

January 9, 2018

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To: City Manager

From: General Manager Parks, Recreation and Culture Services

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

For: **Council**

**Recommendation:**

That Council:

1. Endorse the Coquitlam Crunch Trail and Expansion Plan (2018-2023) as per the report of the General Manager Parks, Recreation and Culture Services dated January 9, 2018 entitled "Coquitlam Crunch Trail and Expansion Plan (2018-2023)".
2. Direct staff to bring back final detailed design plans and budget for Phase 1 of improvements later in 2018.

**Report Purpose:**

The purpose of this report is to seek Council approval of the 5-year plan (2018-2023) for the expansion of the Coquitlam Crunch Trail, and to seek endorsement for staff to proceed with the detailed design for Phase 1 of the plan.

**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 was identified in the 2017 Business Plan as a "C" Priority. The Crunch Trail expansion plan for Phase 1 has been included, and is fully funded, in the 2018 Business Plan as an "A" Priority under the City's Community Enhancement Blitz.

**Background:**

The Crunch Trail is a highly 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. The trail provides an incredible link between neighbourhoods and parks, providing access to recreation and outdoor amenities to many residents and fitness enthusiasts. Walking the Crunch Trail has become a popular fitness challenge, in its current state the trail is a 2.2 km climb with 242 metres of elevation gain.

POS

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. 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.

Given the popularity and importance of this amenity, staff have developed a Coquitlam Crunch Trail & Expansion Plan (Attachment 1) that will oversee a strategic and phased approach to the trail development over the next 5 years.

#### Trail Planning

Park planning work commenced in 2017 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. The proposed improvements and expansion to the Crunch Trail network is consistent with the City's Master Trail Plan.

The Coquitlam Crunch Trail and Expansion Plan (the "Crunch Plan") was first presented to Council-in-Committee on July 10, 2017 and then again subsequently on October 2, 2017. The feedback from the last meeting is outlined below in the discussion section, but generally the comments and feedback from Council were incorporated into the proposed 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 to ensure uninterrupted access to stairs along the trail. This stair work is nearing completion and is expected to be operational by the end of January 2018.

#### **Discussion:**

The Crunch Plan was presented to Council-in-Committee on October 2, 2017. At that meeting, several important items were raised and these will be addressed as part of the Plan and its implementation. The proposed improvements attempt to establish recreational amenities that will have broad appeal and that will be well utilized by all. These items are:

### Plan Phasing

The Plan allows for flexibility in phasing. The phasing can be sequential as outlined in the Plan document or based on Council preference. Once the Plan is approved, each individual phase will come to Council for approval with detailed design plans, and both capital and operating budgets.

### Stair Safety and User Comfort

Both sun glare and vertigo have been raised by users in the past as concerns along the stair sections of the trail. To address these concerns, the new stair sections will have the metal mesh painted black. There will also be breaks in the mesh surfacing in order to create visual breaks and address vertigo. Those two measures are anticipated to work better than the white curb strips which were previously used to create visual breaks. All improvements will be monitored based on feedback from the public; if necessary adjustments may be made.

### Trail Street Crossings

The Crunch Trail is bisected by several major roads. To assist with connectivity and to provide safe recreational opportunities, Parks, Recreation and Culture as well as Engineering & Public Works are collectively coordinating efforts to provide for these connections. The existing crossings on Lansdowne Drive will have the temporary curb bulges made permanent, and the crossing volumes will be monitored to determine if/when the crossings may require upgrades to pedestrian activated crossings. In Phase 1, the Crunch Plan proposes a new pedestrian activated crossing at Guildford Way. Some of the trails will also be realigned to make sure they provide connections to where it's safe to cross the street. Additionally, new trail signage and trail markers will be installed to assist with this issue. In future phases, the Barnet Highway crossing and a safe pedestrian connection to the Greenlinks extension will need to be considered. At first this connection may be on-street via marked sidewalks but in the future a more direct pedestrian connection over the train tracks with a future street bridge may be possible as outlined in the Strategic Transportation Plan. The Strategic Transportation Plan calls for a pedestrian crossing of the railway at Falcon Drive, as part of the Falcon Drive overpass.

### Washrooms

Each of the first 3 phases of the trail expansion proposes the establishment of a washroom. Washrooms are important amenities which are frequently requested by the users. Only approximate washroom locations have been identified at this point in the Plan as exact locations will require approvals from BC Hydro. BC Hydro ROW development and use regulations pose some challenges and limitations, but staff will be working through some logistical issues and investigating other options to provide a serviced facility. These will be outlined as part of detailed design plans for each phase when they come to Council.

#### "Coquitlam Crunch" Brand Identity

The City has invested in the development and promotion of the Coquitlam Crunch Trail, and it is now important to secure and protect the brand identity for this community asset. Parks, Recreation and Culture is working with Legal Services to establish the "official mark" registration, which is the government equivalent of a registered trademark. Additionally, Corporate Communications has now secured the appropriate social media handles for the Coquitlam Crunch, including Facebook, Twitter and Instagram. Corporate Communications is also working with the Information and Communications Technology group to secure web domains "coquitlamcrunch.com" and "coquitlamcrunch.ca", with the latter currently being used by the organizers of the Coquitlam Crunch Challenge.

#### Trail Operating Costs

Trail operating costs are important, especially as the trail expands and new amenities may be added. Detailed information on the operating expenses tied to capital will be presented to Council for information as part of detailed design plans for each phase. If the Coquitlam Crunch Trail and Expansion Plan is approved, staff will report back later in 2018 with the detailed design plans and budget for Phase 1; that report will also include operating costs for Phase 1 that will be tied to capital project approval. Subsequent detailed design and budget reports on next phases will have similar operating expense information.

#### **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. Should Council support the direction described in the Coquitlam Crunch Trail and Expansion Plan (2018-2023), staff will commence the detailed design work on Phase 1 of the project working towards the funding envelope of \$2.5 million which has been approved in the 2018 Capital Budget Plan as part of the Community Enhancement Blitz. The \$2.5 million funding includes \$2 million for Phase 1 of the Crunch Trail Expansion and \$500,000 for the new Crunch Trail washroom (1 of 3 washrooms funded at a total cost of \$1.5 million within the Community Enhancement Blitz). Funding for future phases and potential construction, if approved by Council, will be included in future capital budget planning processes and will be added to the DCC program for eligible components. The anticipated project budget for the first 3 phases is generally as follows, based on preliminary costing:

### 5 Year Crunch Trail Expansion Plan

Description	Anticipated Funding	Anticipated Year of Budget Request	Possible Construction
Phase One (Approved)	\$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>		

It is noted that project costs will be refined as each phase is investigated and designed so costs are only high-level at this point. As well, future potential phases beyond phase 3 have not been included as those are too far in the future.

#### Conclusion:

Staff are presenting the Coquitlam Crunch Trail and Expansion Plan (2018-2023) to Council for approval. If endorsed, the first phase of the Plan with a budget envelope of \$2.5 million will move into the detailed design stage. This phase represents an "A" Priority project within the 2018-2019 Community Enhancement Blitz. The detailed design plans for Phase 1 together with the capital and operating budget will be presented to Council subsequently in 2018.

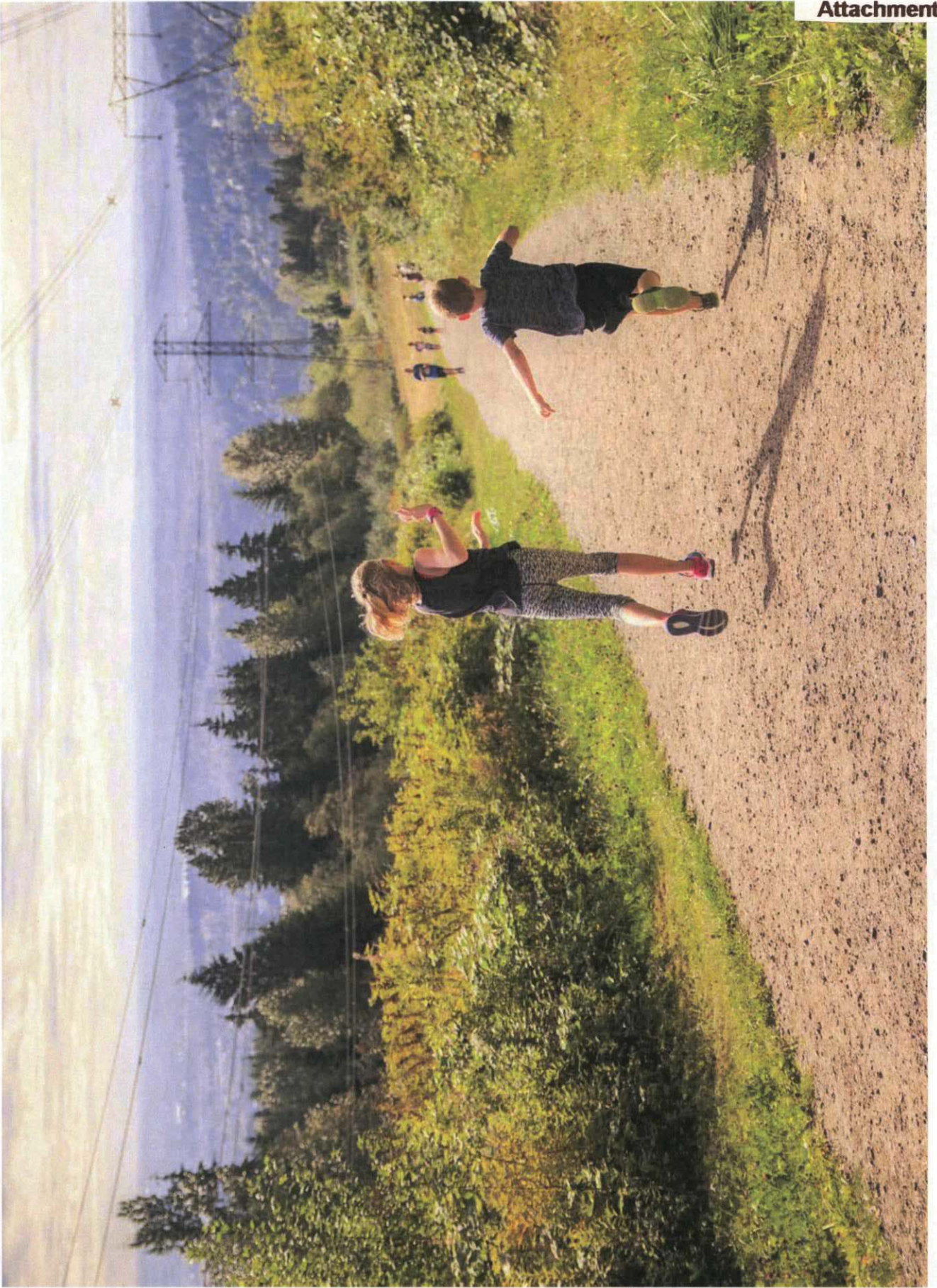


Raul Allueva, RPP

#### Attachment 1 – Coquitlam Crunch Trail and Expansion Plan (2018 -2023)

This report was prepared by Andre Isakov, Parks Planning & Design Manager with contributions from Lanny Englund, Manager, Park Planning & Forestry, Kathleen Reinheimer, Manager, Parks, Dan Mooney, Manager, Transportation, Chad Braley, Manager, Capital Projects and Inspections, Stephanie James, Acting Director, Legal and Bylaw Enforcement, Kathleen Vincent, Manager, Corporate Communications, and Michelle Hunt, General Manager Financial and Information Services.

COQUITLAM CRUNCH TRAIL AND EXPANSION PLAN 2018-2023



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## THE COQUITLAM CRUNCH TRAIL EXPANSION AND IMPROVEMENT PLAN 2018-2023

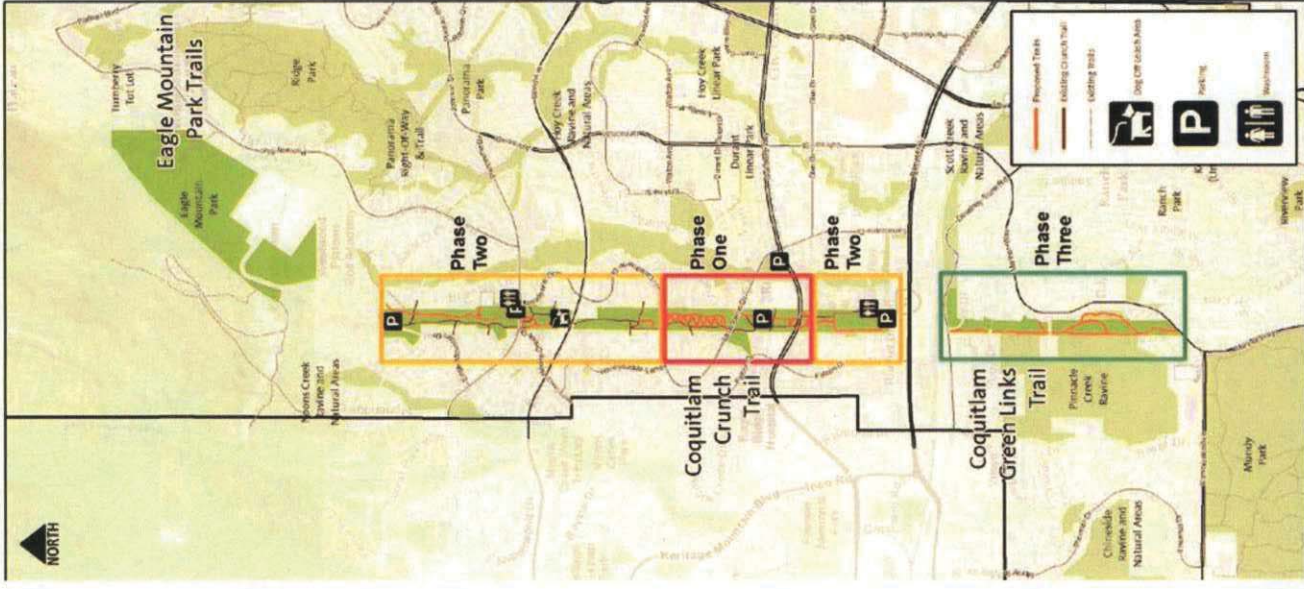
### Introduction

The Coquitlam Crunch Trail is a very popular local and regional recreational trail system that is a 2.2 km long climb with 242 metres elevation change. It currently stretches 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 (Figure 1). The trail sees 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 will 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.

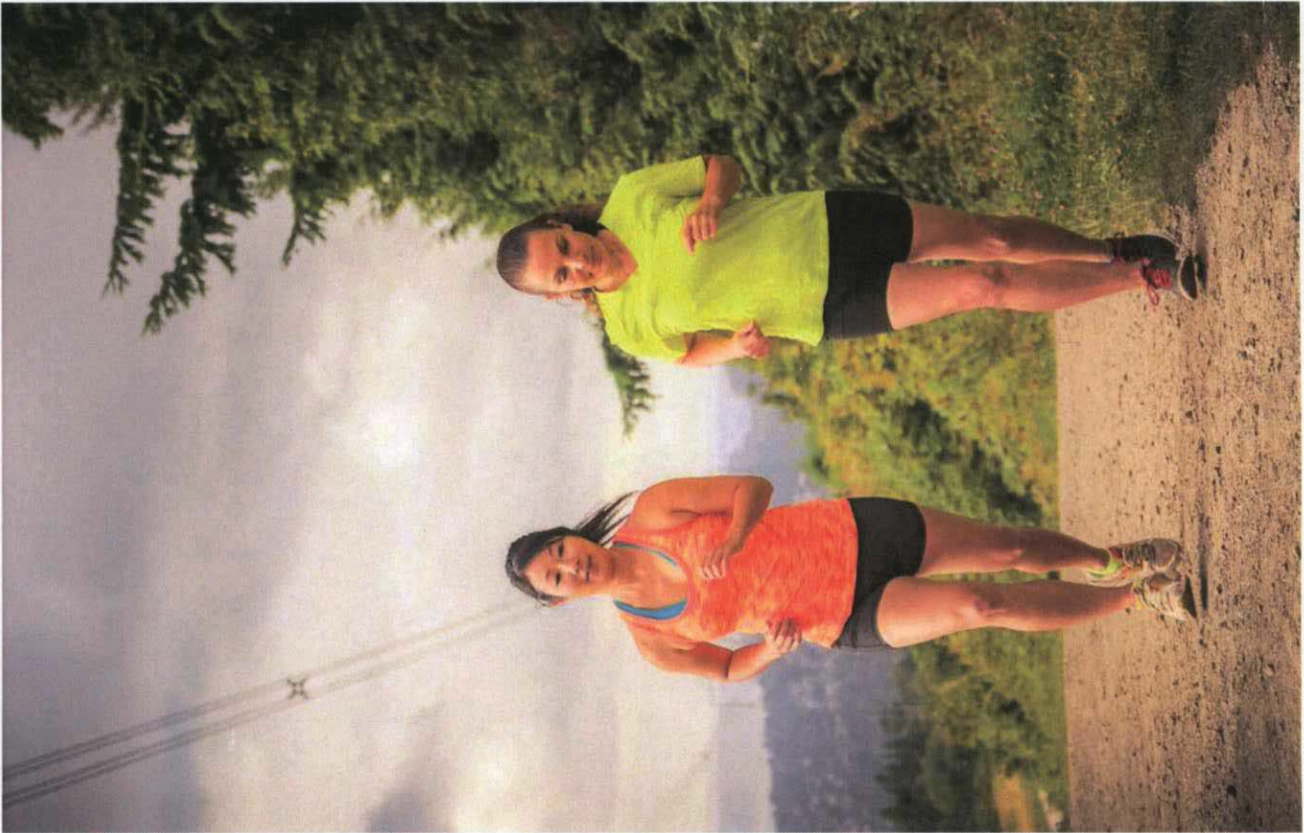
The most popular stretch of the trail is the steepest, connecting lower Lansdowne Drive to upper Lansdowne Drive, comprised of more than 400 timber stairs (Figure 1). It is this physical challenge combined with easy access and spectacular urban views that are making the Crunch Trail a popular local and 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 and will continue to be a high City priority in 2018 and beyond.

Response to user surveys conducted in spring of 2017 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. 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. This Plan is the guiding document for future Crunch Trail enhancements.



**Figure 1**  
Coquitlam Crunch Context / Phasing Map





## 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 (Figure 2). In the future, this may 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 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 city-owned lands which are designated for a future Crunch Trail extension known as the "Greenlinks Extension" (Figure 2). 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. When completed this will be an important north-south regional trail and pedestrian route that connects the Fraser River to Eagle Mountain Park (Figure 3). The first phase shown in Figure 4 focuses on proposed priority improvements within the sections between Lansdowne Drive (north) to Guildford Way) based on public feedback. This section is top priority as it is most used and its steep topography provides for a most challenging and intensive recreational activity with some of the best views.

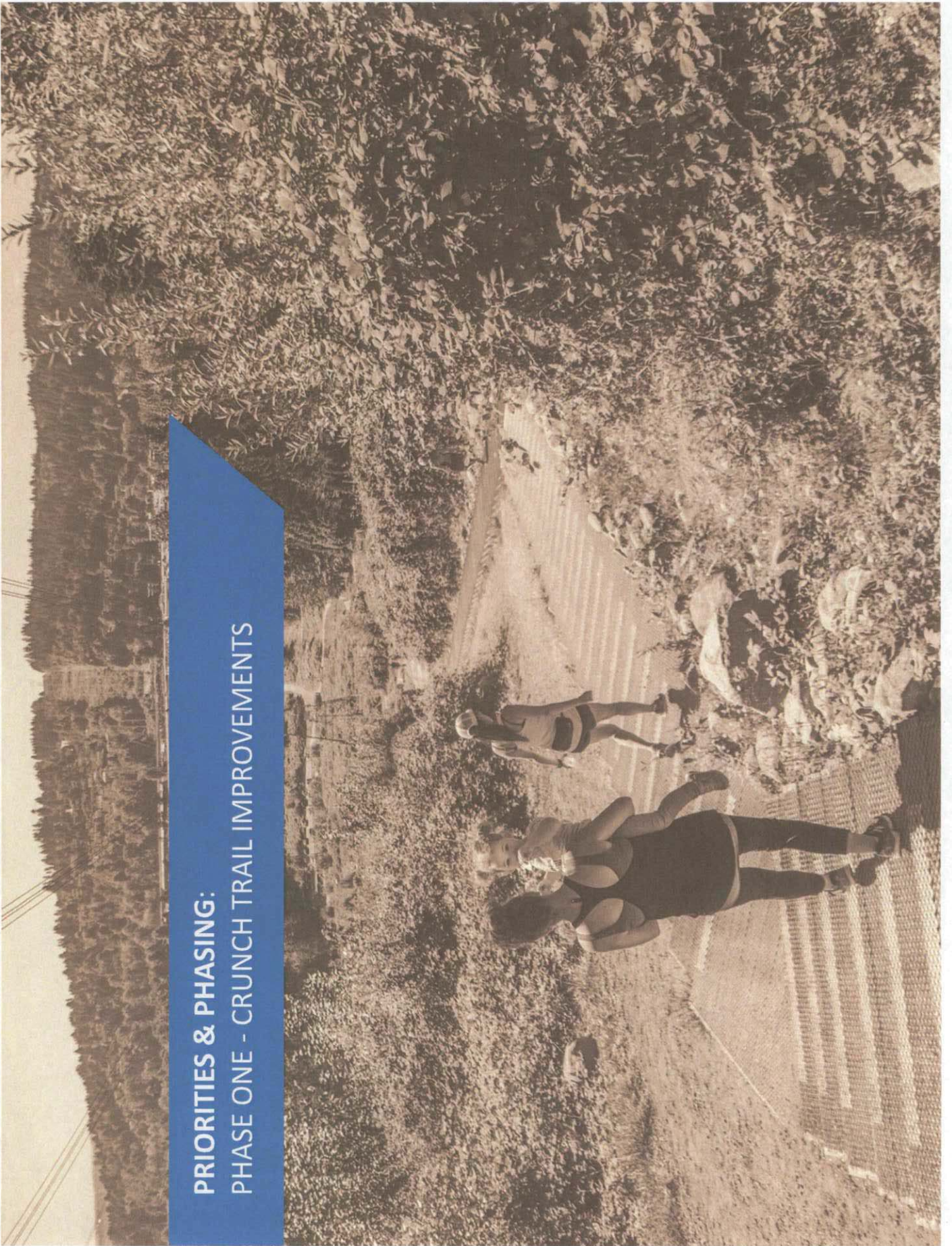


**Figure 2**  
Excerpt from Master Trail Plan -  
Coquitlam Greenlinks Trail (Right)

**Figure 3**  
Excerpt from Master Trail Plan -  
Eagle Mountain Park Trail Connection  
(Left)



**PRIORITIES & PHASING:  
PHASE ONE - CRUNCH TRAIL IMPROVEMENTS**



## PHASE 1 - CRUNCH TRAIL IMPROVEMENTS

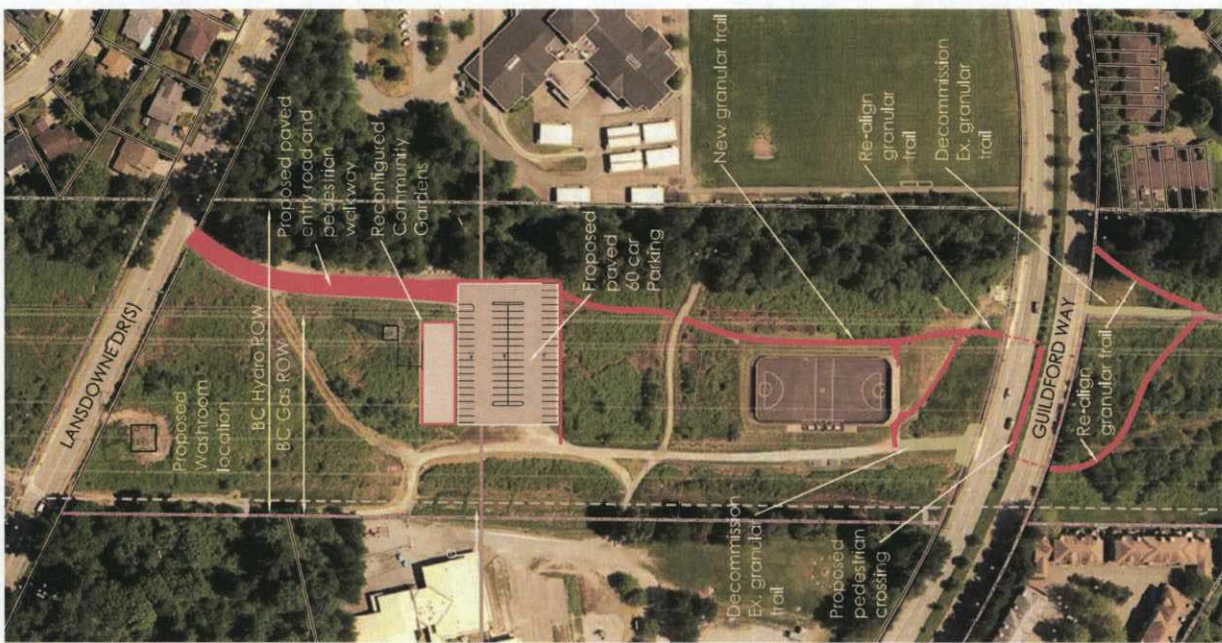
The preliminary estimate to complete phase one is \$2.5 million. It includes the following:

1. **Washroom Facilities - Lansdowne Drive (south)** - A serviced washroom facility located to service the users of the trail, community gardens and stairs would be ideal. A few options will be investigated to seek the best location.
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. This can be accomplished with minimal cost, as materials can be re-used. 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.

**Figure 4a.** Lansdowne Dr. (North) to Lansdowne Dr. (South)



**Figure 4b.** Lansdowne Dr. (South) to Guildford Way



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.

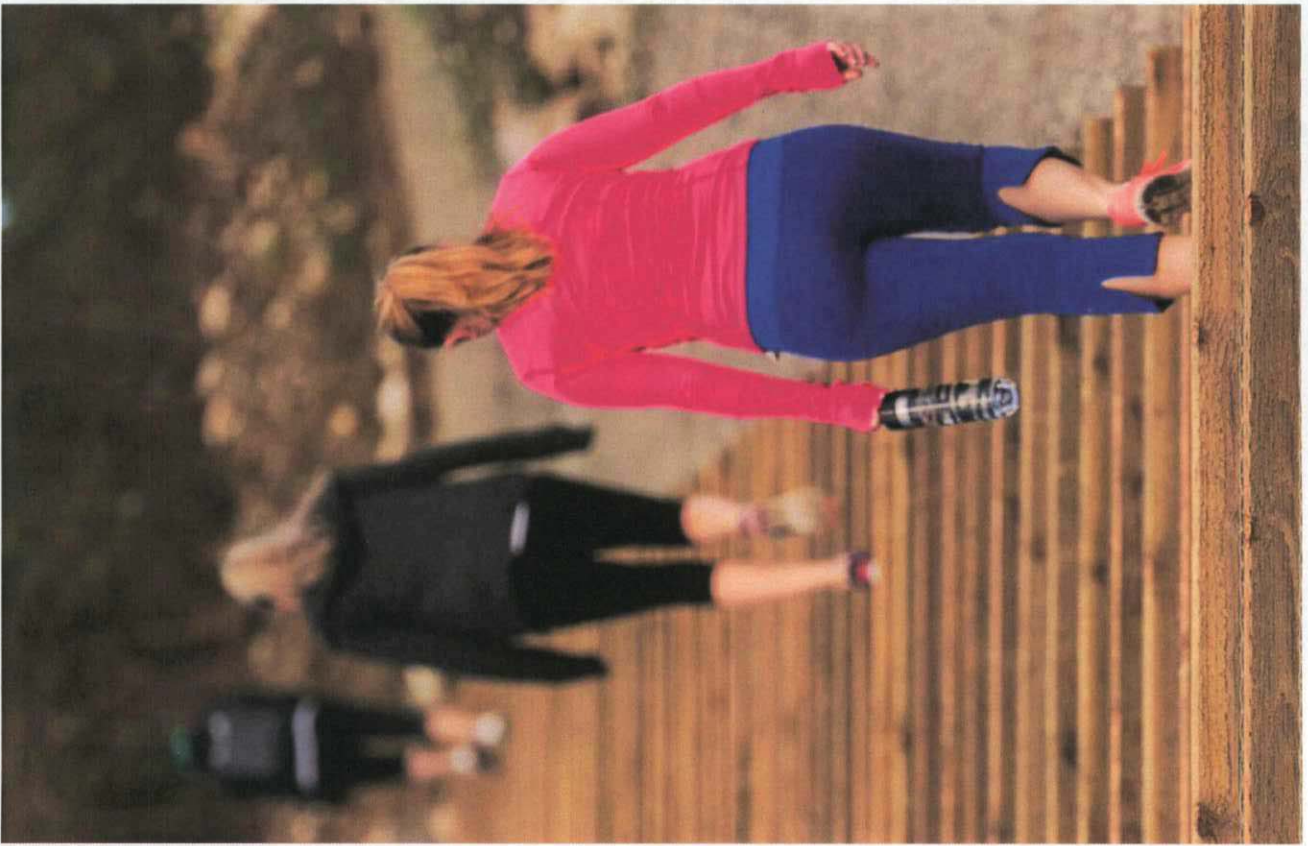
6. New Transverse Trails - To add an alternate way to maneuver up the steeply sloped popular stair section of the Crunch Trail, the addition of crisscrossing pathways between the twinned stair sections will offer a variety of options to use stairs, pathway or a combination of routes to make the most 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.

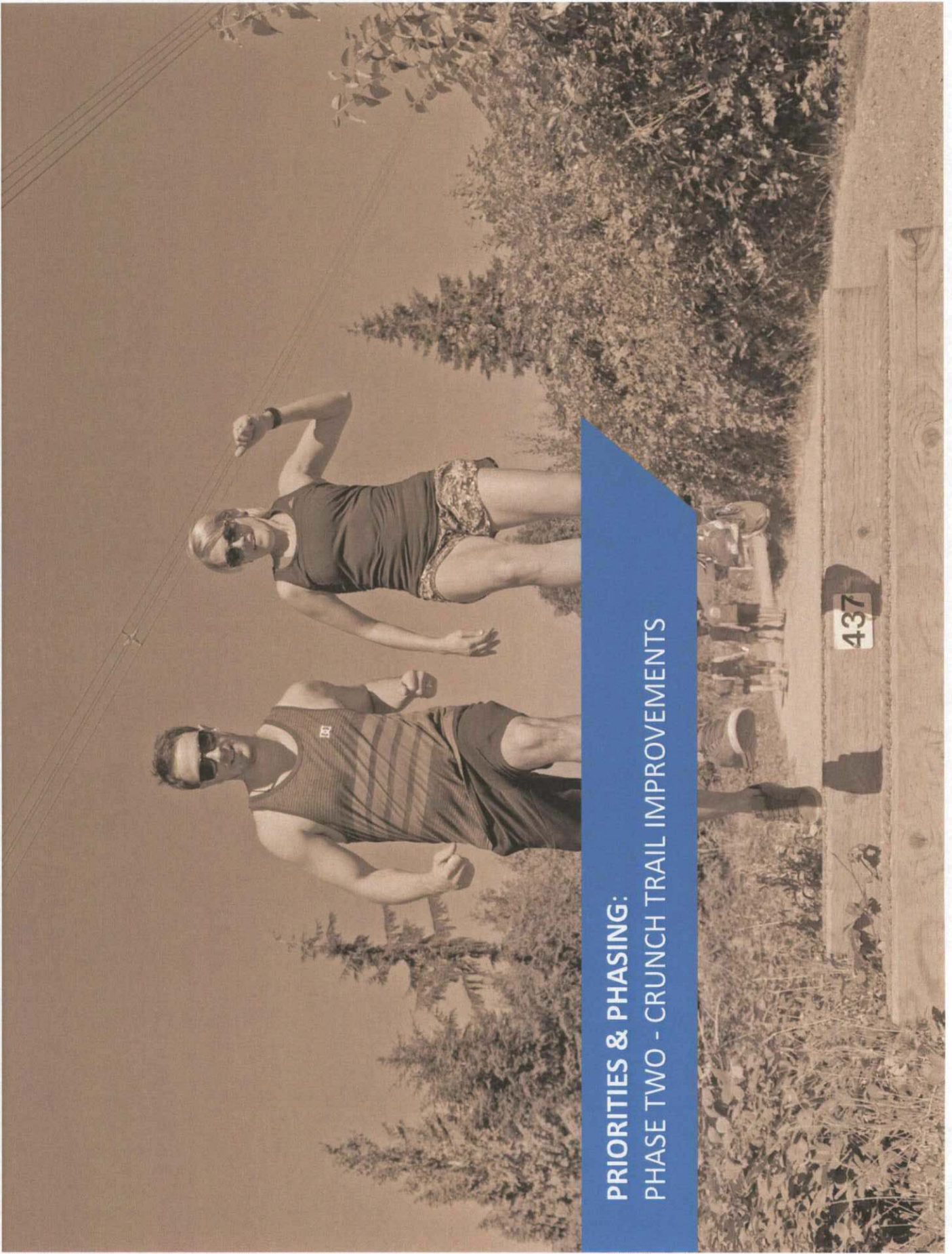
7. Viewing Areas - The addition of viewing and sitting areas along the traverse trails will give users opportunities for resting, stretching, and exercise while enjoying the views from multiple vantage points along the stair section of the Crunch Trail. The viewing areas could accommodate five metre 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 way-finding 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. New 200m Trail Section - With the proposed pedestrian crossing, new trail sections are proposed to accommodate new travel patterns while others are decommissioned.





**PRIORITIES & PHASING:  
PHASE TWO - CRUNCH TRAIL IMPROVEMENTS**

## PHASE TWO – CRUNCH TRAIL IMPROVEMENTS

The second phase shown generally in concept in *(Figure 5a,b,c,d.)* focuses on trail improvements in the sections between Eagle Mountain Drive to Lansdowne Drive (north), and between Guildford Way to Runnel Drive. *(Figure 6a,b.)* The preliminary estimate to complete phase two is \$1,500,000. Improvements would include:

### Eagle Mountain Drive to Lansdowne Drive North; (Left Image)

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



Figure 5a



Figure 5b

### Figure 5 (a, b)

Eagle Mountain Dr. (North) to Panorama Dr. (North)  
 (Images move North / South  
 From Left to Right)

Figure 5c



Figure 5d

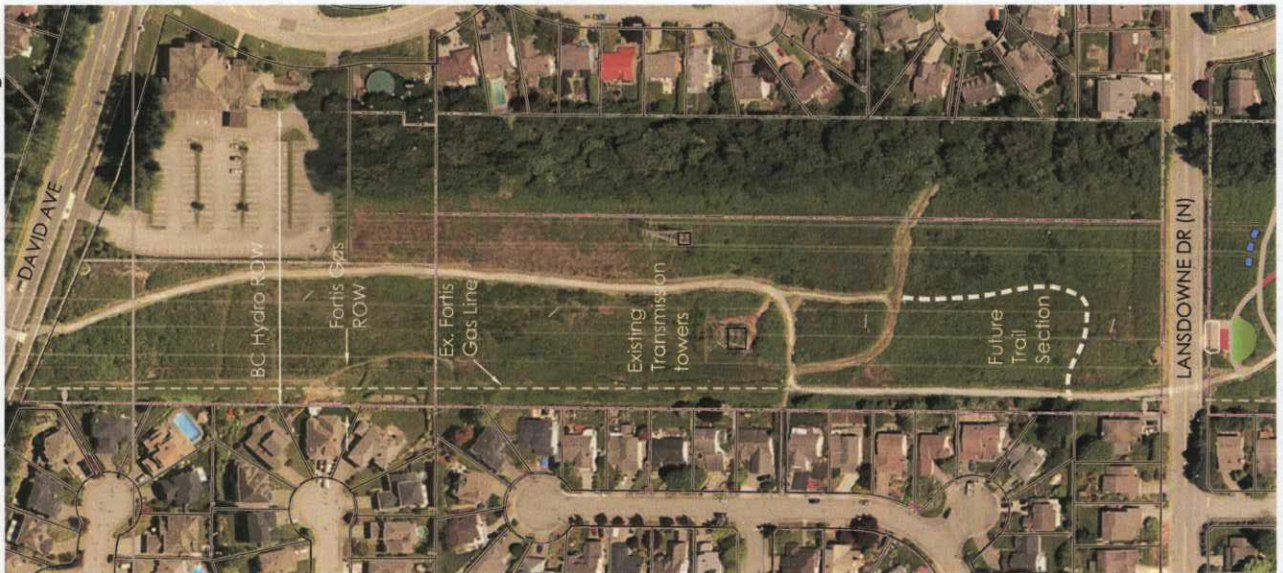


Figure 5 (c, d)  
Panorama Dr. to LandsdowneDr. (North)  
(Images move North / South  
From Left to Right)



**Figure 6 (a,b)**  
 Guildford Way to Runnel Dr..  
 (Images move North / South  
 From Left to Right)

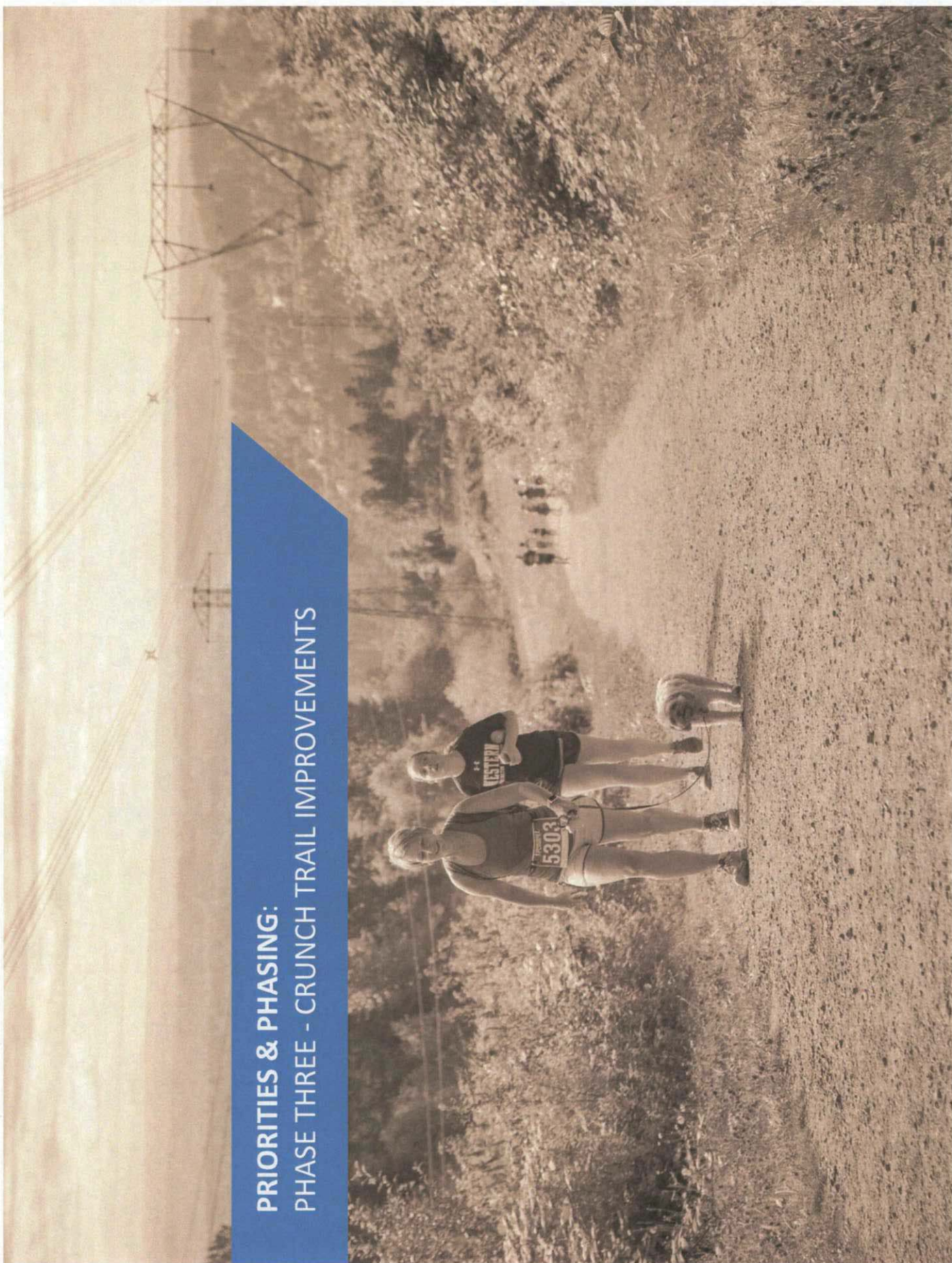


## PHASE TWO – CRUNCH TRAIL IMPROVEMENTS

### Guildford Way to Runnel (Right Image):

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

**PRIORITIES & PHASING:  
PHASE THREE - CRUNCH TRAIL IMPROVEMENTS**



### 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 (Figure 7a, b,c,d.) 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.

Figure 7a



Figure 7b



Figure 7d



Figure 7c



As part of the Crunch Trail System, this section will likely draw users who will utilize the entire system as a whole. A safe pedestrian connection to the *Greenlinks Extension* will need to be considered between the existing trail and the new extension. 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.

Figure 7 (a,b,c,d)  
Dewdney Trunk Rd. to Mariner Way  
(Images move North / South  
From Left to Right)

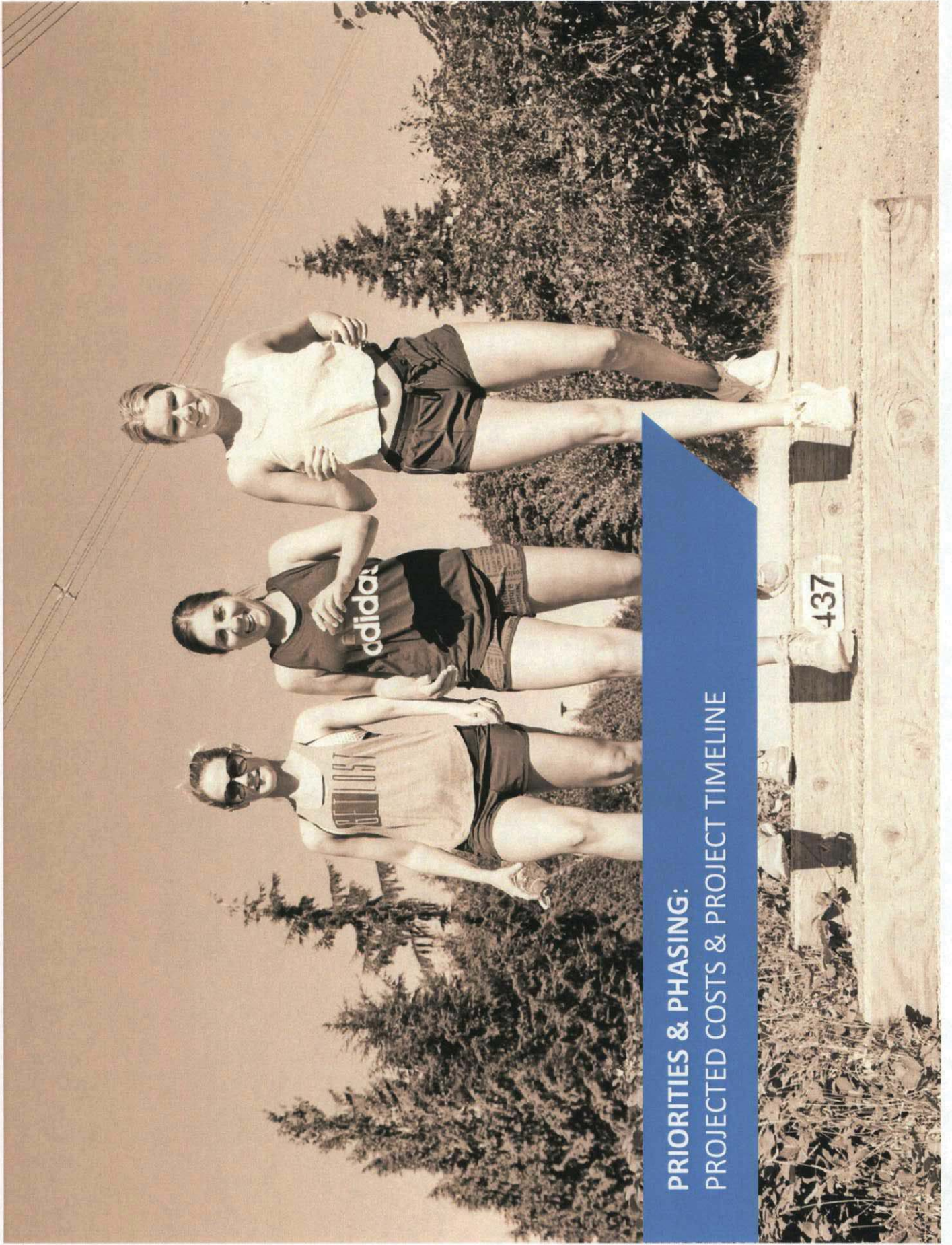
**PRIORITIES & PHASING:  
PHASE FOUR & PROJECTED COSTS FOR  
CRUNCH TRAIL IMPROVEMENTS**



#### **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.





**PRIORITIES & PHASING:  
PROJECTED COSTS & PROJECT TIMELINE**

## PROJECTED COSTS & PROJECT TIMELINE

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>		

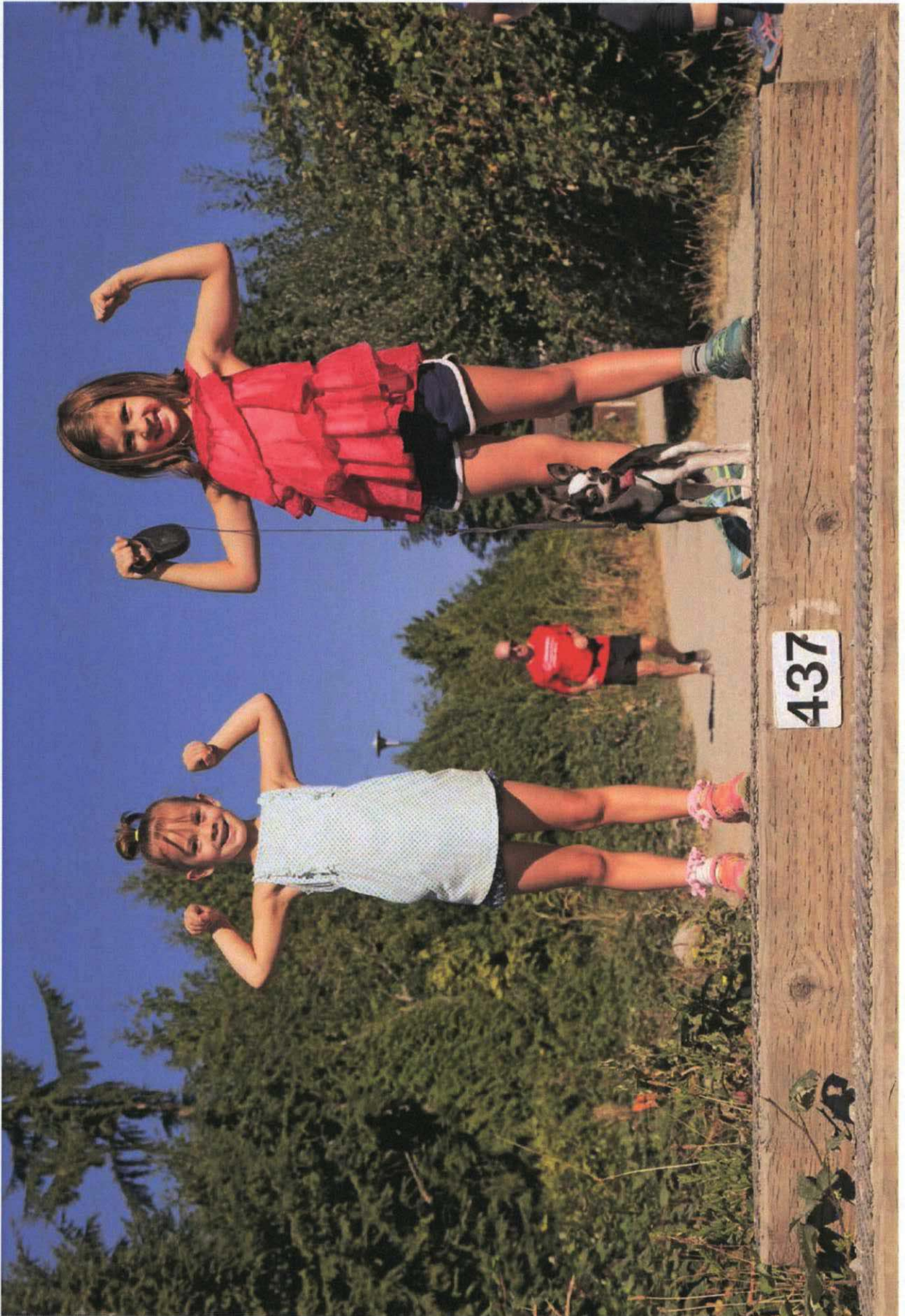
This Plan allows for flexibility in phasing. Each individual phase will come to Council for approval with detail design plans and both capital and operating budgets. Each phase of the Plan may be updated and amended at that point. No funding beyond Phase 1 improvements has been identified, although eligible projects and improvements will be added to the future Development Cost Charges (DCC) program.

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. 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.

This Plan is the guiding document for future Crunch Trail Improvements.







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