gathering place connected by trails, adjacent to a neighbourhood park and a short walk away from the trailhead to Cliff Falls.

**Northern Neighbourhood Park**  
Programmed park adjacent to the village commercial node and linked by multi-use paths.

**Single-Family Residential**  
Larger lots as a sensitive transition to rural acreages outside of the urban area boundary.

**Multi-Modal Spine Trail**  
Creating a gentle-grade connection from the proposed elementary school to the Cliff Falls trailhead.

**Celebration of surface water**  
Visible stormwater management features to capture surface water, create habitat and protect our water resources.

**Single-Family Residential**  
Single-family homes reflecting the character of existing neighbourhood.

**Central Neighbourhood Park**  
Programmed park linked by multi-use paths, close to the existing single family area to the south.

**Legend:**

- SINGLE FAMILY
- DUPLEX, TRIPLEX, FOURPLEX
- CLUSTER TOWNHOUSE
- TOWNHOUSE
- SCHOOL PARK
- METRO VANCOUVER PARK
- ENVIRONMENTALLY SENSITIVE AREAS
- NE ALBION PLAN AREA
- SIGNIFICANT TREE CLUSTERS
- MAINTENANCE TRAIL
- EQUESTRIAN TRAIL
- POTENTIAL PARK SITE
- VILLAGE COMMERCIAL NODE (COURTYARD/FOUR RETAIL)

# Proposed Amenity Zoning

Typically, neighbourhood amenities can be provided at the time of new development through tools such as site specific dedications. The Greater Albion Area Plan establishes that Density Bonus zoning may also be used to help fund the provision of neighbourhood amenities through new development.

## NORTH EAST ALBION AMENITY ZONING

Like all density bonus programs, such zoning is optional in nature. Under density bonus zoning, there is a fixed base level of density that is available to all development, and an optional maximum density that can be permitted should the applicant wish to provide an amenity contribution.

Currently in the wider Albion neighbourhood, density bonus amenity contributions assist in the delivery of the following eligible amenities:

- Park Construction;
- Park Maintenance;
- Multi-Use Pathway Construction;
- Multi-Use Pathway Maintenance;
- Civic Facility/Community Gathering Place Construction;
- Civic Facility/Community Gathering Place Maintenance.

The draft North East Albion Land Use Concept Plan proposes a wide variety of similar amenities including: neighbourhood park space, multi-use pathways, trail connections, stormwater galleries, and affordable housing.

Ongoing work is anticipated in the coming months to incorporate into the existing Albion Area Density Bonus regulations the amenities proposed for the North East Albion neighbourhood.



# Sub-Area Between 248<sup>th</sup> and Lockwood

## We updated the plan based on Your Comments

**Townhouse Residential**  
Located in areas near to watercourses or on steep slopes where it is difficult to accommodate single-family residential development.

**South Village Commercial Node**  
A gathering place adjacent to the elementary school and park site. This node will help to serve existing residents in South East Albion.

**Low-Rise Residential over Retail**  
To help satisfy the diverse and changing housing needs of the neighbourhood.

**Duplex, Triplex, Fourplex**  
Multi-family homes with single-family character will create a sensitive level of density for the South Village Commercial Node while respecting character of the existing neighbourhood.

**North Village Commercial Node**  
A gathering place connected by trails, adjacent to a neighbourhood park and a short walk away from the trailhead to Cliff Falls.

**Cluster Townhouse**  
Encourage clustering of units to maximize environmental protection on steep slopes and in areas with significant tree clusters.

**Legend:**

- SINGLE FAMILY
- DUPLEX, TRIPLEX, FOURPLEX
- CLUSTER TOWNHOUSE
- TOWNHOUSE
- SCHOOL PARK
- METRO VANCOUVER PARK
- ENVIRONMENTALLY SENSITIVE AREAS
- NE ALBION PLAN AREA
- SIGNIFICANT TREE CLUSTERS
- MAINTENANCE TRAIL
- EQUESTRIAN TRAIL
- POTENTIAL PARK SITE
- VILLAGE COMMERCIAL NODE (COURTYARD/FOUR RETAIL)

## Sub-Area West of 248<sup>th</sup> Street

**We updated the plan based on Your Comments**

**Trees and Density**

Clusters of significant trees have been identified. There may be opportunities for future development to build single family homes along with opportunities for duplex, triplex or fourplex homes in this area in exchange for the preservation of high-value tree stands.

**Equestrian Trail**

A trail that connects riders from the existing Kanaka crossing to Grant Hill. This also helps to create a buffer between much of the environmentally sensitive area and future development

**Townhouses make a "Good Neighbour"**

A townhouse land use is preferred adjacent to Kanaka Creek Regional Park and sensitive streams because strata-ownership ensures better stewardship of the environmental buffer.

**Single Family Residential**  
Detached homes at the south of the plan area respects the character existing homes to the south and east of the school site



## JOIN THE ROUNDTABLE

# Facilitated Discussion

*Ask a Planner!*

## Sub-Area North of 112<sup>th</sup> Avenue

**We updated the plan based on Your Comments**

**Northern Greenway**

Linking the 112 Ave Parkway and North Village Commercial to Cliff Falls via a continuous system of sidewalks, pathways and off-street trails.

**Townhouses make a "Good Neighbour"**

A townhouse land use is preferred adjacent to Kanaka Creek Regional Park because strata-ownership can encourage better stewardship of the environmental buffer.

**Natural Transition**

This watercourse creates a natural transition and buffer between land uses.

**Celebration of Surface Water**  
Visible stormwater management features capture surface water, create habitat and protect our water resources.

**Single-Family Residential**

To transition to rural and agricultural land-uses east of 252 Street.

**112 Ave Road Alignment**  
Evaluating environmental, economic, and operational impacts determined the ultimate location for this arterial road connection to the east.



## SHARE YOUR THOUGHTS

# Complete our Written Survey

*Grab a Pen!*

# Thank you for participating in our Open House Event

For more information...

## Visit our website!

- Access online surveys
- View information from earlier events
- Learn about upcoming events and timelines, including Council dates

*Inquiries regarding the North East  
Albion Planning Process may be  
directed to:*

Phone: 604-467-7343  
Email: [northeastalbion@mapleridge.ca](mailto:northeastalbion@mapleridge.ca)

*How do I talk to the City about a  
problem unrelated to North East  
Albion Land Use Planning?*

Phone: 604-463-5221  
Email: [enquiries@mapleridge.ca](mailto:enquiries@mapleridge.ca)

[www.mapleridge.ca/2214/](http://www.mapleridge.ca/2214/)



NORTH EAST ALBION



NORTH EAST ALBION  
JUNE 2019 OPEN HOUSE  
BOARD #

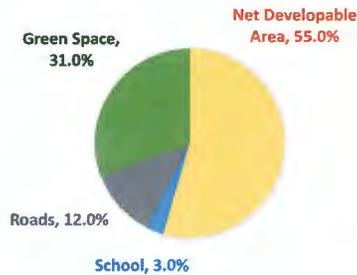
# Proposed Land Use Concept Plan

## LAND USE STATISTICS

The overall land-use concept plan shows how the environmental, residential land uses, commercial space, parks and trails all fit together.

The plan responds to the design principles by providing residential units needed to support new commercial and recreational spaces, and introducing a robust trail network to integrate a green, vibrant and connected neighbourhood.

### Percentages By Area



### Residential Area by Housing Type

Single Family	62%
Duplex, Triplex, Fourplex	6%
Cluster Townhouse	5%
Townhouse & Mixed-Use	26%

This plan projects an estimated population of 3000 people, given regional population per unit estimates.

Site specific considerations will determine the buildout population.

## Green Space Areas

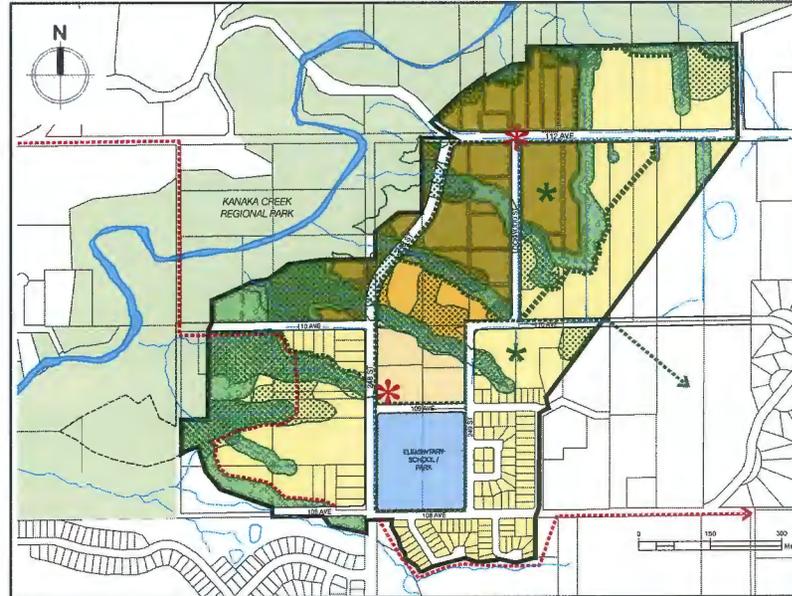
**Neighbourhood Parks**  
Introducing two locations for public green space with play features for a range of ages.

**Activated School Park**  
The neighbourhood park co-located with the elementary school will feature a full-sized active use sports field as well as looping trails and playgrounds

**Multi-Use Pathways**  
Gravel and asphalt multi-use pathways that connect North East Albion with South Albion and Kanaka Creek Regional Park, including Cliff Falls.

**Equestrian Trail**  
Maintaining and enhancing equestrian connections to the existing trail network.

**Environmental Areas**  
Protecting the health and integrity of the watercourses and tributaries that feed into Kanaka Creek Regional Park.



## Legend

- SINGLE FAMILY
- DUPLEX, TRIPLEX, FOURPLEX
- CLUSTER TOWNHOUSE
- TOWNHOUSE
- SCHOOL / PARK
- METRO VANCOUVER PARK
- ENVIRONMENTALLY SENSITIVE AREAS
- NE ALBION PLAN AREA
- SIGNIFICANT TREE CLUSTERS
- MULTI-USE TRAIL
- EQUESTRIAN TRAIL
- POTENTIAL PARK SITE
- VILLAGE COMMERCIAL NODE (GROUND-LEVEL RETAIL)

## Residential and Retail Typologies

### Single Family



Detached homes. May include duplex, triplex, and fourplex that appear as a single family house in certain locations

### Duplex, Triplex, Fourplex



Ground-oriented multi-family homes that appear as a single family house

### Cluster Townhouse



Multi-family townhomes developed with a clustered layout to maximize preservation of significant tree stands

### Townhouse



Multi-family homes in areas without significant tree clusters; on strata roads with visitor parking

### Mixed Use Commercial



Low-rise townhouse or apartment homes stacked above ground-level commercial

# North East Albion Open House Survey

The City of Maple Ridge has a planning process underway that is looking at how we want to live, work, play, and grow, into the North East Albion Area. This process is exploring land use and servicing options for the area, noting that the Albion Area Plan had always envisioned that further study of the area was needed at the time when redevelopment begins to occur in this area.

Since our last public event, the community input and stakeholder feedback along with the outcomes of the technical studies have informed the evolution of a draft neighbourhood concept plan. Your continued input through this Open House and Community Survey will help inform City Council's consideration of the draft North East Albion Neighbourhood Concept Plan.

The survey should take less than 5 minutes. The survey will close Friday July 12, 2019. If you have any questions about the survey, please contact the City of Maple Ridge Planning Department at [northeastalbion@mapleridge.ca](mailto:northeastalbion@mapleridge.ca) or by phone at 604-463-5221.

Copies of the Information Boards along with the draft neighbourhood concept plan presented at the North East Albion Open House on Monday June 24th, 2019 are available for review at [www.mapleridge.ca/2214](http://www.mapleridge.ca/2214). The draft North East Albion Concept Plan forms the basis of many of the questions in this survey. After taking a moment to familiarize yourself with the concept, let's get started!



NORTH EAST ALBION

1. What are up to 3 things you like about the draft North East Albion Neighbourhood Concept Plan?

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2. Tell us what you think needs more improvement.

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# North East Albion Open House Survey

3. Generally, based on the information presented at the Open House and/or in your review of the draft North East Albion Neighbourhood Concept Plan, what is your level of support?

Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree

4. Do you have any other specific comments on the draft North East Albion Neighbourhood Concept Plan?

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5. Where do you live?

- North East Albion Area
- Albion Area (Outside of North East Albion Area)
- Within Maple Ridge (Outside of Albion)
- Outside of Maple Ridge
- Prefer not to answer

6. Please provide any other comments or information you would like us to have.

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Thank you!

If you have any questions about the survey, please contact the City of Maple Ridge Planning Department at [northeastalbion@mapleridge.ca](mailto:northeastalbion@mapleridge.ca) or by phone at 604-463-5221.

North East Albion Open House Survey – Results

Q1. What are up to 3 things you like about the draft North East Albion Neighbourhood Concept Plan?

School, parks and trails considered
Park Amenities/commercial toward 112th
i like amenities on the 112th corner
1) you paid attention to natural features, areas of high tree density and steep slopes for culverts appear to be no-go regions. 2) the idea stratas make better neighbors, keeping encroachments low by having townhouse developments on the border of kanaka creek 3) the two townsite design. keeping pedestrians 5 minutes away from 1 area where you can get groceries or coffee is good assuming the businesses can stay open.
1. Walking trails 2. Local School 3. local parks
1/Glad to see you have single family plans for the areas now identified on the map as east of lockwood which includes a big park area. 2/South Commercial node is in a good place. 3/Like that you are thinking of maintaining the large tree clusters in the area and preserving the wildlife corridor. Lot of natural wildlife and birds make this area home and maintaining that is a big part of making an area livable for residents.
Walk ways. Access to nature. The school isn't crowded by high density.
The diversity of housing choice should provide more options for local families to keep their roots in the community, affordability should be improved for future purchasers with higher density product offerings, and the area is rich in amenities for residents to use and explore
Affordable housing options, product variety, more town homes for younger families!
1. Activated School Park - this will be a great addition for the school and the neighborhood 2. The plan drives growth and density 3. Equestrian Trail
Proposed Village Commercial Tail, Natural Parks
I don't like anything about it. I think the issues of transportation + other community needs should be met in current communities before any more development happens.

<ul style="list-style-type: none"> <li>- The intention to keep green spaces</li> <li>- The desire to create a hub</li> <li>- The focus on keeping things smaller-scale</li> </ul>
<ol style="list-style-type: none"> <li>1) I love the idea of more commercial spaces and splitting up the locations. Integrate with park access to make it more of a destination.</li> <li>2) Keeping so many natural aspects - trees, parks, trails</li> <li>3) Mix of home types</li> </ol>
Nothing
Mixed commercial/ residential, new school
<ul style="list-style-type: none"> <li>- limited commercial</li> <li>- [arterial] [inter]section at 112</li> <li>- multi use trails</li> </ul>
<ol style="list-style-type: none"> <li>1) the walking trails</li> <li>2) mixed housing</li> <li>3) closer school</li> <li>4) Your website maps are confusing.</li> <li>5) The 'links' to make comments on the North East Albion Land Use and Servicing Concept Planning. GOES NO WHERE?</li> </ol>
<p>Good blend of Multi Family and Single family close to a school.  Like the trails etc, don't think you need a large park as School field will provide good active space for many.</p>
<ul style="list-style-type: none"> <li>-Single family houses with attached garage, driveway and a usable yard.</li> <li>-Kanaka Creek trails and more park space.</li> <li>-Environmental protection of existing wildlife, waterways and forest.</li> </ul>
Mix usemor
Green space
<p>Support the Diversity of housing, densifying housing around the proposed commercial node adjacent to the sports park and school site , creating a community with commercial neighbourhood services ie. child care, small restaurant, maybe have a police community office, etc, sports facility and school all within walking distance of the New growth area.</p>
None
Nothing
<ol style="list-style-type: none"> <li>1)Higher density residential with smaller single-family lots</li> <li>2) The village commercial next to the school and park site at 248 street and 108 Ave</li> <li>3) Allowing residential and commercial for a higher density</li> </ol>
Commercial areas, diverse residential types, and connection to nature

Who said I liked anything about it? A little presumptuous, wouldn't you agree? Nice try though. Let's see...ability to walk to services, protecting wild life and wild places, not monkey wrenching the water. All good things. I'll give you that.

Nothing

I like that there are some environmental remediations and standards to be imposed, although they are not sufficient.

Multi use pathways. Park use.

I like the parks and sports field, school as a hub, commercial village like concept.

I am not opposed to more housing but believe that higher density housing such as townhouses should not be going into rural areas but should be put in the central areas of Maple Ridge where services are already available. Green, rural areas should be preserved as farmland and acreages. The rural townhouse projects that are going in will only create traffic bottlenecks and more problems.

Commercial nodes, walking options from residences. Environmental focus, living within the trees and environment not just more clear cutting urban sprawl.

I like the attempt to have horse trails but I think it must be acknowledged that any attempt at areas for the community to be active are going to be a poorer version than what is already present. Rather than creatively planning around existing natural assets these trails are just mitigating the impact of losing current greenspace and can't really be celebrated as an innovative approach to the neighbourhood.

I appreciate that an attempt has been made to have a mix of housing styles, below I reference where I think the city has an opportunity to fully explore mixed housing.

That stands of trees have been identified to save. This will provide better stability, run-off control and cooling. I would strongly encourage larger and more stands to be maintained.

Maple Ridge's actual "Albion Area Plan" was introduced and given wide publication when it was first introduced. There was substantial time for this inclusive process, and all of Maple Ridge was invited to, and many did participate, resulting in a profoundly changed vision being adopted after realization of the originally proposed high-density commercial and residential development in a mainly wetland area, was unneeded due to its unsuitability. It is apparent that current staff are taking an entirely different and exclusive approach which avoids and/or minimizes area resident input, or in the case of directly affected adjacent neighbourhoods, even to the point of not sharing even preparatory knowledge.

Broad publication and public input was NOT the approach used for the (6 month old) newly-minted "North East Albion Area Plan" which in reality references an artificial area, really a Developer project-defined set of streets, many of which have already been purchased on speculation of its fast-tracked development by contributing "Consultation Facilitation" parties. Hardly a Municipal "best-practice" particularly when it does not fall within the requirements of the current area plan accepted previously. The role of the Planning Department is not solely to respond to a constant stream of changes to an accepted community model.

Other than a postcard in the mail, there was NO notice besides recent roadside signage...In fact, in attending the public session on June 24th, it was apparent that one set of information was being provided to affected residents, and another to developers.

For residents: "Oh no, this proposed arterial eastern-access corridor to handle greatly increased traffic is just at the initial discussion stage, although this has been what 'the City' has wanted since 2015." In point of fact, the suggested routes go to nowhere east of the development, and would be cutting through peaceful rural acreages, streams and greenways. What was apparent from the June session is that previously provided mapping showing this high-traffic routing had been removed from display provided to us on June 24th, as it clearly showed the intention to be to create a high-volume arterial roadway directly through a greenway/salmon stream area, and quiet trail-crossed horseback-riding routes. This is not acceptable.

For developers it was a different message: "Yes, 112th is to become a main eastern-focussed traffic corridor on that side of the development which will open up the whole area from Grant to 272nd. You will be able to develop the area." And they will have full City license to do so, as "[n]ew roads essential to a functional street grid are identified, such as the 248 Street connection. Any new local roads required for housing will be determined at the time of development." This is not acceptable.

The affected neighbours who make this area their home, are walkers, hikers, runners, and horseback riders who make daily use of the quiet country roads and lovely natural setting. It is also one of the few remaining wildlife corridors with bears, cougars and deer accessing the unspoiled creeks and streams from their woodland dens and meadows. It is not acceptable that this Council consider cutting through this area with an arterial route, destroying a peaceful neighbourhood.

- Shopping. We need it so desperately, and the village style (like Newport in Port Moody) is a great idea.
- More parks and trails
- Wildlife and environmental focus!! (Plan properly to keep it green instead of ripping EVERYTHING out!)

I like that you are asking these questions. that housing types are mixed and that some trees are protected
Prioritizing saving environmental green areas, and building multi-use, integrated communities.
Environmentally significant areas are planning to be built on. Tree clusters are planning to be cut down. Too many townhouse zones
Higher density around the park and school site with commercial component next door to the school and park site. Walking distance aspect to parks , commercial and recreational focal points.
None

**Q2. Tell us what you think needs more improvement.**

Transportation and commuter options
Commercial right next to elementary school is poor idea, down the road towards 112 is better. Too many townhomes/ multi too crowded Estimated 3000 people for this area is ridiculous. The area is not very big, the number of cars in the area will be a concern as we already have traffic issues
less townhomes too many ppl for the area
Too large scale for the neighbourhood Fewer townhomes
the transportation plan through the neighborhood. 112th will not be sufficient if left at 2 lanes, and there seems to be no plan for the bridge over the creek. Along with that, there seems to be no concrete plan for culverts under the roads or for wildlife corridors across 248th
1/Concerned you have too much high density housing planned for the area. 2/Do not like the north commercial node right on 112. that street just too busy now 3/ Increased traffic on 112 (which is already very dangerous in the winter due to curves, narrow, drop offs and low temp areas) will force the city works to increase the use of brine solution during the winter as increased traffic flows wear it off and all of this increased brine will find its way into kanaka creek! But without brine or salt during winter months this road would have to be closed during many periods. Increased traffic flows on 112 I believe is asking for trouble and I would expect many accidents and cars off into the ditch etc.

The upper north east Albion portion. It should have had more townhouses included to allow younger families to get into the area. As demonstrated on the option there were some homes up to the nature walk ways and the a tradition into single family homes.

What type of single family homes? Please provide affordable options that aren't \$1million to purchase

nothing

We think that some of the areas currently labelled as single family should be considered for multi-family/townhouse zoning in order to provide a higher density of homes at an affordable price point

Stop assuming that people sell their land to developers because they won't. The destruction of their neighbourhood leaves them wanting to leave.

- Parking - We are already seeing parking issues with the volume of townhouses going in.
- Wildlife - there will be increasing interfaces an(d) animal deaths with more people/ business and lack of respect.
- I'm not sure how a school can be a hub

My concern is parking, will single family homes have suites? Garages?

greenspace

- more green space + multi use traits
- more area for preservation
- protect the bears in the area

- details on the community park
- larger commercial space.

Not sure apartments would work well in this area currently. However as time moves on and this area develops then the time may come for a small commercial space and some smaller apartments. Like what has happened on 240th and 112th...

Mixed commercial with residential and more parks toddler friendly to older.

Traffic calming and road improvement.

More dynasty

Too high density.

Thought to existing surrounding neighbourhoods that are are being changed by the huge increase in population for developers gain.

Expediate the School and Park development, something that is badly needed to the area given the current population and needs of the children and residents of Maple Ridge. City assist with services to provide incentive for builders to proceed.

The route from 232 to 248 it should be along 124th ave.

Definitely no four lane road please.

The plan is well done

A dog park. Concerns about commercial occupation with hopes we don't consider day care and liquor stores the only targeted commercial tenants. It would be preferable to attract restaurants, pubs or theatres to allow for social gatherings and activities.

Density needs to be minimized. We don't need another tiny town adventure. It is a cozy neighbourhood but a little too dense in many, many opinions. In my opinion, Country Lane is a colossal failure as far as planning and development goes. Parking is seriously lacking and the streets are far too narrow to be considered safe in modern terms. This isn't the 18th century after all. The sidewalks are also far too narrow. Two adults cannot walk side by side. The tiny parks are a bit of a joke. They are only really practical as toddler parks and when equipment broke down, it should have been replaced with the same equipment or better than what was there originally. That has not happened at 243 and 102A.

More green space  
Less high density housing  
Traffic control/calming measures

The entire plan is a disappointment and lacks creative thought around community space, environmental protection, and retention of existing fragile ecosystems. It is a plan for developers - not for residents, our environment, or the future of either.

I think there needs to be much more thought given to wild parks and green space. The existing green wildlife corridors and stream protection are not sufficient. I was shocked to hear of possible bike paths and widening/'improving' of 112th near, and through, Kanaka Creek Park. This is vulnerable land and any disruption will be detrimental to the water course and therefore the fish stocks and other parts of this fragile ecosystem.

Widening of 248th. General densification of this rural area should be avoided at all costs. Develop closer to town where there is infrastructure and where you don't have to clear forested areas.

Parks and recreation is not just green space. Would be good to have sports courts like tennis, basketball, or even swimming pool.

On the commercial side, it would be nice to have classes for kids like martial arts, art / pottery classes, music school.

The two proposed exit routes to the east from "North East Albion", running through the Palmer Rolph / Grant Avenue area are totally inappropriate. They both would seriously degrade an enclosed rural community and will only move traffic a little further east before returning it to Dewdney Trunk or Lougheed Hwy. The GVRD has a plan to extend the park area at the end of Grant Avenue so a new road should not go through this area.

Do not need 4 lane roads. Roads need to be wide enough for emergency vehicles not racetracks. Ensure adequate parking for all the residences, history has shown public transport will be poorly serviced in the area. Ensure schools and commercial are built and ready for the residential, not arriving 15 years later.

Road plans and housing density.

There is no need for 248 street to be extended when there is already an existing route to 112. High density housing will destroy the natural and rural feel of the area.

My concerns around the plan fall into two categories. One, because this consultation and plan has been sparked by a development application there has been no consideration of how this plan impacts the integrity of Maple Ridge's longterm community planning and it is contingent on people already living in the area to sell their land. There's no consideration that individuals might value their community and where they live enough to stay in their current homes. Two, the plan itself does not adequately address Maple Ridge's needs.

This plan should be considered in relation to longterm goals for the city. What targets are being missed or met by this plan?

If the target is to protect the integrity of Maple Ridge's rural flavour, then this plan should be scrapped and downtown Maple Ridge and West of 230th should be densified. I would encourage this for a number of reasons. Not least of which is walkability and transit accessibility. The current plan assumes everyone has a car to access groceries and a place of work. This will increase congestion, traffic incidents, air quality, and if people work elsewhere they spend less money in the community.

If the target is an integrated, livable neighbourhood. There needs to be increased amenities. Albion scores startlingly low on the child development index. Increased greenspace and less crowded childcare options address this. If this area is developed, current plan does not have enough daycares. I would deeply encourage the municipality to work creatively with the school district to fund early childhood programs and use the new elementary school planned as a community school model rather than just a new elementary school.

If the target is to increase housing for our community, there should be more rigorous mixed housing. Multi-family homes and low rise (4-6) story apartments with below market rental in at least 15% of the units. This is another argument for further densifying downtown.

If the target is to have robust natural assets that will mitigate the impacts of climate change than this plan misses the mark. It is not an adequate policy to replace 2nd generation forests with saplings or bushes. The cooling impact of trees is vital, especially with increased temperatures. Heat waves are killing people in Canada currently, existing green space being preserved amid development is the easiest and cheapest way to prevent this. Grant Hill is a great example of reduced stability and increased run-off from removing all the trees on a property and replacing it with concrete structures. While the houses coming in will have city water, surrounding neighbourhoods rely on aquifers that require water to enter seeping through the earth. Concrete puts these aquifers at risk. The fish bearing streams and Kanaka Creek will be at high risk of deleterious substances in their habitat due to run off. The recently ammended Fisheries Act makes this illegal.

The current plan does not address the longterm needs of Maple Ridge and needs to be altered to match targets that meet actual policy goals for the city. A plan with development as the goal does not serve the community. And until Council stops planning in a responsive, reflexive manner anytime a developer applies to shift fundamental structures of our community (ie where waste water/city water reaches), these plans won't meet the actual needs of the community

- i) Stop either version of this “preferred” development fast-tracking: This tiny area within Albion, carefully titled “North East Albion” even though it is not the whole NE sector of this area, where a newly identified portion has been identified by a developer as a profitable project, saw “...[a] development application submitted very late in 2018” extremely quickly and quietly started “...the North East Albion Land Use and Servicing Concept Planning Process. Per the Albion Area Plan, a review of the land uses and servicing was required (??) to ensure that development responds to the community’s changing needs.” This plan is driving the changes not responding to them, and these post-election North East Albion Plans are not a response to this community’s current OR changing needs. This extensive work done by City Staff on behalf of a large Developer, with its extremely selective resident review, was done in relative secrecy and included only a tiny portion of the affected population in that sector of Maple Ridge. As identified in published City documents, Council and staff activity did not start until January 2019. It is clear that unlike resident-supported applications in exactly the same street areas, which languished for literally years without Municipal Staff or Council activity (some applications from 2012, some from 2015) this particular application made in very late 2018, was suddenly fast-tracked by Staff/Council in January 2019 . Worse yet, additional development suggestions produced by those profiting most directly from the proposed development are completely insensitive to the natural peace and beauty of the forest areas. This is so extreme that there is now an additionally proposed “North Village Commercial Node ... connected by trails, adjacent to a neighbourhood park and a short walk away from the trailhead to Cliff Falls” of which even initial attendees at previous meetings may not be aware – although that property has now been clear-cut. In other words, “development” of this commercial enterprise has already been started right at the Regional Park’s Cliff Falls trailhead. This is not acceptable.
- ii) It is important that Council ensures resident (and voter) trust is upheld, and Staff and Council provide transparency in an open and standard review process conducted by Staff on behalf of ALL residents, particularly in view of this kind of uneven development application handling by Council/Staff, just as other Municipalities are doing. It would behoove Maple Ridge Council to expand its own definition of Conflict of Interest to include: benefits anticipated and/or received by individuals and/or family members, of those elected to or working within the City of Maple Ridge from proposals received by the Municipality. It is clear that the agenda has been pre-set and is NOT consultation-focussed, as per Board #4 : “The finalized land use plan is expected to be before Council for endorsement in the Fall. Once the plan is endorsed, Staff will prepare supporting policies, continue the discussion with the community and ultimately initiate a formal process to adopt the Land Use Plan into the Albion Area Plan as part of the Maple Ridge Official Community Plan. The timeline for individual development applications will vary, but development approvals and construction may begin next year. ” This is a profound change to fast-track unwanted and unneeded high-density developments at the outer-most areas in Maple Ridge, even though there are ample areas within already serviced corridors that currently have existing arterial roads, bus routes, recycling pick-up, etc.) that would better support the same high-density growth.

- Maple Ridge needs more apartments for single and small families.
- Keep the village style shopping but less mom and pop shops and business opportunities for educated people who can work and live in the same city.
- Not keen on where the school is to be located. There will be too many within the same area (SRT, the new one on 104 and now this one) and will create a lot of traffic, despite a thoroughfare. Too many parents will still drive their kids instead of there being a bus service.
- Dog park? Why isn't that proposed?

I think we need to consider what type of community we want to live in. Do we want to have some rural areas or put it all to housing. there is much more infilling we could do with housing close to current services before we start pushing wildlife further and further out.

The idea of 'putting' horse trails in an area that is already rich in horse trails, people trails and animal trails and which is open to anyone in Maple Ridge is a poor attempt to quieten people who might object. In reality few horse riders will use these horse trails as they will now be close to housing. People buying houses in the area will be given the impression they live in close proximity to the countryside when in fact they will not.

This whole process was started as a result of an application to build so it is not a neutral process at all. it would seem that the rural parts of Maple Ridge are seen by some on council as just a way to increase the tax base. It has taken over ten years to even begin the community centre in Albion, long after it was needed by the community and it will be way too small for those living in the new areas. City of Maple Ridge has no control over new bus routes or new schools. Even SD42 can only apply for funding when all other schools in the district are almost full, not just the schools in this area but the whole District of Maple Ridge and Pitt Meadows. So those issues will be with us for a long time in the future

Park and Play space is way too small in the planning. Children need large areas to have adventures and problem solve not just little playgrounds.

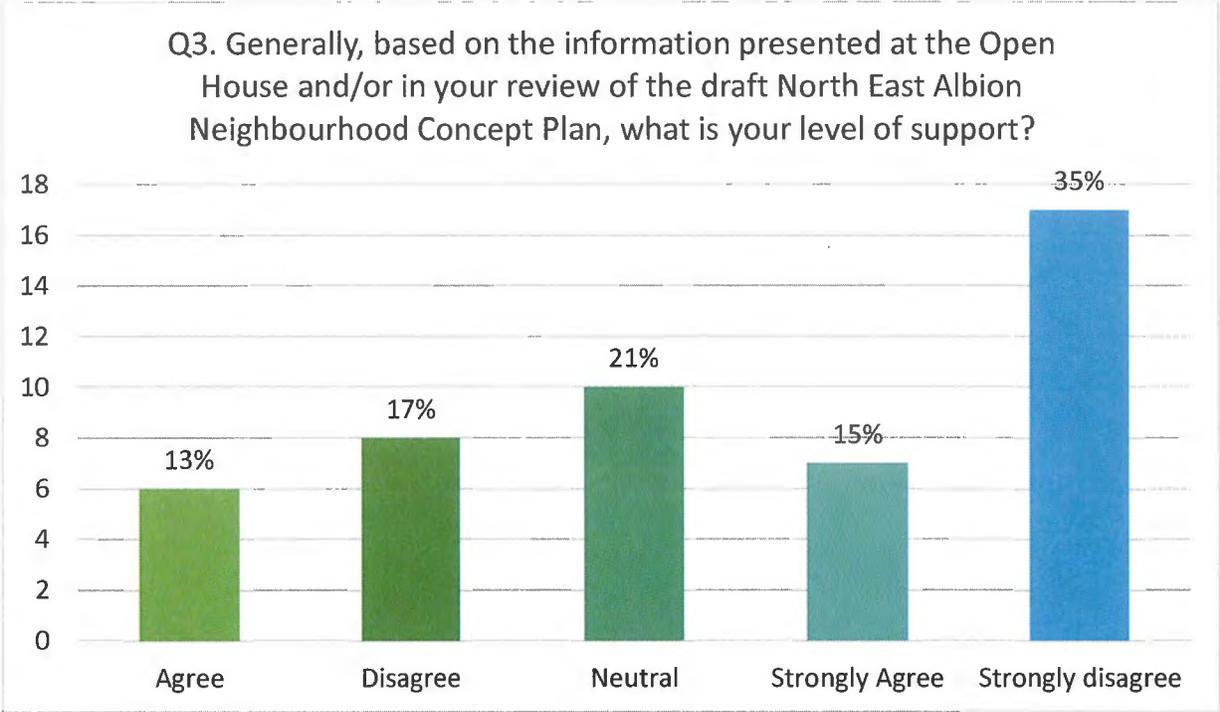
Single family homes are NOT the way of the future! With the impending climate change crisis (which we are already feeling the effects of with flooding and heat waves and forest fires and droughts across the country), and with the housing crisis, how on earth can proposing 62% single family homes be seen as a good idea? This will only benefit the already-wealthy, and will lead to increased car dependence in a time when it is ESSENTIAL to shift our communities away from car-centrality. Maple Ridge has been making great strides densifying and building walkable communities; do not let this neighborhood turn into even more suburban sprawl!

I believe there to be too many townhouse ares. When built they will be built on environmentally significant areas and tree clusters. This should be changed to multi home clusters to accommodate the natural environment. As temperatures rise and rain refuses to fall, townhome dense areas will be heat stricken. If you want to build these homes for the future you need to protect the surrounding areas that are already in place. Paving and planting a tree in front on each townhome will be a laughable effort towards sustainability. Build these homes in a way that accommodates nature so that families will stay long term and be able to reap the health benefits of living in densely green areas.

The city By way of local improvement charges assist in installing services to encourage development .

I do not agree with punching 248 through. There are many family homes / acreages here that would be adversely impacted.

Q3. Generally, based on the information presented at the Open House and/or in your review of the draft North East Albion Neighbourhood Concept Plan, what is your level of support?



Q4. Do you have any other specific comments on the draft North East Albion Neighbourhood Concept Plan?

Kanaka creek road will not be able to carry this increased traffic!
Estimated additional 3000 people crammed into this small area is like Albion but worse as more people will be crammed into townhouses. I can't imagine this many people and the increased number of cars in this small area. It will be extremely crowded with an increase of an already problematic traffic problem with speeding, noise, narrow roads
leave the area quiet instead of crowded
Too large scale for the area
This appears that you guys have done a great deal of homework on this. Along with tons of consultation. The impressive design is in the storm water management strategy trying to build multi use trails along the contours, permeable materials along roads in lieu of storm catch basin. also, the collecting ponds for extreme runoff. I hope that this level of focus on the natural environment stays in the final neighborhood, years from now when this is all built up.

I think the planning department overall has done a nice job and allowing locals who live in this area the chance to be involved in the process is a first class move. Lots of effort has gone into consulting with the public that's clear and it will pay off down the road. Cheers to MR planning!

Needs more density

I think its an innovative plan that is going to have benefits to all stakeholders and future residents at build out

no further comment

We are the family that currently owns the property at 24930 110th avenue. I have spoken with both Chad (parks department) and Amanda (planner) about this proposal in an effort to further understand it.

We purchased this property as a long term investment hold. We had numerous offers for future value and we did not sell. We bought this property knowing that this is zoned for SFD.

Carving some land out for a park essentially lowers the value of our property. We are willing to work with the City but we don't want our property devalued with respect to future value. We are open to a discussion how we could help but at the same time sustain our property's value. For example, a multifamily zoning and a smaller kids park next to the current green space backing on to the current homes there. This is a suggestion and we are open to a dialogue for any other options you may consider that would work better

Additionally, with the number of homes going into the area, a larger retail area would serve the area better so that residents can shop for common items in their neighborhood versus going into town. Additionally, services such as a medical clinic, pharmacy, etc would be invaluable for such a neighborhood. We would be also be open to our property be re-zoned as retail with residential multifamily above. This will not only satisfy the need for more retail but would also provide more affordable housing.

We are open to other suggestions as well that would be both beneficial to the City of Maple Ridge and ourselves as the property owner.

When do we stop development? Mission?

It really depends on how some of the issues are dealt with. Will there be an active wildlife education plan? How does a school become a hub?

Too much pressure on Kanaka Creek.

Concerns on traffic, flow, amenities

- Not in favour of the TH density along the creek. This should be protected area as park.
- Wildlife corridor seems to be forgotten given how little the plan accommodates the resident bear population.

- 1) what period of time is the expected build out?
- 2) when is the school to be built?

There is absolutely zero interest in townhouses, and apartments in North East Albion. The proposed 86 unit development on lockwood is crazy. North East Albion needs to remain medium density.

West of 248 st we should have more dynasty like more row homes duplex and triplex

Too high density with not enough infrastructure or services to support the increased population.

The plan includes the addition of a road connecting the new development through a forest, to grant avenue or Palmer Rolf, which is currently a very quite rural neighbourhood. Then it would go through though a park that has a number of creaks leading to kanaka creek a hugely important salmon eco system, through another quiet rural neighbourhood and finally to 272. There has been no consultation or real thought of anyone in the neighbourhood that will be massively disrupted by the addition of an arterial road. The grant avenue, 260th and Palmer Rolf area has a huge amount of wildlife, bears, coyotes, cougars, and countless birds that will be greatly disturbed by the addition of a road and the traffic that comes with it. Additionally many children currently play in the road, families walk their pets and neighbourhood socialize as it is a very safe quiet dead end street. Also this area is of great importance to the horse community, it connects a number of trails in a safe way, that would be ruined by the addition of a through road where cars will be travelling a greater speeds.

Focus on Commercial node adjacent to the School and Park sites with support for for added density in this area to support such, continue with other various home type uses, single family and or semi detached.

The village commercial ground level retail should allow apartments above

Do not allow wide removal of trees for construction. Rather selective removal only to allow the construction and permanent building occupancy. Leaving selective trees allows us to have the foot hills and mountain community feel.

Encroachments on local creeks and rivers should not be compromised to increase development or developable land.

Road network does not support an additional 3000 people in the area and the vehicles they will be operating.

- The Albion neighbourhood has consistently ranked dead last in the Early Development Indicator (EDI) for children which ranks areas health based on five areas including social development and physical development, and the opportunities for both This plan does nothing to create a community to better serve children. And a single new 'community centre' will not make up for a lack of imagination and people-centred planning.
- If this massive scale of development is allowed to continues it will affect the water of nearby rural areas. These areas are also affected by increased traffic and the need for new roads. It also puts pressure owners on rural landowners to sell even in areas designated rural. Where will it stop? It is unethical and disingenuous to suggest this development exists in a silo and won't do harm to other rural areas, and to fragile ecosystems on Thornhill (Grant Hill) and Kanaka Creek Park. It's time to start taking these issues into account.

See above. Do not like the development and densification of this area. If this is to go ahead it needs more infrastructure. Restaurants, stores, transit, etc. Develop where this already exists.

Ps the map is terrible. You can hardly locate this when referencing against google maps. Poorly done.

Development is better than no development. But traffic needs to be taken into account.

More urban sprawl is not helpful, the major infrastructure through Maple Ridge can not handle the population now. I commute to Vancouver Daily and 50% of my time is taken crawling from Albion to Harris Road, 20 % of my total distance traveled. I am concerned that a 4 lane 148st will connect to Jackson Rd and remove all residential parking on Jackson. I live in a 7 bedroom house and have a single space garage for 3 cars. The lane is already full of neighbors vehicles and street parking out front is essential. If street parking is removed it will be a nightmare.

The park boundary should be respected by matching the distance (15 m) required between development and waterways. So new development should not occur within 15 m of park boundary. This would reduced negative wildlife encounters by increasing the natural corridors and further limit run-off into fish bearing streams.

The idea of having Strata close to the park boundary to increase accountability for respecting the park is a great idea. However, Co-Op housing would provide greater accountability and also address the housing ownership crisis. I would encourage the move to Co-Op in the plan.

This plan includes land within thr 15-25% grade requiring built in stability structures. This should also require less trees to be removed. Use the natural assets. Maintain stand integrity of larger groups of trees in grades over 15%.

Metro Vancouver and DFO need to be actively involved in this decision. A formal, independent, environmental assessment needs to occur for the part of the plan requiring construction over Kanaka Creek.

i) It is also clear that this proposal impacts far more than the newly identified "North East Albion" area. Yet, not all of the impacted residents in these affected areas were notified, until after those profiting directly from the development project completed their various planning stages.

ii) It is also clear that the specific salmon stream-adjacent high density (strata-title) type or development is the preferred City Staff model, as they stated as much within the posted materials, and in discussion admitted that it is easier to deal with a strata council than with individual residents. It is hardly the role of staff to prefer their own convenience in pushing through projects.

iii) It is a fallacy to suggest that high density pedestrian and/or vehicular traffic in a greenway/salmon stream/horseback riding /environmentally sensitive area is a bonus, and that high-density development in this ravine are is the preferred model of current area residents. It is NOT. This higher population density can only result in higher vehicular traffic, higher and more serious wildlife/human interactions, increased danger to pedestrians and horseback riders and horses, increased and irreversible roadside pollution and dumping, and higher potential for direct and irreversible waterway contamination. It is shameful that this ravine and greenway development is being considered on the scale City Staff & developers have produced.

iv) As can be seen by the map, it is being proposed that the whole neighbourhood's environmentally sensitive areas would be obliterated by duplex, triplex, fourplex and cluster townhouse construction - an appalling treatment of the very resources and amenities that make Maple Ridge so unique, which the actual Community Plan already protects.

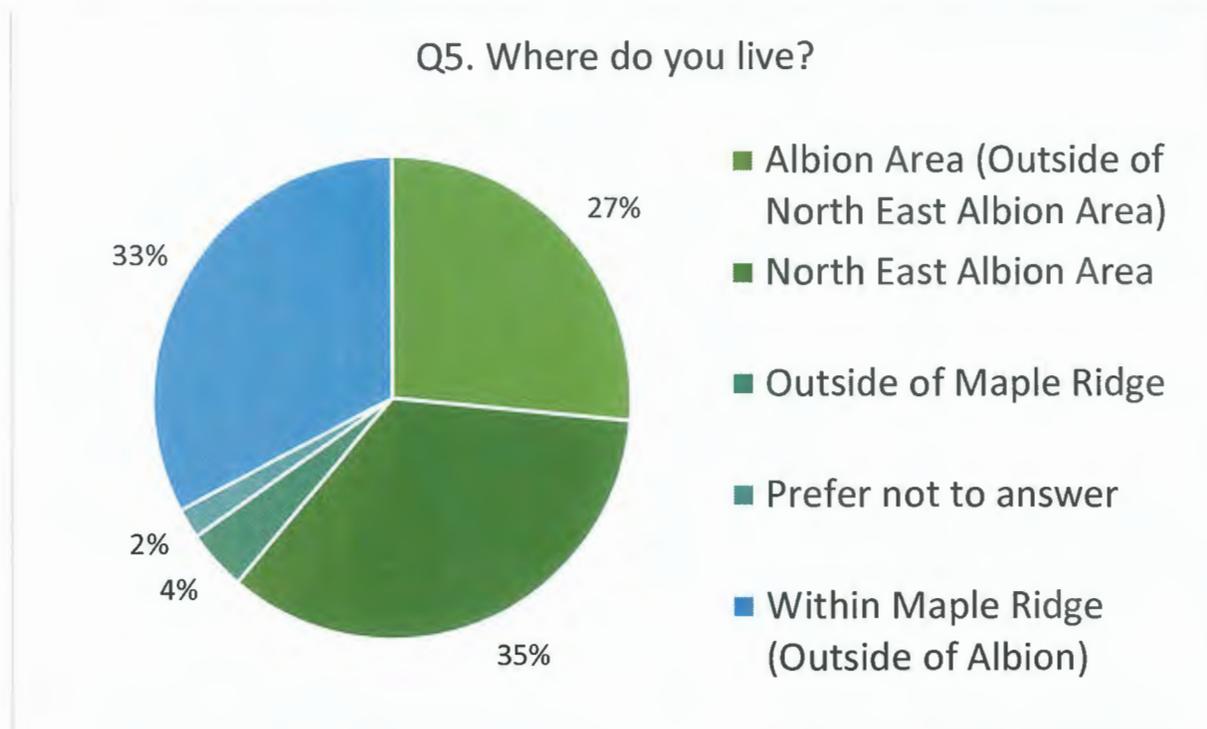
Please consider the housing crisis, environmental protection, and climate change more seriously.

It should not by any means be legal for so many environmentally significant areas to be built upon. Plans such as these do not consider the environment, long term residents of maple ridge who understand the sensitivity and importance of the land, or future tenants and their health. This is an issue of health as well as environmental ethics. Create livable areas that cater to the existing landscape and In turn lower temperatures in suburban areas, increase mental health, clean air, and help with soil and water retention, as well as encourage wildlife habitat. Without these long term considerations residents as well as the environment will suffer in the very near future as we face the climate crisis.

Support commercial neighbourhood amenities to lie adjacent to park and adjoining school site.

I would like to see development slowed and MAJOR infrastructure improved (Lougheed hey, Golden Ears way, Dewdney trunk) before any other development is going ahead.

### Q5. Where do you live?



### Q6. Please provide any other comments or information you would like us to have. Thank you.

How are secondary school needs going to be met? Two extra elementary schools with one way too small high school SRT?? School planning needs to be apart of this process. Expand SRT as per school district facilities plan/review.

focus on fixing the things that have not yet been fixed, busy traffic, high school space such as srt, etc instead of adding more homes causing the area to become more crowded and schools too full n more traffic

Why do you have to develop the hell out of every corner of this city? Having a bit of beautiful countryside and nature is the reason we moved here now you want to take it all away. There is mind boggling development in every corner of Albion /240th/Jackson road already. Once you fill the new elementary school where do all of these kids go to high school? Better planning needs to happen beforehand not after. The city has no shopping, jobs few amenities, how about meeting those needs first.

Please consider the impacts of sprawl on this neighborhood plan. Your boundary is limited on 2 sides by Metro Vancouver boundaries. the amount of single family homes was a bit disappointing, as we are in the midst of an affordability crisis, and these detached homes may never be affordable. Preserving the natural environment and keeping people out of their cars should be a big part of decision making.

[REDACTED]  
This is a follow up of information that I have shared with Mike Pym your environmental planner.

If you look at our property and the natural lay of the land you can see the culvert on the east side of Lockwood hits the highest spot of our property. There is no way a stream would have flowed that way. Where the culvert is situated it is picking up the perimeter ditch of the house across the street as well as what has been diverted up the hill. There is a ditch on the east side of Lockwood that should be picking up that run off but it was left about 2 ft higher than the culvert. It catches the runoff mostly from the perimeter ditch dug for 24930 110th Ave.

I worked with the son of the family that lived on the east side of Lockwood. He father wanted to subdivide his property off the back and the city wasn't interested so he did it himself and that is why the road isn't in the correct location. He placed the culverts to drain any water off his side of Lockwood to the West side(my property). This is why there is a small strip of land that runs down to 112th. The city couldn't put in a ditch on private property so the ditch stopped and was left non functional. The guy that put it in also put in the culverts to make sure that it ran straight off his property and down the hill.

I inadvertently made my own mistake by having the backhoe operator dig a one foot wide drainage channel diagonally through my property to drain what was coming out of the culvert in the rainy season and is now being called a stream by the city. There was no channel when I purchased the property. It was just soft and muddy.

I noticed in the latest open house that 110th Ave is being extended to the east and what was the origin of the surface water between 24990 110 AVE and 11070 LOCKWOOD ST has to be diverted. I would like to be part of that discussion as it directly affects me. I am quite sure that if the water was allowed to flow in its natural direction it would flow towards 112th. The property at 24930 110th Ave also has a ditch on the north side of its property and for some reason that I don't understand they ran a culvert under their neighbour's driveway instead of under their own driveway to carry away their drainage. It makes no sense and that is the bulk of the water that flows through my property.

In summary I would like to see the culvert draining on to my property removed and the natural drainage patterns restored.

[REDACTED]  
As a resident of North East Albion, we appreciate the tremendous amount of work that has gone into all the consultation meetings, information packages and boards and open houses to involve the public. It may be your job but the effort should be recognized. Real quality process!

bear proof garbage bins are a good idea for residents if Maple Ridge ever goes with city pick up.

Please feel free to contact me at [REDACTED] for any further information you may require.

Please review the need to improve the 3-way stop at 112 + Palmer Rolph - It is a blind intersection North + South with traffic consistently not stopping and driving through. With increased traffic + truck traffic (from 256 St Quarry) to the new development project ) this will become an increased traffic hazard. ? need for roundabout. (1)

I will provide them on an ongoing basis.  
Thank you (2)

Please consider a roundabout at 112th & Palmer Rolph. This 3 way stop is dangerous - many cars/trucks blow through the stop sign. (4)

This area needs more development (commercial) to sustain the families that live here, but I like that balance of keeping things green and not a major downtown area. The North East Albion plan looks like it will create a nice little community. (5)

The whole area is a big wildlife refuge. Please leave it alone. (6)

Will new services have size potential for future east development? (7)

- TH on S/E corner of Lockwood/ 112 is worse than all other areas  
- 112 Ave is deadly now the proposal is to put lots more density on it + the resulting over flow illegal parking on 112 Ave. This will be a disaster. (8)

- I live at [REDACTED] and can attest that what is marked as stream or sensitive is man made and not a natural flow. The current plan shows some diversion of the upstream water flow from the culvert and I would like some input as to how this will be addressed.  
- The cities current guestimate of natural flow is incorrect.  
- It would have been nice if someone had taken the time to find out (ask the property owner what has occurred in the past!) (9)

We do not need a neighborhood pub or liquor store. We do not need any commercial space in North East Albion. We choose to live here to be AWAY from that.

Review west of 248 st

I believe there needs to be more consideration for wildlife corridors and green spaces. Green spaces contribute to community wellness. Increased density (e.g., townhouses) will have negative impacts on our community liveability and wellness. We are rapidly losing our green spaces and ALR lands. Overpopulation seems shortsighted. Crowding people into small homes with minimal outdoor space and long commutes to work will only increase people's dissatisfaction and stress. Research into wellness does not support high density living and lose of green spaces.

Good presentation, reach out to the other partners involved sooner than later, ie, the Province / School District in order to begin the planning of the School and the Recreational park land which lies adjacent.

I have lost faith in the decision making at City Hall. It ended when you decided to shut down Gord Robsons golf course that hosted many youth events then you decided to help A pot grow company choose a site in a very environmentally sensitive area in Whonnock. That is disgusting on so many levels. You are destroying Maple Ridge.

Hope the council approves in a timely manner

Make sure public input is involved during the building or area and developer plans so it meets our needs and expectations.

Developing in flood plains is folly and citizens of Maple Ridge will not be impressed if they are required to buy back flood plain developments in the future. We all know that climate change is upon us, floods will happen much more often, and anyone that buys into a development of this kind is a fool. Let them deal with their mistake. Please don't try to make us all pay for their foolishness or short sightedness. I'm not saying that this applies directly to this proposal, but if it does in any way, please take this advice. If not, it is at the political peril of those that approve such foolish endeavours.

- I want an end to the idea of extending 112th/Bosonworth through to 260th Street (or any other eastward arterial route) with an eye to extending this potential arterial route past the fragile Kanaka Creek to Whonnock. I am not alone. DFO has already said No. The neighbourhood is an important, unique piece clearly designated as rural Maple Ridge. It must stay that way. The pressure on this area has to stop. The trees, animals, land and water - and the people who live there - are as important as any developer's bottom line. Go South if you must continue the insatiable need to spread out instead of infilling urban Maple Ridge and protecting your 'rural' brand.

North East Albion is a small development zone. I think Maple Ridge has grown enough that some where in Maple Ridge (probably East) we need a something bigger like a larger community hub with recreation centre, Costco, a bit more the like Port Coquitlam area with Costco and Walmart just over the Pitt River Bridge.

Please fix the intersection of Jackson / 104 Ave before allowing any more building. It is dangerous.

It is extremely concerning and disappointing to see only at the end of the open houses that 248 street may one day be a four-lane road. Right now 248 street is a quiet rural street in front of our residences which is why many of us live choose to live here.

There are currently no other four-lane roads in Albion and I don't understand how putting a four-lane road in the northeast section would make any sense even in the future. This would only add to the destruction of the environment and personality of the area. Additionally, it would raise serious safety concerns.

Considering our era of safety and environmentalism, I'm shocked that the city of Maple Ridge would consider a large road in an environment such as this. One would think that focusing on better transit options would have been a wiser choice.

I urge the city to revisit this road plan and reconsult the community because this was never brought up during the consultation meetings/open houses I attended. I attended all but the last meeting. It wasn't until the last email I received when this road plan was revealed by means of a very small and obscure drawing which showed 4 vehicles between some trees.

6. The Albion Area Plan has already been accepted and depended upon by Maple Ridge residents and should be followed, rather than expending time and monies of City Staff working to change it to a Developer's benefit and against residents' concern. Please learn the lessons for which other Municipalities have already paid to their regret: Celebrate the unique wilderness and green zones that cannot be replaced, and make high-density development centrally located surrounding the existing services and transportation hubs within the core centre of the City of Maple Ridge. Otherwise, you are knowingly producing more vehicular traffic-dependent neighbourhoods that will exponentially decrease Maple Ridge's quality of our air, ground and water.

I am not part of the current expansion, which I absolutely hate going to albion area. Connecting roads through forested lands I think this will have a huge affect on wildlife. Albion is Wayyy too crowded. I like my rural living which is why I bought where I did. The Grant hill expansion puts our water at risk, and the Kanaka creek. If our neighbour didn't find out about this plan we would never have know . I think a better public awareness should happen. The maple ridge city website is hard to navigate to find this info out. A round about at Palmer Ralph is dangerous. amd I think a lot of the plan is contingent on current rural land owners to sell - I think that's kinda bullying. Let's develop to this point - everyone will sell because they don't want to live in this area now that it's super crowded and then we can develop further! Ya, not cool.



## NORTH EAST ALBION OPEN HOUSE

Hi Neighbour!

We wanted to make sure you know about the last open house meeting for the nearby development the city is calling "ThornVale, North East Albion" just to the west of us.

Changes to our neighbourhood are included as potential options to handle the increased density of multi-family developments and create arterial traffic routes – despite our community not being in North East Albion and without any consultation with us.

**Option One extends Bosonworth Road to 260th. Option Two includes a round-about at 260th and 112th, and also at Palmer Rolf and 256th. Both options include putting a road through the end of Grant Avenue to 108th Ave.**

Please consider attending the Monday, June 24 meeting/open house. Please also consider contacting council members, the city's planning department, and the consultants to share your views. Links and contacts are on the following page.

Thanks for taking the time to check out this meeting and proposal.



LIVE



PLAY



GROW

### SHAPING THE FUTURE OF NORTH EAST ALBION

The City of Maple Ridge has a planning vision and strategy that is looking to help us all to live, work, play, and grow into the North East Albion Area since our last Open House. The community input and stakeholder feedback along with the outcomes of the last Open House studies have informed the evolution of a draft Neighbourhood Concept plan.

Please join us on Monday, June 24<sup>th</sup> to learn more about the draft Neighbourhood Concept plan for North East Albion.

**North East Albion Open House**  
**Monday, June 24<sup>th</sup>, 2019 from 5:30 - 8:30 p.m.**

at  
**Samuel Robertson Technical Secondary School**  
10445 24<sup>th</sup> Street, Maple Ridge, BC

Your input through the Open House will help inform city council's consideration of the draft Neighbourhood Concept plan.

For more information, please visit our website at  
[www.mapleridge.ca/2214](http://www.mapleridge.ca/2214)  
or email  
[northeastalbion@mapleridge.ca](mailto:northeastalbion@mapleridge.ca)

Connect with us

[@YourMapleRidge](#)  
[#LivePlayGrowNEAlbion](#)



 **MAPLE RIDGE**  
**BRITISH COLUMBIA**

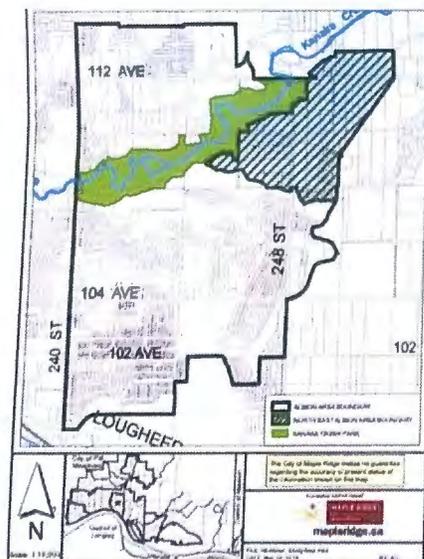
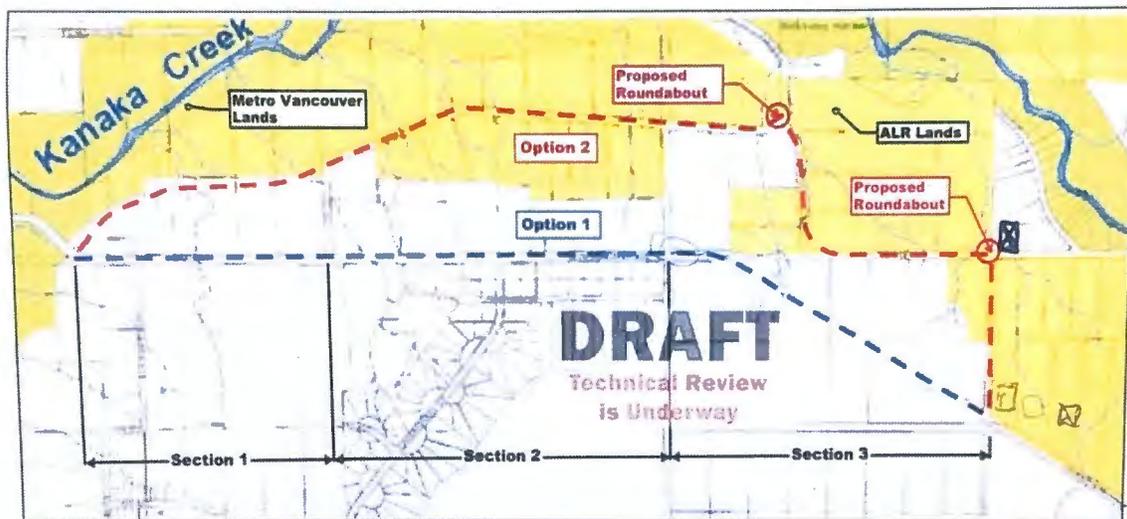
## EXPLORING POTENTIAL ROAD ALIGNMENTS TO IMPROVE CIRCULATION IN NORTH EAST ALBION

As part of the North East Albion Land Use and Servicing Analysis, the arterial road connection along 112 Ave east to Grant Avenue is being reviewed.

This east-west connection is highlighted in the Maple Ridge Strategic Transportation Plan and the Maple Ridge Official Community Plan but the exact alignment is not confirmed.

Both alignments have unique challenges with regard to:

- Environmental Impacts
- Operation and Maintenance implications over the life cycle of the roadway
- Transportation Function
- Land Acquisition
- Construction Cost



### The plan:

<https://gis.mapleridge.ca/LandDevelopmentViewer/LandDevelopmentViewer.html>

### Council members:

mayorandcouncil@mapleridge.ca  
 mmorden@mapleridge.ca  
 kduncan@mapleridge.ca  
 cmeadus@mapleridge.ca  
 jdueck@mapleridge.ca  
 ayousef@mapleridge.ca  
 mmorden@mapleridge.ca  
 grobson@mapleridge.ca  
 rsvendsen@mapleridge.ca

### Information & Feedback Link:

[www.mapleridge.ca/2214](http://www.mapleridge.ca/2214)

## Appendix C(7) - Additional Correspondence

#1

From: [REDACTED]  
Sent: July 9, 2019 9:14 AM  
To: Mayor Council and CAO Users List <MayorCouncilAndCaol@mapleridge.ca>  
Subject: "North East Albion" development and associated transportation routes.

To: The Mayor, City Council and Planning Staff

I recently learned that the City of Maple Ridge is involved in planning the development of something called "North East Albion", when I received a postcard invitation to an open house at Samuel Robertson School held on June 24. In discussing the invitation with neighbors I was shown a city-produced planning map showing two possible new east-west transportation routes that would provide an eastern exit for "North East Albion" and that would run through the area of Palmer Rolph Street, 112 Avenue and Grant Avenue. This map did not appear to be available at the June 24 open house.

I am writing to Maple Ridge City Council and staff to express my complete opposition to both of these routes.

The area east of Palmer Rolph Street, including 112 Avenue, 260 Street, 261 Street and Grant Avenue make up a distinct rural neighborhood. The rural acreages in this area act as a greenbelt that connects Kanaka Creek Park and the forests of Grants Hill and create a very active wildlife corridor. This area is also frequently enjoyed by hikers, cyclists and horse riders. The quiet, rural atmosphere of this area would be dramatically degraded if this area was made part of a transportation corridor.

It appears to me that many of the rural, green areas of Maple Ridge are being paved over for townhouse developments. To me, it would make more sense to focus higher density housing in the more central areas of Maple Ridge where transportation, shopping, entertainment and other services are located.

If Maple Ridge requires more east - west transportation routes, would it not make more sense to improve Dewdney Trunk Road and Lougheed Highway? Any new route through the Palmer Rolph - Grant Avenue area would only move traffic a small distance east before returning it north or south to one of these existing, high traffic routes.

[REDACTED]  
Maple Ridge

[REDACTED].com



Your Cycling Connection

604.558.2002  
bikehub.ca



July 9, 2019

To: northeastalbion@mapleridge.ca

Re: North East Albion Concept Plan

To whom it may concern,

We are happy to give you below our feedback with regard to the Concept Plan for North East Albion, as presented at the Open House on June 24.

**Trail network**

Our Maple Ridge/Pitt Meadows HUB Cycling Committee is pleased to see an all ages all abilities multi-use trail network throughout the neighbourhood as part of the plan for North East Albion. We appreciate that the lay-out of the trail network has been done with some consideration of the topography of the land in order to avoid any unnecessary steep grades.

**Bike lanes:**

We support east-west bike lanes along 112 Ave. As indicated on display board #13, bike lanes are also planned along 248 Street (new arterial) :

**Bike Lanes, Multi-Use Paths and Trails**

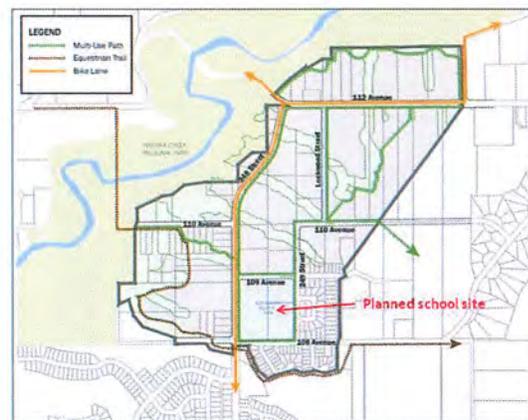


Image: Multi-modal loops and connections

112 Ave.

According to the street cross sections on the same display board, 112 Ave. will be constructed with bike lanes of 1.5 m, on both sides, and a buffer of 0.5 m.

### North-south designated bike route

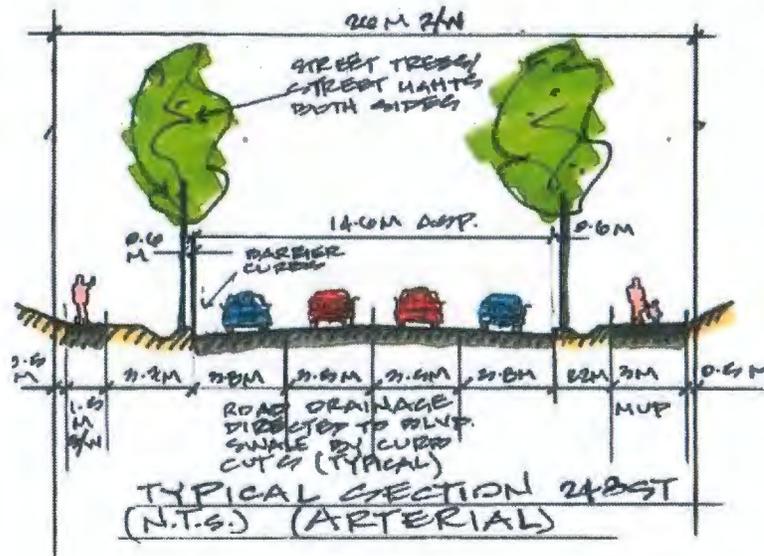
According to the 2014 Transportation Plan, the north-south designated bike route (planned shoulders) follows 108 Ave., 249 Street, 110 Ave. and Lockwood Street. We agree that 248 Street, once put through to 112 Ave., looks like a more logical and smooth continuation of the bike route:



However, according to the contour lines on Ridgeview mapping it appears that from a grade perspective, the existing designated bike route is likely more favourable:



The north-south bike route as planned along 248 Street appears to have no bike lanes according to the street cross section on display board #13, but 3.8 meter has been reserved on both sides of the street for street parking:



We would appreciate to receive assurances that, along the north-south bike route that will ultimately be selected, uni-directional bike lanes -on both sides of the street - will indeed be part of the design.

With the provision of parking protected, buffered bike lanes along 248 Street, the width of both

car- and parking lanes could be reduced, which will help to reduce car speeds. According to [NACTO's Urban Street Design Guide](#), : "*For designated truck or transit routes, one travel lane of 11 feet [3.35m] may be used in each direction.*" and "*Parking lane widths of 7–9 feet [2.1-2.7 m] are generally recommended.*"

If 249 St./Lockwood St. continues to be the bike route as designated in the 2014 Transportation Plan, space will need to be provided for buffered, protected bike lanes.

Further south, the bike lanes should continue along 248 Street and Jackson Road down to the roundabout at 102 Street, in order to ensure continuity and connectivity.

### **Physical separation of bike lanes**

Rather than providing merely a painted buffer between the bike lanes and the car lanes, we would suggest to also provide some sort of physical separation.

Physically separated bike lanes are considered an all ages and abilities bicycle facility, as they increase the comfort of users by providing a clear physical separation between people cycling and motor vehicles. This increased comfort can play a significant role in increasing bicycle use, particularly among less experienced bicycle users and among women, children, and seniors.

Where separated, all ages all abilities bike lanes are provided, the width of the 3 meter off-road pathways can be reduced as they can serve as pedestrian-only pathways.

Another important reason for using physical separation, is to prevent drivers from using the bike lanes for parking. This can be expected to be especially problematic in the area of the planned school.

For recommended width of bike lane and buffer, types of separation and other considerations, please consult the newly released [British Columbia Active Transportation Design Guide](#) (see D.3 Protected Bicycle Lanes).

A type of separation commonly used in our municipality is the flexible delineator post. These are a low cost option. Another advantage is that they take up little space and can be placed close to the edge of the buffer closest to the car lane, thus increasing the usable width of the bike lane to allow passing, without requiring extra space to be reserved for the bike lane.

We would like to point out that protected bike lanes are best provided along streets with relatively few driveways and side streets. Therefore, motor vehicle access to homes in subdivisions along the designated bike route should be from back lanes only.

### **112 Ave. dip at Kanaka Creek crossing**

This section of roadway has always been very challenging to navigate for people on bikes due to the very steep grade as well as the narrow width of the roadway. We understand that due to environmental considerations any changes made to the design would likely still result in a very challenging and probably increasingly dangerous route for people on bikes due to expected

increase in traffic volumes.

We would therefore like to request the city to work with Metro Vancouver Parks to explore a solution to enable easier and safer east-west travel along this section, or in the vicinity of 112th Ave.

With kind regards,

Ivan Chow  
co-chair  
*HUB Cycling*  
*Maple Ridge/Pitt Meadows Committee*

JC/IC/IM/JW/BB/JL/DW

**HUB Cycling** is a charitable not for profit organization that has spent over 20 years removing barriers to cycling in Metro Vancouver, while cultivating the health, environmental, and economic benefits that active transportation can bring. HUB has educated thousands of people, motivated thousands more, and championed improvements that #UnGapTheMap to create a connected cycling network. HUB Cycling's mission is to get more people cycling more often. HUB Cycling have close to 3,000 members and more than 40,000 direct supporters. HUB Cycling has 11 volunteer committees across Metro Vancouver that encourages cycling for all ages and abilities (AAA) in municipalities across Metro Vancouver. For more information, visit [bikehub.ca](http://bikehub.ca).

#3

From: [REDACTED]  
Sent: July 11, 2019 1:23 PM  
To: North East Albion Project  
cc: Amanda Grochowich  
Subject: Re: North East Albion Open House Follow-up

Thank you for the information April.

It is extremely concerning and disappointing to hear that a four-lane road may be a possibility on what is right now a quiet rural street in front of our residences.

There are currently no other four-lane roads in Albion and I don't understand how putting a four-lane road in the northeast section would make any sense even in the future. This would only add to the destruction of the environment and personality of our area. Additionally, it would raise serious safety concerns.

Considering our era of safety and environmentalism, I'm shocked that the city of Maple Ridge would consider a large road in an environment such as this.

I urge the city to revisit this road plan and reconsult the community because this was never brought up during the consultation meetings. I attended all but the last meeting. It wasn't until the last email I received when this road plan was revealed.

Please forward this email to whomever this matter concerns and also please acknowledge the receipt of this email request.

Sincerely  
[REDACTED]

**TO:** His Worship Mayor Michael Morden  
and Members of Council  
**FROM:** Chief Administrative Officer  
**SUBJECT:** Review of Cycling on Sidewalks

**MEETING DATE:** October 1, 2019  
**FILE NO:** 09-3900-20  
**MEETING:** Workshop

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**EXECUTIVE SUMMARY:**

The City's Highway and Traffic Bylaw was amended in 2009 to permit bicycles, roller skates, skateboards and other means of transportation to utilize sidewalks, footpaths and walkways. In 2017, Council asked the Active Transportation Advisory Committee (ATAC) to review the practice of permitting bicycles on sidewalks in Town Centre streets and consider the possible reduction in the posted speed limit in the Town Centre.

The British Columbia Motor Vehicle Act states that cycling on sidewalks is not allowed unless the municipality has a bylaw that permits cycling on sidewalks, which is the case in Maple Ridge. ATAC formed a sub-committee and recommended amending the Highway and Traffic Bylaw to ban bicycles riding on sidewalks to reduce the chances of pedestrian and bicyclist collisions along four specific corridors, namely Dewdney Trunk Road from 222 Street to 227 Street; Lougheed Highway from 222 Street to 227 Street; 224 Street from North Avenue to 122 Avenue and Edge Street from McIntosh Avenue to Dewdney Trunk Road. Council may elect to extend banning bicycles throughout the City rather than the four noted corridors.

On the issue of speed reduction in the Town Centre, ATAC's recommendation to Council was to implement 50km/h to 30km/h on 224 Street between Lougheed Highway and Dewdney Trunk Road as cyclists would now be riding on the roadway. The observed 85<sup>th</sup> percentile vehicle speed was 34.6 km/h during business hours on this section of 224 Street and therefore implementation of the speed limit change would be relatively simple.

When the proposed bylaw amendment was presented at the Committee of the Whole meeting held on July 16, 2019, Council decided that further discussion was required on the topic of riding bicycles on sidewalks. This report provides information regarding four possible options for Council to consider with regards to riding bicycles on sidewalks. Following Council directive at this Workshop, staff will bring forward a report with the recommended Highway and Traffic Bylaw amendment at a future Council meeting.

**RECOMMENDATION:**

This report is submitted for information.

## DISCUSSION:

### a) **Background Context:**

Since the current Highway and Traffic Bylaw No. 6704-2009 was adopted to allow bicycles to ride on sidewalks, the City of Maple Ridge has seen rapid growth and densification of the Town Centre. Pedestrians using the Town Centre sidewalks include the elderly with mobility constraints and customers exiting from businesses that have to look out for unexpected bicyclists.

The majority of municipalities in British Columbia do not permit bicyclists to ride on sidewalks. The BC Motor Vehicle Act also prohibits bicyclists to ride on sidewalks unless a municipality specifically permits it in a municipal bylaw, which is the case in Maple Ridge. In 2017, Council asked the Active Transportation Advisory Committee (ATAC) to review the practice of permitting bicycles on sidewalks in Town Centre streets.

ATAC recommended a ban on cycling on sidewalks on four specific Town Centre corridors, namely Dewdney Trunk Road from 222 Street to 227 Street; Lougheed Highway from 222 Street to 227 Street; 224 Street from North Avenue to 122 Avenue and Edge Street from McIntosh Avenue to Dewdney Trunk Road.

Should Council support the recommendation to restrict bicycles on sidewalks on the above-noted corridors then it is recommended that appropriate signage be erected along the four corridors to indicate that cycling is not permitted on the sidewalks. In addition, pavement markings could be painted on the sidewalks themselves for further notification.

There are four options for Council to consider:

1. Ban cycling in specific streets in the Town Centre as recommended by ATAC
2. Expand the banning of cycling on sidewalks outside of the four corridors recommended
3. Continue to permit cycling on all sidewalks
4. Ban cycling on all sidewalks in the City

Enforcement would be a key component for success of this initiative and anticipating Council support the proposed revision, staff have initiated discussions with the local RCMP Traffic Services Division and City's Bylaw Department to ensure they are aware of the changes to the bylaw. Both the RCMP and the Bylaw Department have expressed concerns regarding enforcement challenges, RCMP members noted the likelihood of securing a conviction on a charge of riding on sidewalks without due care and attention is extremely low – approximately 5%.

### b) **Desired Outcome:**

It is the City's goal to improve safety and maintain a high standard for all modes of transportation.

### c) **Citizen/Customer Implications:**

If the option selected bans cyclists on sidewalks, it would improve safety for vulnerable pedestrians, however at the same time cyclists would now have to share the travel lane with cars which may make them feel unsafe.

d) **Interdepartmental Implications:**

The Engineering Department works with the RCMP and the Bylaws Department on a number of traffic and transportation issues and will rely on them for enforcement, should the exclusion of bicycles proceed.

e) **Business Plan/Financial Implications:**

The cost to implement the ban on cycling on the four specific sidewalk corridors or a City-wide ban is relatively small and may be accommodated in existing budgets. The cost to implement would be primarily for sign placement and pavement markings.

f) **Policy Implications:**

Should a decision be made to exclude bicycles on sidewalks in the Town Centre then the existing Highway and Traffic Bylaw No. 6704-2009 will need to be amended.

**CONCLUSIONS:**

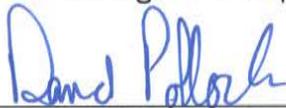
Banning bicycles riding on sidewalks to reduce the chances of pedestrian and bicyclist collisions along four specific corridors in the Town Centre was a recommendation of ATAC. In addition, speed limit changes from 50km/h to 30km/h on 224 Street between Lougheed Highway and Dewdney Trunk Road was also advised since bicyclists will be sharing the roadway with vehicles.

On the issue of banning bicycles riding on sidewalks, Council can alternatively elect not to change the existing bylaw or expand the ban in addition to the four corridors or endorse a City-wide ban. If Council elects to make changes to the current Highway and Traffic Bylaw, staff will bring forward a report in the near future with the amended Highway and Traffic Bylaw for Council adoption.



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Prepared by: Purvez Irani, PEng., PTOE  
Manager of Transportation



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Approved by: David Pollock, PEng.  
General Manager Engineering Services



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Concurrence: Kelly Swift, MBA  
Acting Chief Administrative Officer

**Attachments:**

(A) Map – Town Centre





November 28, 2019  
Morris J. Wosk Centre for Dialogue. Asia Pacific Hall  
3300-515 West Hastings Street  
Vancouver, BC  
8:30 am to 4:30 pm

The Lower Mainland Local Government Association and CivicInfo BC proudly present **CivX 2019: Civil Ideas for Less Civil Times** taking place on Thursday November 28, 2019 at the Morris J. Wosk Centre for Dialogue in Vancouver.

At this one-day seminar (8:30am – 4:30pm) delegates will hear practical ideas for making our towns and cities more inclusive for our citizens, regardless of age, gender, culture, or socio-economic background. Our exciting line-up of guest speakers includes:

- Diane Kalen-Sukra, Author, “Save Your City: How Toxic Culture Kills Community & What to Do about It”
- Tasha Henderson, Director, Women Transforming Communities speaking on “Encouraging Women to Get Involved in Local Government”
- Chris Friesen, Director of Settlement Services, Immigrant Services Society of BC discussing “Tips for Local Governments on Welcoming New Canadians”
- Dr. Atiya Mahmood, Associate Professor, Department of Gerontology, Simon Fraser University and Dr. Ben Mortenson, Associate Professor, Department of Occupational Science and Occupational Therapy, UBC speaking on “Community Mobility and Participation Among People with Mobility Disabilities”
- Dr. Eamonn O’Laocha, Instructor, Douglas College & Douglas Applied Research, Teaching and Consultancy speaking on “Using Technology to Connect Marginalized Populations”
- Representatives from the Fraser Basin Youth Council (Co-Creating a Sustainable BC) discussing “Engaging Young People/Youth & Sustainability”

The day will wrap up with a facilitated session, where local government delegates can share ideas and practices with one another, with a written summary being provided to all in attendance. A full agenda, with detailed session descriptions, will be published in late September.



November 28, 2019  
Morris J. Wosk Centre for Dialogue. Asia Pacific Hall  
3300-515 West Hastings Street  
Vancouver, BC  
8:30 am to 4:30 pm

Who should attend? Like past CivX events, this event will be of particular interest to local government elected officials, local government staff, staff from local government agencies, academics, and post-secondary students.

For those requiring overnight accommodation, a block rate is available at the Delta Hotel by Marriott Vancouver Downtown Suites, which is attached to the event centre. Click on link to book: <https://www.marriott.com/events/start.mi?id=1553903484786&key=GRP>

The cost of the event is only \$199, including a seated lunch. Online registration is open at

<https://www.civicinfo.bc.ca/event/2019/CivX>