

September 25, 2017

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To: City Manager

From: General Manager Parks, Recreation & Culture Services

Subject: **Coquitlam Crunch Trail Expansion Plan (2018 -2023)**

For: **Council-in-Committee**

**Recommendation:**

That Committee receive the report of the General Manager Parks, Recreation & Culture Services dated September 25, 2017 entitled "Coquitlam Crunch Trail Expansion Plan (2018-2023)" for information.

**Report Purpose:**

The purpose of this report is to update Committee on the public feedback results from the public survey and to seek input on the proposed expansion plans for the Coquitlam Crunch Trail. The plan proposes phased improvements and expansion of the Coquitlam Crunch Trail (the "Crunch Trail") system over the next 5 years consistent with the City's Master Trail Plan and includes proposed phasing of improvements, and high-level costs associated with the trail system improvements. Initial Committee feedback and direction will be incorporated into the final Crunch Trail Expansion plan to be presented to Council later in 2017.

**Strategic Goal:**

The initiative presented in this report supports the City's Corporate Strategic Goal of "Increasing Active Participation and Creativity" and "Enhancing Sustainability of City Services and Infrastructure". This project is identified in the 2017 Business Plan as a "C" Priority and will continue to be a high City priority in 2018 and beyond, subject to Council endorsement of the proposed plan and future project phases.

**Executive Summary:**

The Coquitlam Crunch Trail is a very popular local and regional recreational trail system that can expect to have approximately 7,000 visits per month during the low periods up to 52,000 visits per month during peak use periods in the spring and summer months. Doing "the Crunch" has become synonymous with Coquitlam, and this trail system has now become one of the most important recreational amenities in the City with limitless potential for people of all ages to enjoy. Proposed new trail system extensions together with future amenity enhancements along the existing Crunch Trail can take this trail system to another level, offering a much broader and comprehensive level of recreational offerings to residents, and becoming a regional destination amenity that forms a key part of the City's brand and supports tourism and economic development.

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The City's Master Trail Plan guides the planning work that began in early January 2017 and proposes a future trail route north along Eagle Mountain Drive to connect to the Eagle Mountain Park Trail connections. When completed this will be an important north-south regional route that connects the Fraser River to Eagle Mountain Park. From May 9 – June 1, 2017 the City conducted user surveys to better understand the current needs, and help prioritize trail enhancements. The response was unprecedented, with 1,741 participants providing feedback that revealed top ranked requested improvements including washrooms, a variety of site furnishings and supportive features such as benches and drinking water fountains, and trail improvements to address loose or slippery trail surfacing and stair sections.

Based on this public feedback, staff have developed preliminary plans which prioritize proposed improvements for implementation over four phases, with a preliminary budget estimate of \$7 million for phases 1-3. Potential improvements include enhancements to existing infrastructure such as parking, signage, site furnishings, stairs and fencing as well as new washrooms, improved street crossings, outdoor fitness equipment, access to drinking water, and viewing areas. All will further enhance and complement the quality of this recreational experience for local residents and regional visitors.

If supported, staff will proceed to integrate Committee feedback into the final Coquitlam Crunch Expansion Plan that will be presented for Council consideration and approval later this year. At the same time, with Council support, staff intend to present Phase 1 of the Expansion Plan for consideration of this work as a priority project in the 2018 Capital Budget and Business Plan.

**Background:**

The Crunch Trail is a very popular local and regional recreational trail, currently stretching from its base at Eagle Ridge Park upwards to just past Bramble Park along the BC Hydro right-of-way corridor in Northwest Coquitlam, and connecting Eagle Ridge and Westwood Plateau neighbourhoods (Attachment 1). Walking the Crunch has become a popular fitness challenge on this 2.2 km climb with 242 metres of elevation gain.

The most popular stretch of the trail is the steepest, connecting lower Lansdowne Drive to upper Lansdowne Drive, comprised of more than 400 timber stairs (Attachment 1). It is this physical challenge combined with easy access and spectacular urban views that are making the Crunch Trail a popular local and regional outdoor recreational destination. The growing popularity and use has resulted in the need for a number of improvements to the trail and surrounding parkland, leading to identifying the construction of a second set of stairs as a priority item in the 2017 Business Plan.

**2017 Stair Section Twinning**

From July 2017 to spring 2018 the construction of a new water main is taking place along the Crunch Trail from Guildford Way to David Avenue managed by the Engineering & Public Works Department. In advance of this work, park planning staff prepared plans to twin this popular part of the trail to add capacity with a new permanent second set of stairs. The timing for the second stair construction

therefore was able to be coordinated with the water main works. The new stairs will be complete by late September or early October 2017, prior to the start of the utility works in that area.

The existing stairs will remain open and usable until the second set of stairs is completed so users have uninterrupted access to stairs along the trail. Prior to the existing stairs being closed, a communications plan that includes information and detour signage will be developed and implemented under the direction of the Engineering & Public Works Department. This work is progressing well and on schedule to be completed by the end of September 2017.

#### **Discussion:**

##### **Future Crunch Trail Improvements and Expansion**

The proposed improvements and expansion to the Crunch Trail network is consistent with the City's Master Trail Plan which proposes a future trail route north along Eagle Mountain Drive to connect to the Eagle Mountain Park Trail connections( Attachment 2). This will be an important regional connection completing links to existing trails to Buntzen Lake and Belcarra. To the south, future highway and rail crossing are planned in the future to accommodate through-road and pedestrian sidewalk improvements at Falcon Drive (2012 Strategic Transportation Plan). This will allow the Crunch Trail system to connect south of Barnet Highway, also along the hydro utility corridor, on lands that are owned by the City and which are designated for a future Crunch Trail extension known as the "Greenlinks Extension". This is a critical trail section that will connect to the existing Mundy Park Trail system and further south eventually to Colony Farm Regional Park (Attachment 3). When completed this will be an important north-south regional trail and pedestrian route that connects the Fraser River to Eagle Mountain Park.

##### **Public Feedback**

Park planning work commenced in the spring of this year with the City conducting user surveys on the Coquitlam Crunch from May 9 - June 1, 2017 to better understand the current needs, and help prioritize future trail enhancements. The response was unprecedented, with 1,741 participants providing feedback, demonstrating the incredible popularity and the strong public desire for improvements to this well-used trail system. A communication plan was implemented to notify the public and invite feedback that included social media, newspaper notices, City web page information, and signage along the trail. Additionally, for a total of 8 days that included weekdays and weekends, staff equipped with mobile tablets attended the trail in various locations to interact with trail users and collect valuable on-site user feedback.

##### **Survey Results**

The survey asked a series of questions aimed at obtaining feedback from frequent users and non-frequent users. Frequent users provide helpful insight on how to enhance the quality of their current experience and to fill gaps in the functioning and service, whereas non-frequent users help provide insight into what improvements will encourage use and return visits. Analysis of the data showed

overlap in the responses to reveal common priorities that can elevate frequent user satisfaction, customer retention, and encourage more return visits by non-frequent users. Some interesting statistics reveal:

1. Approximately 55% of visitors use the trail once per week to a few times a month.
2. Approximately 63% of visitors are women of which 56% are between 35-54 years.
3. The visitors use the trail for fitness and exercise and as an easy, affordable leisure activity with family and friends.
4. The most frequently used sections are the mid-section between Guildford Way to David Avenue, and the upper section between David Avenue to Eagle Mountain Drive.
5. The majority of respondents prefer a combination of stairs and pathways along the trail route.
6. Top ranked reasons why some visit less frequently:
  - a. Lack of washroom facilities;
  - b. Some people think parts are too difficult, while others think it is not difficult enough;
  - c. The granular trail surface is not stable;
  - d. Personal safety;
  - e. Too busy and crowding; and
  - f. Overhead power lines.
7. Top concerns from frequent users include:
  - a. Loose and rutted gravel surface next to the existing stairs;
  - b. Stair tread dimensions; and
  - c. Glare and dizzying effects, most pronounced while descending, from the non-slip metal grate.

#### Top Improvements by the Public

The top ranked improvements requested by the public include:

1. Washrooms;
2. Site furnishings, drinking water, benches;
3. Loose and slippery trail surfacing;
4. Specifically for the stair section:
  - a. Two way traffic;
  - b. Provide trail alternative to stairs;
  - c. More and wider stairs;
  - d. Better visibility for stairs;
  - e. Improve metal mesh surfacing;
  - f. Improve stair rhythm;
  - g. More viewing decks;
  - h. Extend trail system;
  - i. Water fountains;

- j. Dog off-leash area; and
- k. Outdoor exercise equipment.

### **Priorities and Phasing**

#### **Phase One – Crunch Trail Improvements**

The first phase shown in Attachment 4 focuses on proposed priority improvements within the sections between Lansdowne Drive (north) to Guildford Way) based on public feedback. This section is seen as the top priority since it is the most used and with its steep topography provides for more challenging and intensive recreational opportunities with views. The preliminary estimate to complete phase one is \$2.5 million. It includes the following:

1. Washroom Facilities - Lansdowne Drive (south) - A washroom facility located off of Lansdowne Drive south would be ideal. BC Hydro ROW development and use regulations poses some challenges and limitations, but staff will be working through some logistical issues and investigating other options to provide a serviced facility.
2. Paved Parking Lot - An expanded, paved 60 car parking lot is proposed to replace the existing 30 car gravel parking surface to better accommodate the visitors to the trail, community garden, and lacrosse box.
3. Paving of Access Driveway on Lansdowne Drive to Parking Lot - The paved entry road will replace the existing gravel road leading to the paved parking lot, complete with dedicated pedestrian pathways.
4. Reconfigured Community Garden - The increased footprint of a new parking area will require shifting and reconfiguration of the community garden area further north. The community garden can be expanded as part of this reconfiguration to increase the number of plots beyond the current 26 plots to accommodate the growing wait list.
5. Pedestrian Crossing at Guildford Way - Parks, Recreation & Culture together with Engineering & Public Works will coordinate implementation of a new pedestrian activated crossing that will provide a safe and critical connection. Several trail sections in this location will be added to formalize informal routes and increasing circulation to and from the parking area, while others will be realigned or decommissioned to encourage use of safer routes in this busy part of the Crunch.
6. New Transverse Trails - To add an alternate way to maneuver up the steeply sloped popular stair section of the Crunch Trail, the addition of crisscrossing pathways between the twinned stair sections will offer a variety of options to use stairs, pathway or a combination of routes to make the most of their recreational and fitness experience. All new granular trail surfaces will now be constructed with a finer grade of granular material in place of larger granular trail surfacing to ensure stability and address the concern voiced by users about slippery surfaces.

7. **Viewing Areas** - The addition of viewing and sitting areas along the traverse trails will give users opportunities for resting, stretching, and exercise while enjoying the views from multiple vantage points along the stair section of the Crunch Trail. The viewing areas could accommodate 5 metre wide seating steps and up to 8 benches will be provided near the stair edge for quick rest stops.
8. **Outdoor Exercise Equipment** - Identified as a priority improvement, the addition of outdoor fitness apparatus to the popular stair section of the Crunch Trail will nicely complement the other amenities to enhance the overall fitness experience of the popular stair section. Working within BC Hydro right-of-way restrictions wood and/or aluminum stationary equipment may include: angled sit-up bench, push-up bar, balancing/jumping beams, pull-up/chin bar, and other exercise equipment.
9. **Signage and Furnishings** - A uniform and consistent system of trail signage will be developed to strengthen the City's branding, facilitate wayfinding and orientation, and provide information to users. The addition of furnishings includes benches, drinking water source, trail markers, fencing and baffles are proposed to further enhance the function and experience of the trail network.
10. **200m – New Trail Section** - With the proposed pedestrian crossing, new trail sections are proposed to accommodate new travel patterns while others are decommissioned.

#### Phase Two – Crunch Trail Improvements

The second phase shown generally in concept in Attachment 5 focuses on trail improvements in the sections between Eagle Mountain Drive to Lansdowne Drive (north), and between Guildford Way to Runnel Drive. The preliminary estimate to complete phase two is \$1,500,000. Improvements would include:

##### Eagle Mountain Drive to Lansdowne Drive (north);

1. 30 car paved parking;
2. Washroom;
3. Twinning trail sections;
4. Signage, trail markers, and information kiosks; and
5. Furnishings, drinking water.

##### Guildford Way to Runnel:

1. Twinned trails to offer a looped circuit;
2. Signage, trail markers, and information kiosk;
3. Furnishings; and
4. Improve connection to existing play area.

#### Phase Three – Greenlinks Crunch Trail Extension (Crunch Trail South)

The proposed development of the Greenlinks extension section of the trail shown general in concept in Attachment 6 focuses on the development a new network of urban nature trails to include stairs in steeper sections much like the existing sections of the Crunch Trail stair section, from Dewdney Trunk Road to Mariner

Way. The new trail network can be branded as an extension of the Crunch Trail (Crunch Trail South). The preliminary estimate to complete phase three is \$3 million that would include:

1. 30 car paved parking at the trail head;
2. Washrooms;
3. Information kiosk;
4. Granular trail and wood stairs;
5. Look outs;
6. Signage, trail markers;
7. Access to drinking water; and
8. Furnishings.

These improvements are an extension of the Crunch Trail and will likely draw users who will utilize the entire system as a whole; however, it is important to note that even after these improvements and the improvements to the road network proposed in the Strategic Transportation Plan a significant detour to Falcon Drive is required to connect from the south end of the Crunch Trail at Runnel Drive to the Green Links Trail.

Phase Four - Eagle Mountain Park Trail Connection

A key link to connect the Crunch Trail north to Eagle Mountain Park requires the trail route to run alongside Eagle Mountain Drive. This planning work will be initiated when there is an opportunity to coordinate with future road improvement projects to achieve great efficiencies and cost effectiveness. Detail planning work is required in the future before realistic cost estimates can be provided for this phase.

**Financial Implications:**

The 2017 Capital Budget identified \$400,000 for Crunch Trail planning and improvements which are fully committed to funding the twinning of the stair section between Lansdowne Drive north and south, and which is on track to be completed around late September 2017. Should Council support the general direction described in the proposed improvement and expansion plans, funding of \$2.5 million for the first phase will be proposed in the 2018 Capital Budget Plan for Council review and endorsement, with this project phase being a City priority. Funding for future phases and potential construction, if approved by Council, will be included in future capital budget planning processes, generally as follows:

**5 Year Crunch Trail Expansion Plan**

Description	Anticipated Funding Request	Anticipated Year of Budget Request	Possible Construction
Phase One	\$2,500,000	2018	2018/19
Phase Two	\$1,500,000	2019	2020
Phase Three	\$3,000,000	2020	2021/22
Phase Four	TBD	2022	2023
<b>TOTAL</b>	<b>\$7,000,000</b>		

**Conclusion:**

The Crunch Trail system presents an exciting recreational opportunity for Coquitlam residents and visitors to the City. The expansion of this unique and valuable trail amenity, together with future supportive enhancements along the existing Crunch Trail can take this trail system to another level in the next few years, offering a much broader and comprehensive level of recreational offerings to residents, and becoming a regional destination amenity that forms a key part of the City's brand and supports tourism and economic development.

This report seeks Committee's feedback on proposed park improvements to expand the Crunch Trail over the next 5 years (2018-2023) based on feedback from the extensive public survey. The improvements include enhancements to existing infrastructure such as parking, signage, site furnishings, stairs and fencing as well as new washrooms, improved street crossings, outdoor fitness equipment, access to drinking water, and viewing areas. These improvements will facilitate a phased expansion of the Crunch over the next 5 years, with an anticipated budget of around \$7 million for phases 1-3. Detailed plans and budget will be provided to Council as part of each future phase. All new improvements will further enhance and complement the quality of this recreational experience for local residents and regional visitors.

If supported, staff will proceed to integrate Committee feedback into the final Crunch Trail Expansion Plan (2018 – 2023) that will be presented for Council consideration and approval later this year. Staff also proposes to include Phase 1 of the Crunch expansion for consideration in the 2018 Capital Budget and 2018 Corporate Business Plan.



Raul Allueva, RPP

Attachment 1 – Context Map

Attachment 2 – Master Trail Plan – Coquitlam Crunch Trail and Eagle Mtn Park Trail Connections

Attachment 3 – Master Trail Plan – Coquitlam Greenlinks Trail

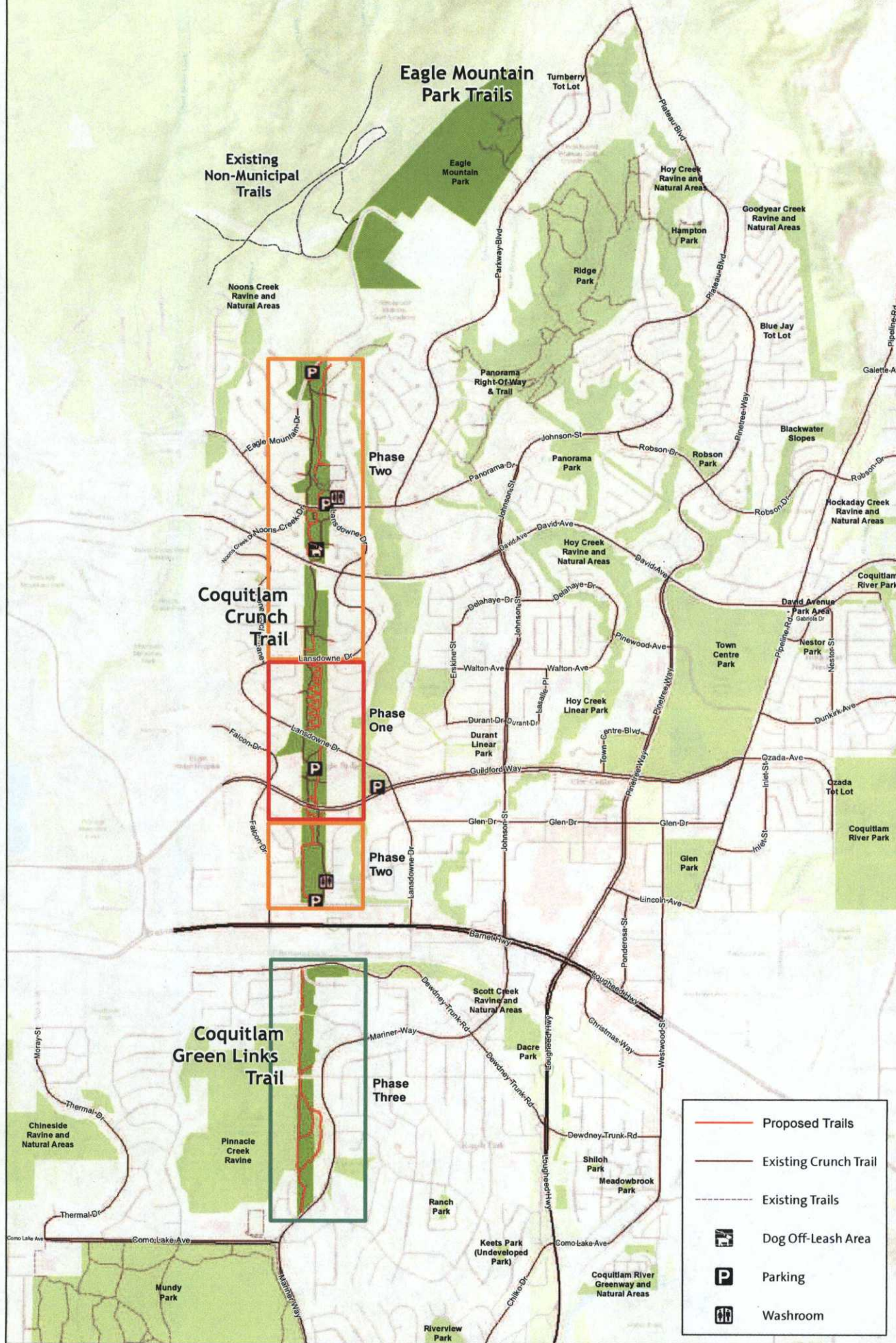
Attachment 4 – Phase One – Crunch Trail Improvements

Attachment 5 – Phase Two – Crunch Trail Improvements

Attachment 6 – Phase Three – Greenlinks Trail Plan (Crunch Trail South)

This report was prepared by Wai-Sue Louie, Park Planner with contributions from Andre Isakov, Parks Planning & Design Manager, Lanny Englund, Manager, Park Planning & Forestry, and reviewed by Kathleen Reinheimer, Manager, Parks, Dan Mooney, Manager, Transportation, and Michelle Hunt, General Manager Financial and Information Services.





-  Proposed Trails
-  Existing Crunch Trail
-  Existing Trails
-  Dog Off-Leash Area
-  Parking
-  Washroom







### 10. Coquitlam Crunch Trail Improvements

The Coquitlam Crunch Trail has become a popular local and regional outdoor recreational destination. The increase in use has resulted in the need for a number of improvements to the trail and surrounding parkland. Trail resurfacing, signage, site furnishings, fencing and parking improvements are required throughout the system. The introduction of other amenities such as outdoor fitness equipment, a water fountain and improvements at viewing areas will further enhance and complement the quality of this recreational experience.

### 13 . Eagle Mountain Park Trail Connections

This trail section is identified in the Northeast Sector Recreational Greenway Plan and is an important section that will complete linkage to the existing trail system that leads to Buntzen Lake and Belcarra along the utility corridor. Implementation of this network will help to extend the Coquitlam Crunch Trail north into Eagle Mountain Park.



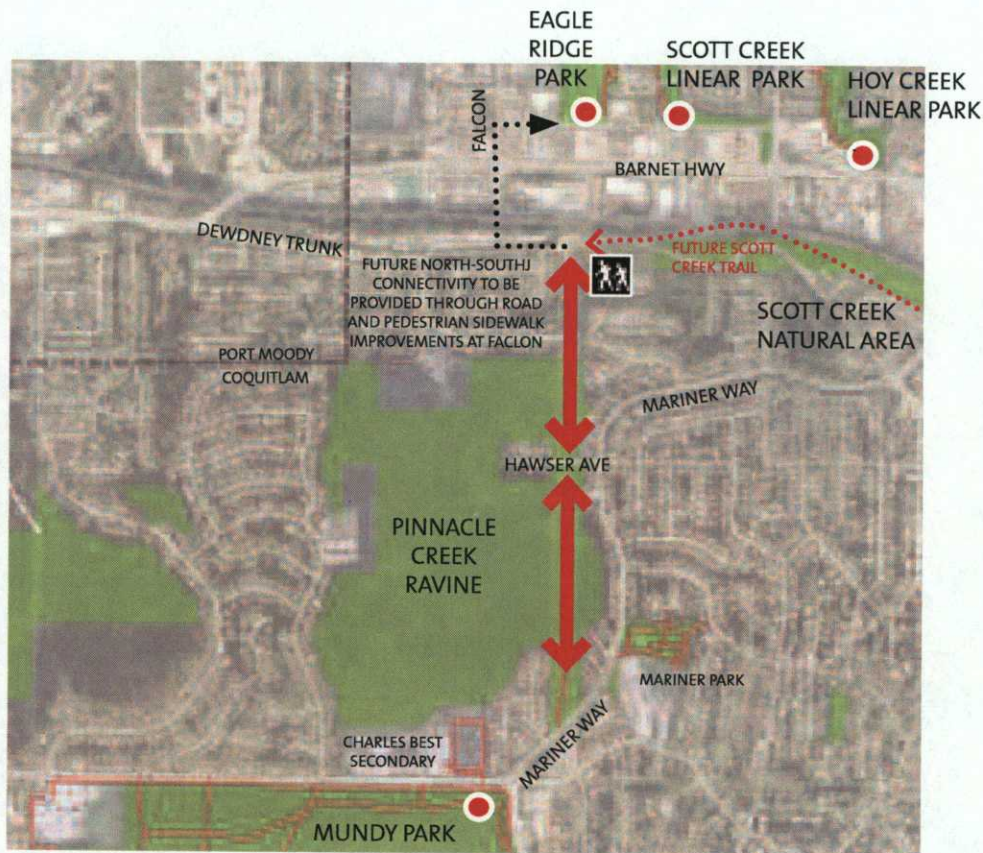
-  EXISTING TRAIL
-  FUTURE TRAIL CONNECTION PROJECT
-  KEY LOCATION WITHIN TRAIL SYSTEM
-  CONNECTION TO OTHER MAJOR TRAIL SYSTEM
-  EXISTING TRAILHEAD
-  EXISTING ROAD OR PUBLIC PATH (PROVIDES CONNECTIVITY)





### 9. Coquitlam Greenlinks Trail

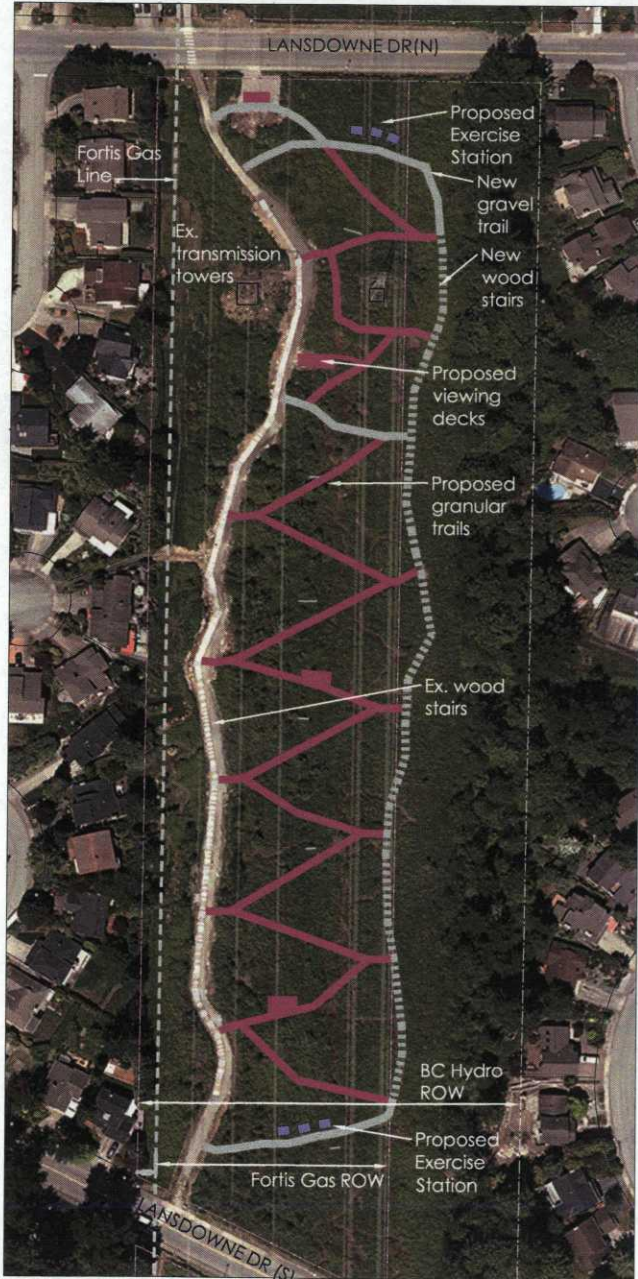
The goal of this connection is to provide a trail linkage between Mundy Park and the Eagle Ridge routed through existing hydro right of way and parkland. This trail is identified in the Metro Vancouver Northeast Sector Recreational Greenway Plan as an important north-south regional route that connects the Fraser River to Eagle Mountain and the Burrard Inlet. This trail will also provide an important link to the Scott Creek Trail System. The Off-Road Cycling Strategy also identifies this area as having value and opportunities for the development of an off-road cycling gravity trail.

It would be developed as an urban nature trail with stairs in steeper portions (similar to the Coquitlam Crunch Trail). A proposed trailhead with parking at the corner of Pier Drive and Dewdney Trunk Road is also identified in the Metro Vancouver Northeast Sector Recreational Greenway Plan. Major highway and railway crossings for pedestrians will be accommodated through future road works and implementation of a bridge crossing at Falcon Drive to provide north-south pedestrian connectivity.



-  EXISTING TRAIL
-  FUTURE TRAIL CONNECTION PROJECT
-  KEY LOCATION WITHIN TRAIL SYSTEM
-  FUTURE TRAILHEAD
-  EXISTING SIDEWALK (PROVIDES CONNECTIVITY)
-  OTHER FUTURE TRAIL PROJECT





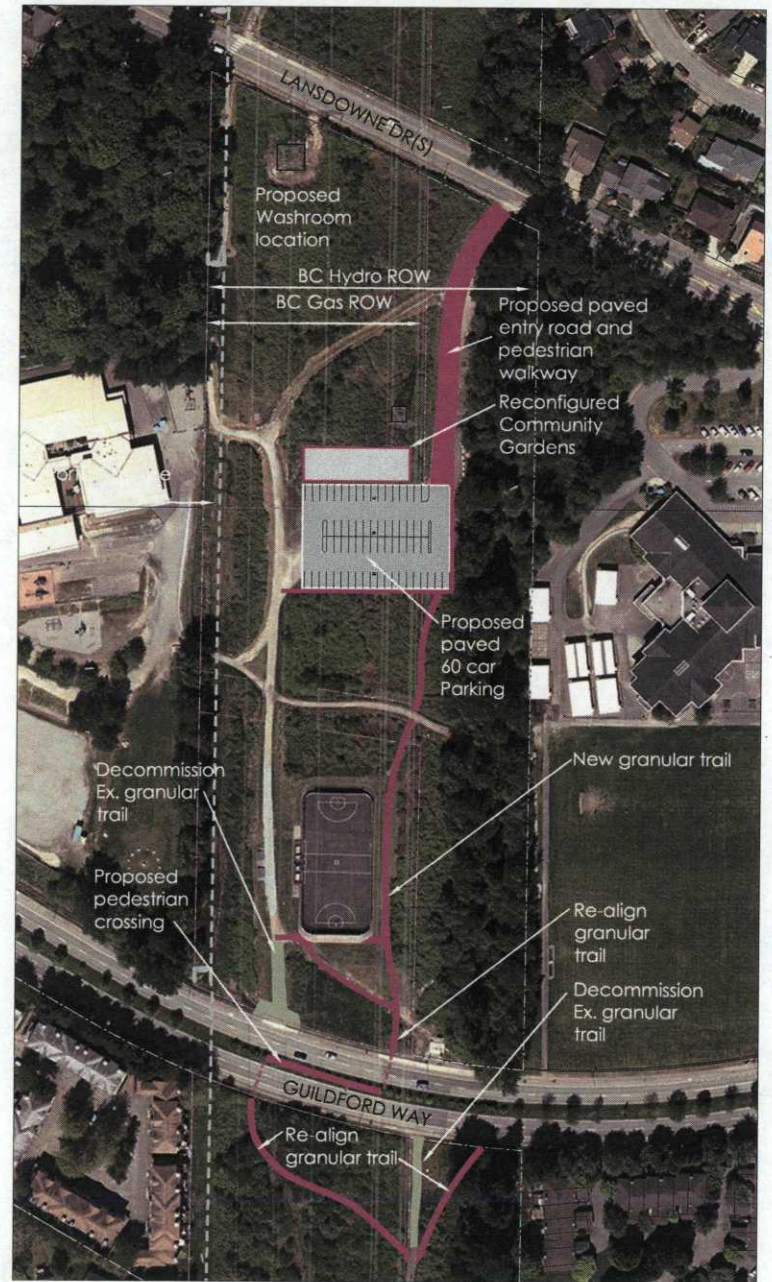
LANSDOWNE DR(N) TO LANSDOWNE DR(S)



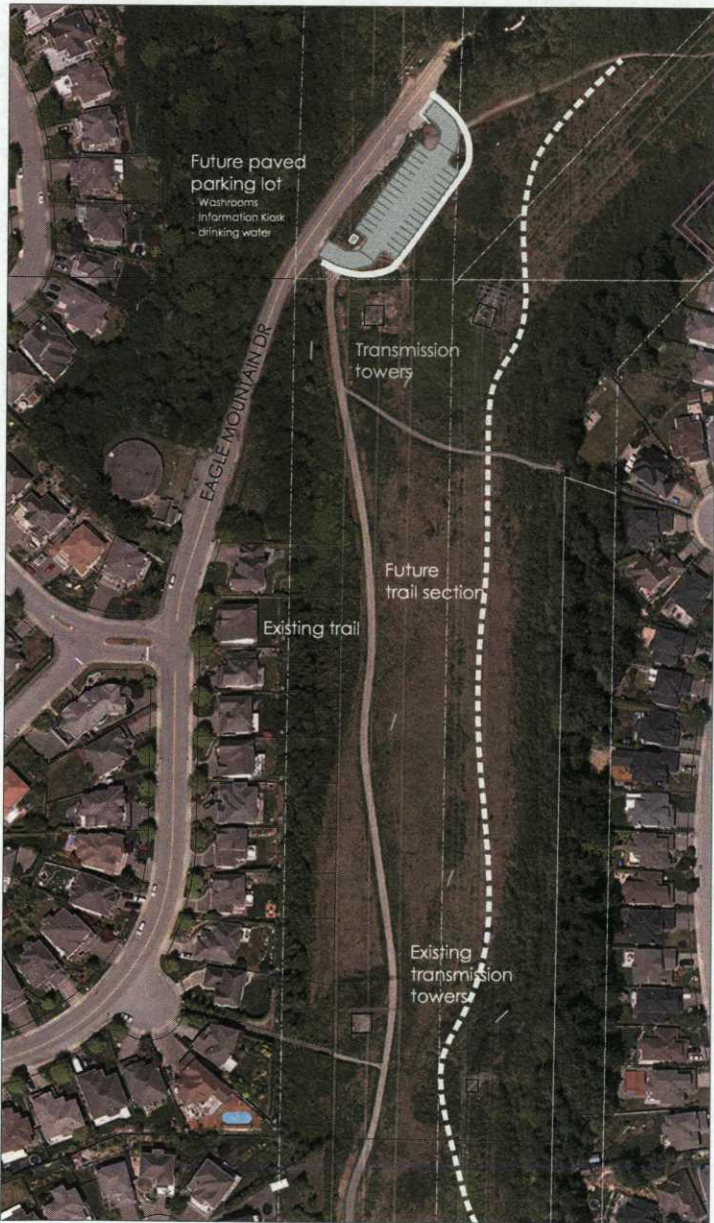
### Phase One (Pink) - Crunch Trail Improvements

Lansdowne Drive (N) to Guildford Way

1. washroom
2. 60 car paved parking
3. entry road
4. reconfigure community gardens
5. pedestrian crossing at Guildford Way
6. traversing granular trails
7. viewing areas
8. outdoor exercise equipment
9. furnishings, signage, fencing, trail markers, drinking water



LANSDOWNE DR(S) TO GUILDFORD WAY



### Phase Two - Crunch Trail Improvements

Eagle Mountain Drive to Lansdowne Drive

1. 30 car paved parking
2. washroom
3. twinned trail
4. signage, information kiosk, trail markers
5. furnishings, drinking water

Guildford Way to Runnel Avenue:

3. twinned trail
4. signage, information kiosk
5. furnishings
6. improve connection to play area



NORTH TERMINUS OF EX. CRUNCH TRAIL AT EAGLE MOUNTAIN DR

EAGLE MOUNTAIN DR TO PANORAMA DR



## Phase Two - Crunch Trail Improvements

Eagle Mountain Drive to Lansdowne Dr

1. 30 car paved parking
2. washroom
3. twinned trail
4. signage, information kiosk, trail markers
5. furnishings, drinking water

Guildford Way to Runnel Avenue:

3. twinned trail
4. signage, information kiosk
5. furnishings
6. improve connection to play area



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PANORAMA DR. TO DAVID AVE



## Phase Two - Crunch Trail Improvements

Eagle Mountain Drive to Lansdowne Drive (N)

1. 30 car paved parking
2. washroom
3. twinned trail
4. signage, information kiosk, trail markers
5. furnishings, drinking water

Guildford Way to Runnel Avenue:

3. twinned trail
4. signage, information kiosk
5. furnishings
6. improve connection to play area



DAVID AVE TO LANSDOWNE DR (N)



### Phase Two - Crunch Trail Improvements

Eagle Mountain Drive to Lansdowne Drive

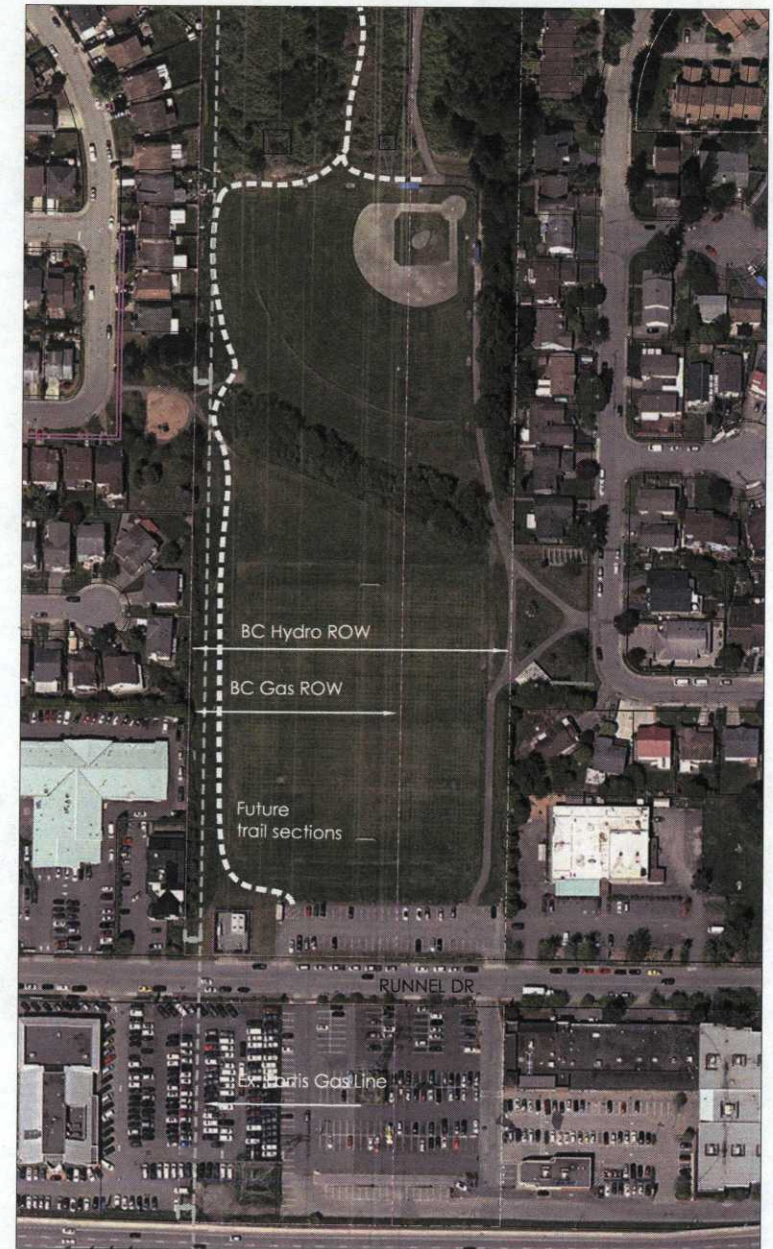
1. 30 car paved parking
2. washroom
3. twinned trail
4. signage, information kiosk, trail markers
5. furnishings, drinking water

Guildford Way to Runnel Avenue:

3. twinned trail
4. signage, information kiosk
5. furnishings
6. improve connection to play area

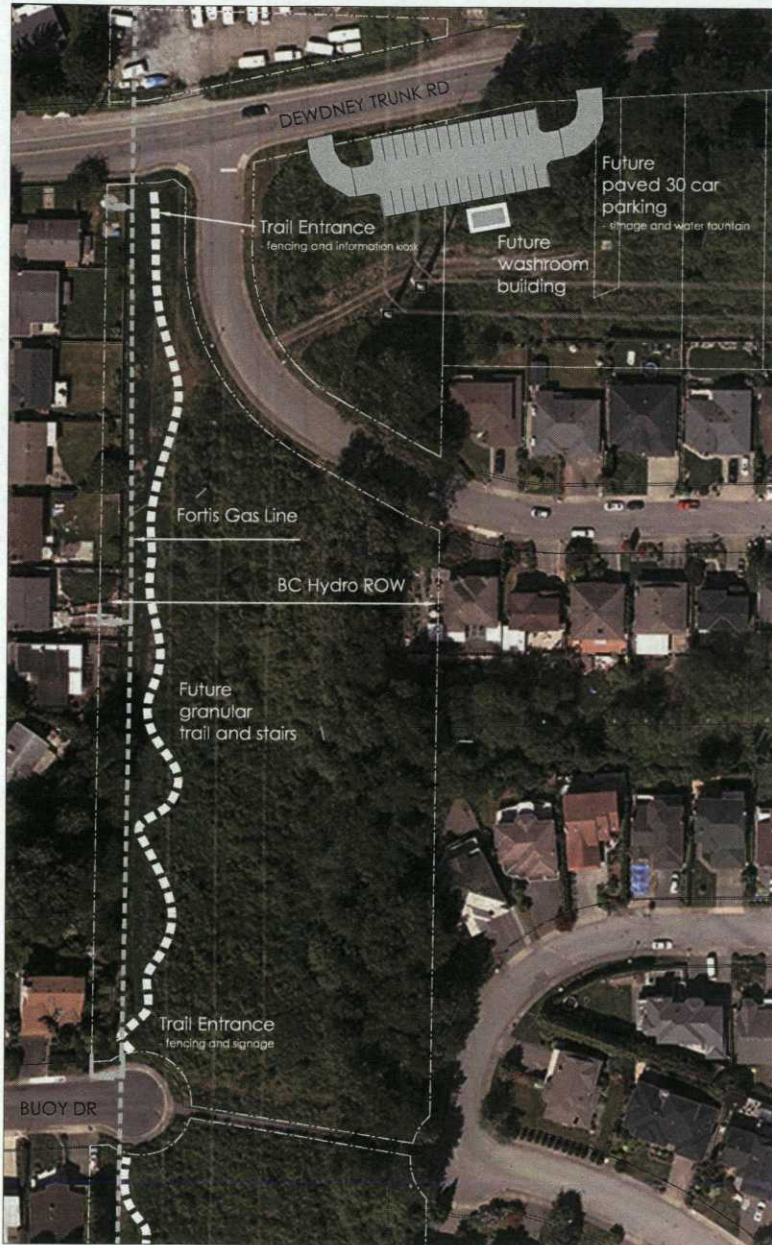
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GUILDFORD WAY AT EAGLE RIDGE PARK



THROUGH EAGLE RIDGE PARK TO RUNNEL DR.





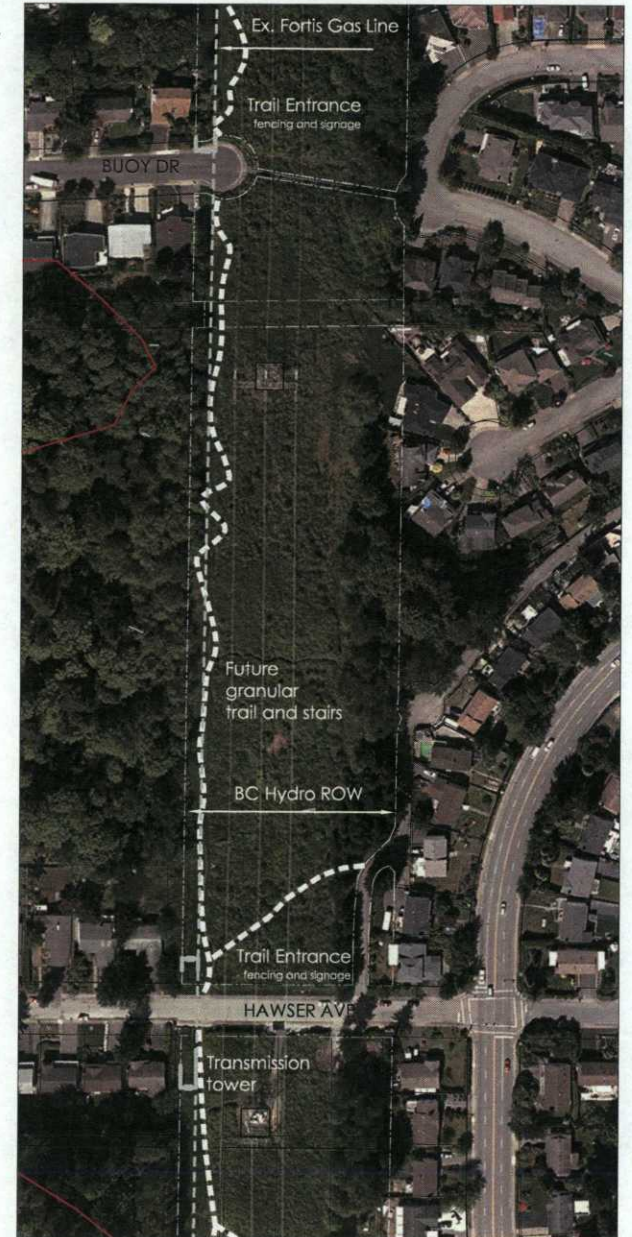
DEWDNEY TRUNK TO BUOY DR.



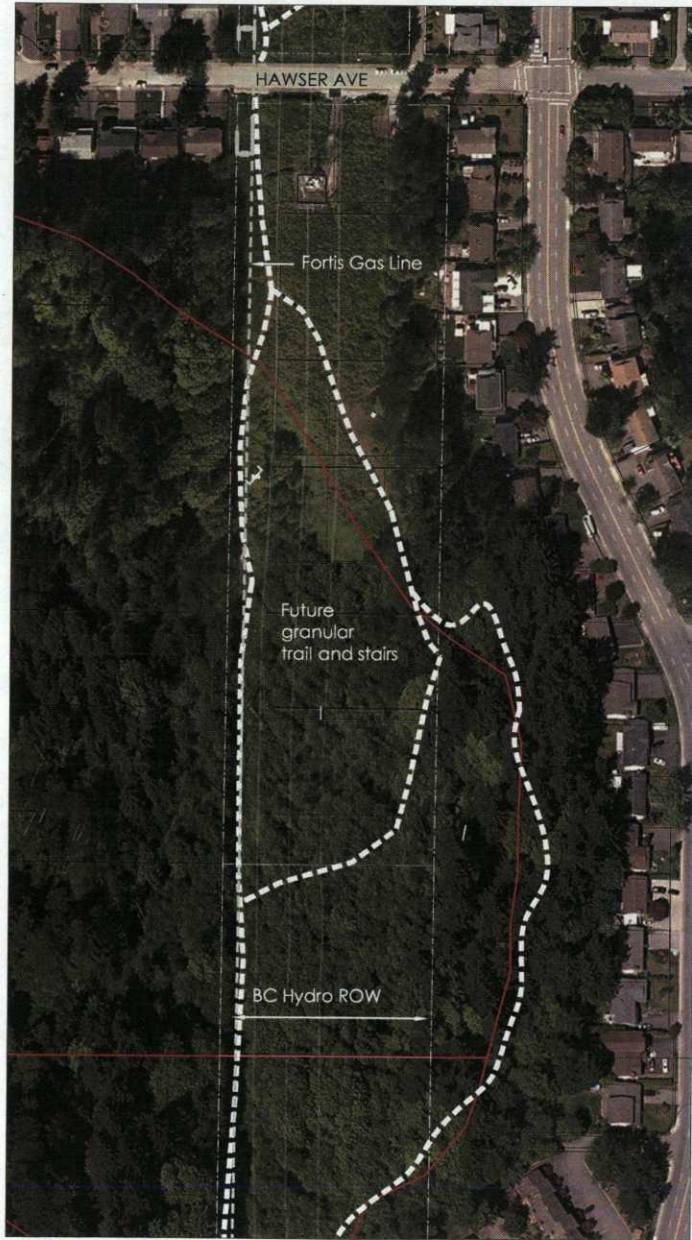
### Phase Three - Greenlinks Trail Connections

Dewdney Trunk Rd to Mariner Way

1. 30 car paved parking
2. washroom
3. information kiosk
4. granular trail and wood stairs
5. signage, trail markers
6. furnishings, drinking water



BUOY DR. TO HAWSER AVE



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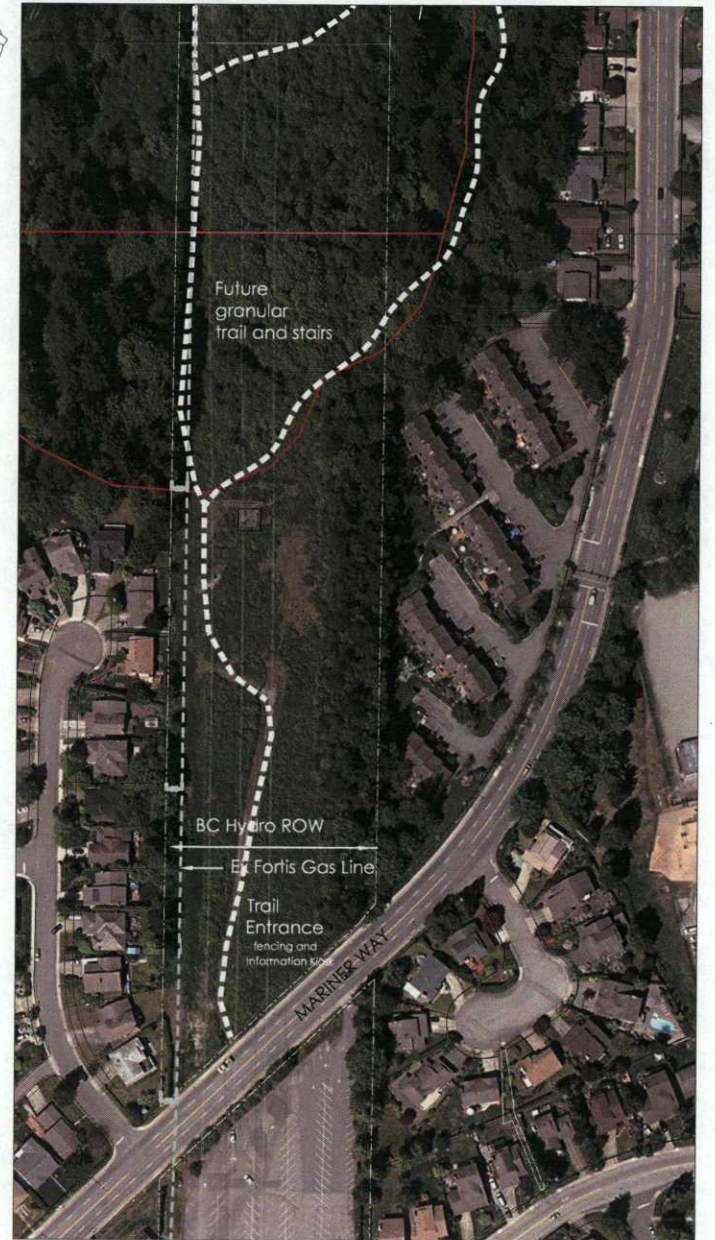
HAWSER AVE TO MARINER WAY



### Phase Three - Greenlinks Trail Connections

Dewdney Trunk Rd to Mariner Way

1. 30 car paved parking
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4. granular trail and wood stairs
5. signage, trail markers
6. furnishings, drinking water



HAWSER AVE TO MARINER WAY