



# ARBUTUS GREENWAY PLAN

*Understanding the Corridor Today*



**DRAFT**  
SEPTEMBER 8, 2017



ISSUE AND REVISION RECORD

Revision	Date	Originator	Checker	Approver	Description
A	September 8 2017	J. Pezarro	A. Gardner	E. Elliott	Issued for Client Review

Document reference: 381002 | 381002-MMD-00-PO-RP-XD-0001| Rev A

Information class: Standard

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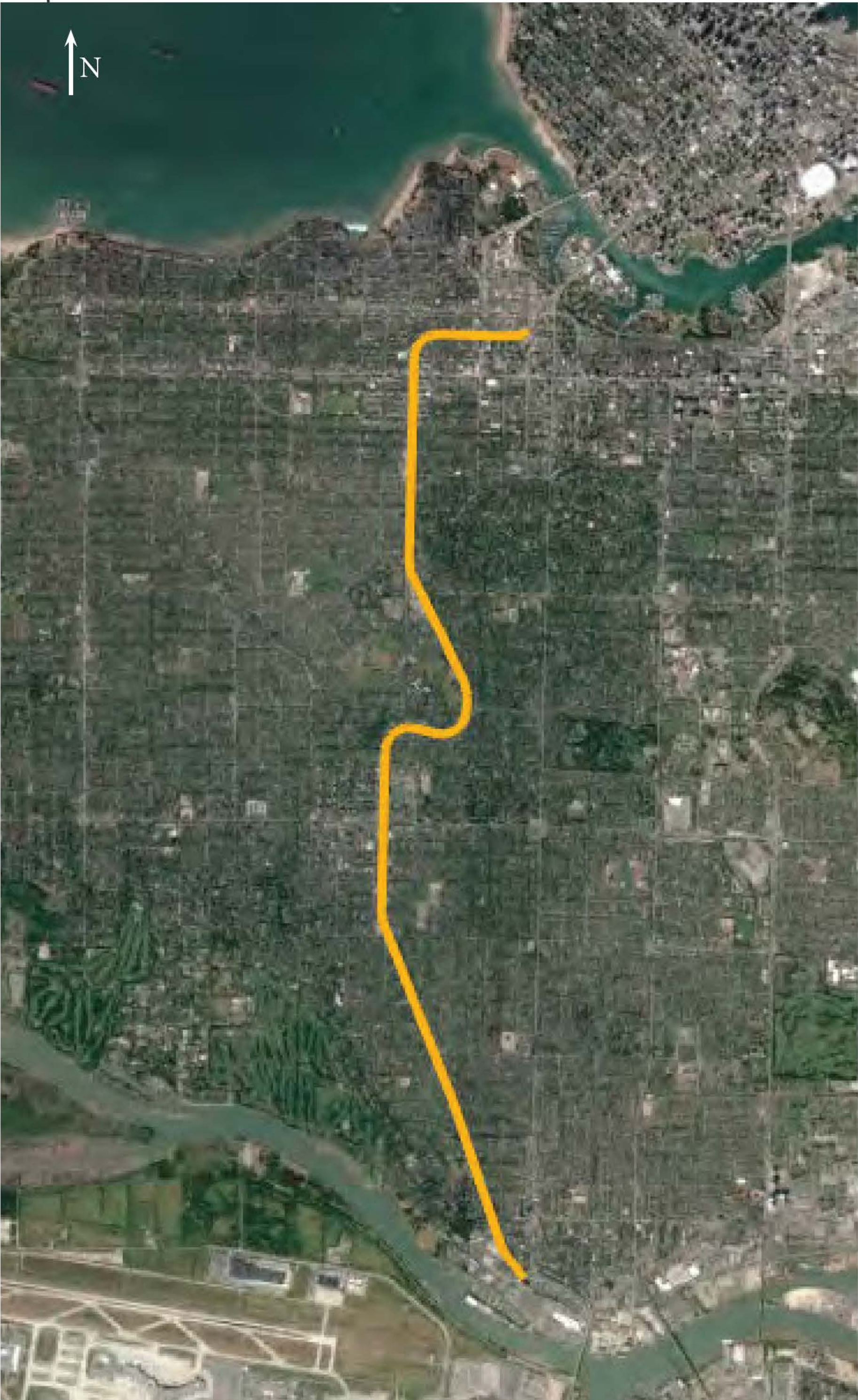


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# EXECUTIVE SUMMARY

The Arbutus Corridor, located parallel to Arbutus Street in south-central Vancouver, is approximately 9 kilometres long and 15-20 metres wide between Fir Street in the north and Milton Street in the south, and represents approximately 42 acres of open space. It has always been, and remains an important north-south corridor that links False Creek to the Fraser River, and connects neighbourhoods like Marpole, Kerrisdale, and Kitsilano. The area surrounding the Corridor is one of diverse land uses, neighbourhoods, communities, and natural features.

The City of Vancouver acquired the disused freight rail corridor from Canadian Pacific Rail in 2016, with the view in the long term to transform it into a greenway; a transportation thoroughfare and public space for use by all. In the short term, temporary paving has been laid and today it is used by myriad outdoor recreation and ecology enthusiasts as a place to visit, gather, and travel by foot, bike, skateboard, and other modes.

The Arbutus Greenway Project (AGP) is a Master Planning and engagement assignment led by the City of Vancouver, dedicated to transforming the Arbutus Corridor into a world-class active transportation and green space.

The scope of this phase of the AGP is to develop an implementable and visionary Arbutus Greenway Master Plan through planning and design with an integrated study team of planners, landscape architects, designers, engineers, artists, and specialists in indigenous design, public art master planning, sustainability, and universal accessibility. The Master Plan will also be shaped by input from intergovernmental First Nations partners, stakeholders, and the public.

In visioning exercises with the community and stakeholders, key themes and desires emerged:

- Space for walking and cycling
- Gathering spaces
- Connections to places
- A space for nature

These themes align with the identified focus areas for the Project team: to integrate places, mobility and infrastructure and community together.

## The Vision

*The Arbutus Greenway will be a defining element of Vancouver’s urban landscape as a vibrant and beautiful public space for walking, cycling, and streetcar. It will be a destination which fosters both movement and rich social interaction—inspired by nature and the stories of the places it connects.*



Before we imagine the future of the Greenway, it is important to reflect on the corridor’s past and current state. This report, *Understanding the Arbutus Corridor Today*, is the first step towards the development of the Arbutus Greenway Master Plan. This is the story of shared interdisciplinary understanding of the history and current condition of the Corridor and its context. This is the foundation from which the Master Plan will grow, fostering a shared understanding with which to work and forming the basis for design.

This report is structured as a story that guides the reader through the history of the Corridor to the Greenway we imagine. We start with its importance to various First Nations in the area, learn of the evolution of its use as an industrial freight rail route and follow its transformation into what we see today.

Planning for the Arbutus Greenway has been underway for decades, culminating with the City’s purchase of the land from Canadian Pacific Railway in 2016. The second section of this report details the various plans and precedents, dating back to the mid-1990’s, that form the basis for early planning work, including: Arbutus Corridor Official Development Plan, Greenest City Action Plan, Transportation 2040, Metro Vancouver Regional Growth Strategy and input from public workshops conducted in 2016 and 2017.



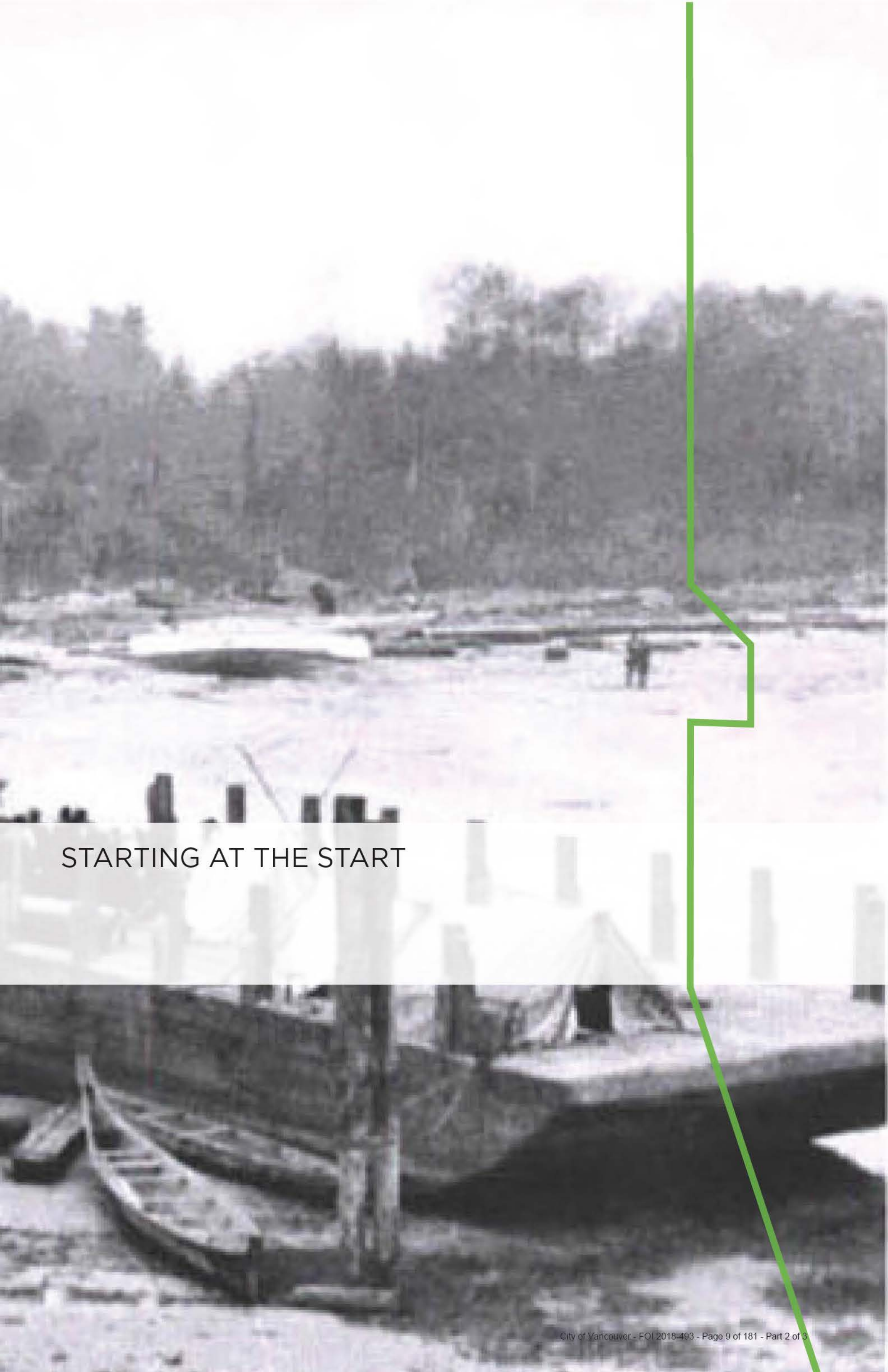
To provide a snapshot of where we are today the third section of the report describes aspects of the existing physical infrastructure and its current state, along with the corridor’s geographic location within the wider transportation network and city. We explore the topography, the characteristics of the temporary pathway and the connections to the communities around the current pathway. Also, highlighted are examples of how the community has played a critical role in turning the area into a source of pride for residents, passers-by, cyclists, walkers, artists and lovers of the natural environment through: community gardens, public art and stewardship.

Finally, this background review considers transportation, ecology, community integration, demographics, and land use, characteristics of the Arbutus Corridor today. this understanding will inform and influence work undertaken across disciplines as the Arbutus Greenway Master Plan takes shape.









STARTING AT THE START





# INTRODUCTION

The Arbutus Corridor, located parallel to Arbutus Street in south-central Vancouver, is approximately 9 kilometres long and 15-20 metres wide between Fir Street in the north and Milton Street in the south, and represents approximately 42 acres of open space. It has always been, and remains an important north-south corridor that links False Creek to the Fraser River, and connects neighbourhoods like Marpole, Kerrisdale, and Kitsilano. The area surrounding the Corridor is one of diverse land uses, neighbourhoods, communities, and natural features.

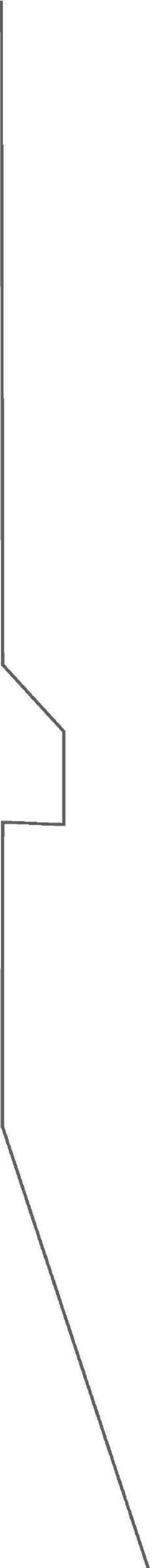
The City of Vancouver acquired the disused freight rail corridor from Canadian Pacific Rail in 2016, with the view in the long term to create a thoroughfare and public space for use by all. In the short term, temporary paving has been laid and today it is used by myriad outdoor recreation and ecology enthusiasts as a place to visit, gather, and travel by foot, bike, skateboard, and other modes.

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## The Vision

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The scope of this phase of the AGP is to develop an implementable and visionary Arbutus Greenway Master Plan through planning and design with an integrated study team of planners, landscape architects, designers, engineers, artists, and specialists in indigenous design, public art master planning, sustainability, and universal accessibility. The Master Plan will also be shaped by input from intergovernmental First Nations partners, stakeholders, and the public.

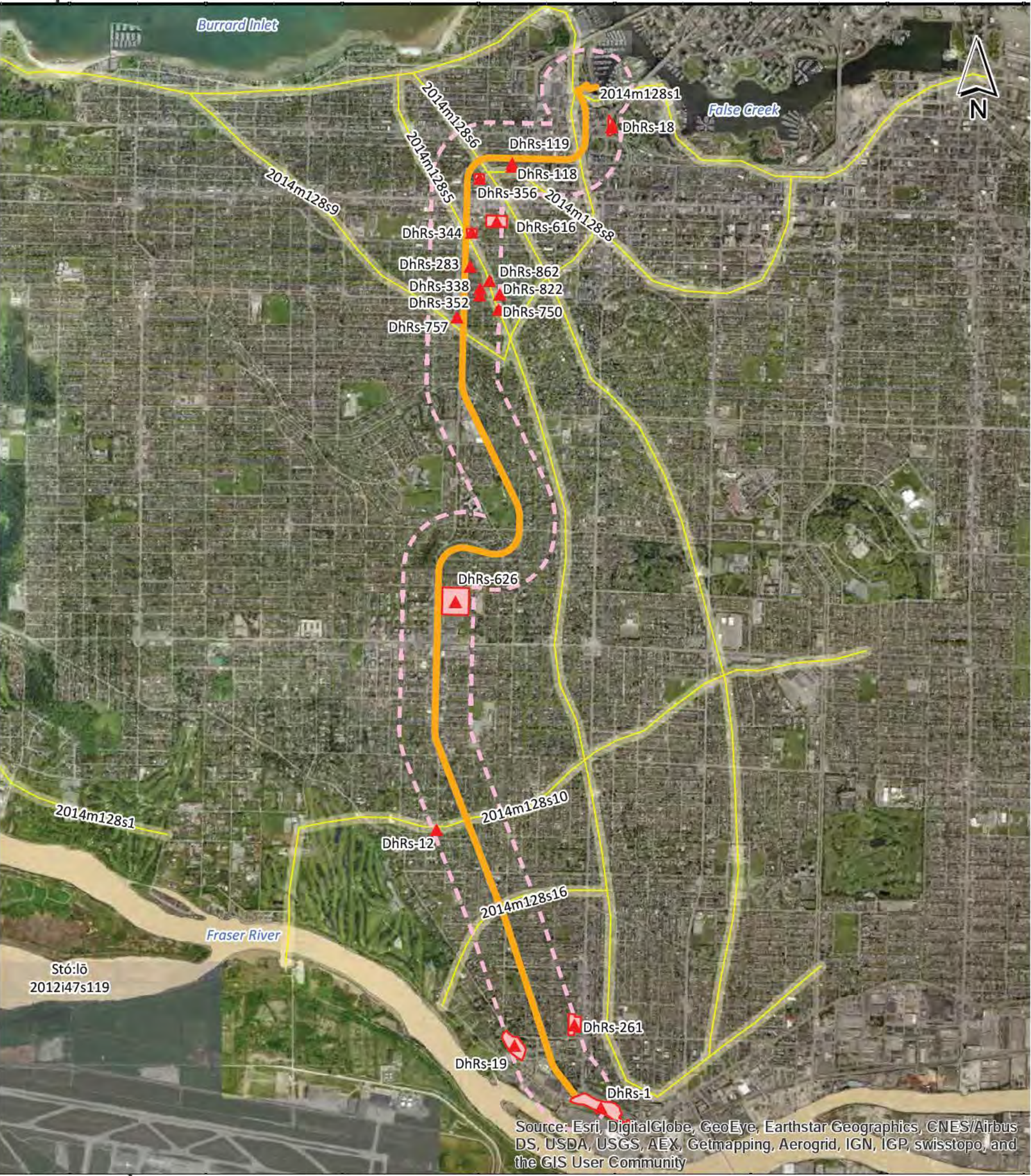
It is important to reflect on the corridor of the past before imagining its future. This report, *Understanding the Arbutus Corridor Today*, is the first step towards the development of the Arbutus Greenway Master Plan. This is the story of a shared interdisciplinary understanding of the history and current condition of the Corridor and its context. This is the foundation from which the Master Plan will grow, fostering a shared understanding and forming the basis for design.

This report is structured as a story that guides the reader through the history of the Corridor to the Greenway we imagine. We start with its importance to First Nations in the area, learn of the evolution of its use as an industrial freight rail route and follow its transformation into what we see today. The report describes aspects of the existing physical infrastructure and its current state, along with the corridor’s geographic location within the wider transportation network and city. It highlights examples of how the community has played a critical role in turning the area into a source of pride for residents, passers-by, cyclists, walkers, artists and lovers of the natural environment. It outlines design considerations for transportation, placemaking, the environment, neighbourhood precincts, adjacent developments and utilities.

The Objectives

1. *Enable safe and comfortable travel between False Creek and the Fraser River for all ages and abilities.*
2. *Ensure the Master Plan for the future Arbutus Greenway anticipates and dedicates space for a future streetcar.*
3. *Provide flexible, public spaces for people to gather, socialize, support community events, and enable artistic expression.*
4. *Enable connections within and across neighbourhoods adjacent to the greenway.*
5. *As the City of Reconciliation, ensure the future Arbutus Greenway will recognize the rich history and cultural diversity of the lands.*
6. *Enhance the City’s biological diversity and urban ecology.*
7. *Meaningfully engage local stakeholders and citywide residents.*
8. *Ensure the Arbutus Greenway design is resilient, adaptable to allow for changing circumstances.*
9. *Ensure the Arbutus Greenway can be successfully constructed in phases, to accommodate a variety of funding strategies and changing circumstances.*





Source: Kleanza Archaeological Overview Assessment for the Arbutus Corridor Greenway



# First Nations and Their Lands

The history of this transportation corridor dates back more than 10,000 years to the network of footpaths carved into the landscape by indigenous peoples traveling between the two bodies of water now commonly known as False Creek and the north arm of the Fraser River.

The Arbutus Corridor falls within the traditional territory of the:

- Cowichan Tribes
- Halalt First Nation
- Lake Cowichan First Nation
- Lyackson First Nation
- Musqueam Indian Band
- Penelakut Tribe
- Seabird Island Band
- Shxw’ow’hamel First Nation
- Skawahlook
- Soowahlie First Nation
- Stowahlie FirsStzwahlie First Nation
- Stwamish Nation
- Tsleil-Waututh First Nation

The Corridor is within the traditional territory of these 13 groups, but only four have formal heritage permitting systems and have participated in the assessment process providing important information and monitoring: Musquem Indian Band, Squamish Nation, Tsleil-Waututh First Nation and Stó:lō Nation.

The land, sea and freshwaters of this area provided more than 300 species of plants and animals that were harvested at various times of the year. Historically, activities like berry and plant gathering, fishing, hunting and processing occurred in the area in around the corridor. A number of traditionally-used species remain today including: Douglas fir, thimbleberry, salmonberry, American crow, owls, and pileated woodpecker.

Musqueam, Squamish, and Tsleil-Waututh Nation members, known for their artistic expertise, wove blankets and created clothing from natural materials such as mountain goat wool, dog hair, cedar bark and root fibres. Homes, tools, and adornments were also created from natural materials, including cedar timbers homes, cedar carvings, cedar canoes, and Douglas fir, yew, and stone and shell tools. The Nations sustained their spirits too, deeply connected to the land and waters; engaging in communal practices, feasts, gift exchanges, dancing and ceremonies. (Musqueam Living Culture, 2006).

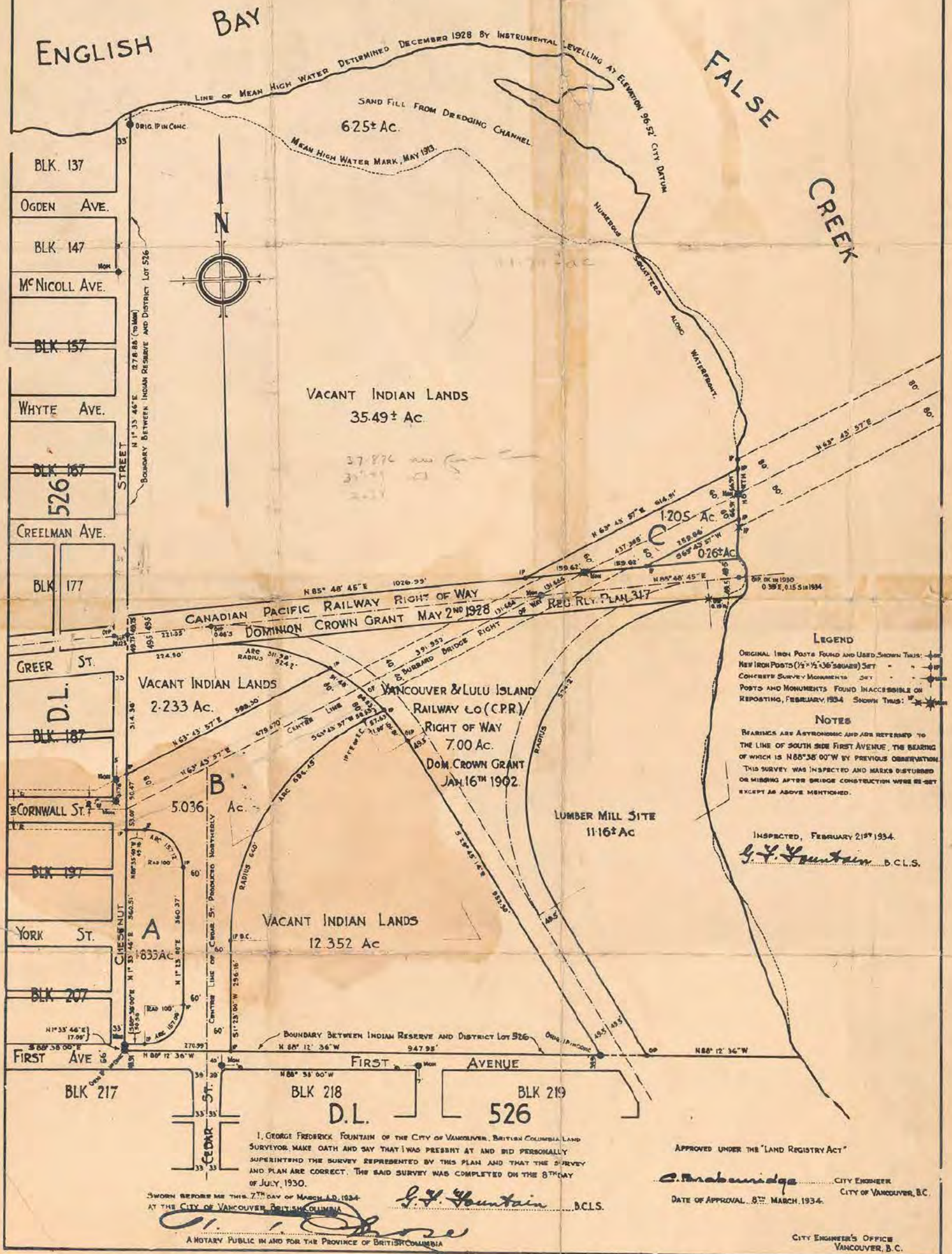
There are 10 provincially recognized archaeological sites within one kilometre of the Arbutus Corridor, including one of great significance located approximately 25 metres from the south end of the Corridor—the village and burial site, *čəsnaʔəm*, also known as the Eburne Site, Marpole Midden or Great Fraser Midden. One of the largest pre-contact middens on the Pacific coast, it is a significant village site with a long history of occupation and was designated as a National Historic Site in 1933.

*sə́n aʔqʷ*, a culturally significant area and traditional use site, is located at the north end of the corridor near Vanier Park at the south end of Burrard Street Bridge. This former village site consisted of a large community house, several individual houses, an orchard and a graveyard. It is the birthplace of Squamish Chief August Jack Khatsahlano (1877-1971), the namesake of the nearby residential area of Kitsilano.



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PLAN SHOWING PARCELS 'A', 'B' & 'C'  
KITSILANO INDIAN RESERVE N°6 OF THE SQUAMISH BAND,  
VANCOUVER, B.C.  
SCALE 1 IN. TO 200 FT.



1 F 166

Source: City of Vancouver Archives



Traditional Use

*In the 2017 Archaeological Overview Assessment, traditional use is defined as “Aboriginal cultural practices or locations associated with a variety of activities including, but not limited to, resource gathering, hunting, fishing, habitation, camping, and sites of ceremonial or spiritual significance”.*

*These locations are protected under the BC Heritage Conservation Act, and will be acknowledged, protected, and celebrated in the Arbutus Greenway Master Plan in partnership with First Nations.*

Most of the lands, waters and resources traditionally used by indigenous people have been lost or degraded. The Arbutus Greenway Master Plan will honour and celebrate the area’s indigenous history and contemporary aboriginal cultures in this region through intergovernmental liaison with Musqueam, Squamish, and Tsleil-Waututh First Nations.

According to the 2016 Census of Canada, almost one in four aboriginal people living in British Columbia reside in Vancouver. While the number of aboriginal, or status and non-status Indians living along the Arbutus Corridor is unknown, the following sites are in close proximity:

- *Kitsilano Indian Reserve 6* associated (Squamish Nation)
- *Musqueam Indian Reserve 2* and *Sea Island Indian Reserve 3* (Musqueam Nation)

*As of 2017, Kitsilano Indian Reserve 6 and Sea Island Indian Reserve 3 are unpopulated and Musqueam Indian Reserve 2 has approximately 1,569 residents.*



# The Newcomers and Their Settlements

The Arbutus Corridor is a tapestry of cultures with diverse and distinctive neighbourhoods. People from all over the world have come to call this area home – beginning in 1850 during the world gold rush, continuing through the incorporation of the City in 1886 and growing exponentially with the arrival of the Canadian Pacific Railway and streetcars in the early 1900s.

With the influx of fortune seekers on their way to the gold fields, Jewish families like the Oppenheimer brothers and the Golds arrived to start new lives, new businesses and new communities. A strong Jewish community grew up in False Creek in the 1930s, and is now centred in the Oakridge area a short walk from the Arbutus Corridor (Museum of the Jewish People, 1996).

At the time of incorporation in 1886, the City of Vancouver was growing and the Chinese community came seeking jobs and prosperity with many finding work on the railway. Despite difficult working conditions and discrimination, Chinese Vancouverites persisted and succeeded, becoming the largest ethnic minority in Vancouver (Willmott, 1968). Chinese traditions are honoured in the Chinese New Year Parade, the dragon boat races, and in the many restaurants along the Corridor.

Today the largest concentrations of Chinese families in the corridor are south of West 16th Avenue into the Marpole area. The majority of local area residents today speak Chinese or English as their first language but neighbours speak many languages including: French, German, Japanese, Korean, Punjabi and Tagalog. A demographic analysis of the Corridor and area is included in Section 8 of this report.

In 1905, one of Kerrisdale's earliest residents, Mrs. MacKinnon, named the village “Kerry’s Dale” after her childhood home in Scotland. The arrival of the interurban line resulted in rapid growth in villages like this along the rail line. The Steveston fish canneries were flourishing, and workers were needed. The Vancouver to Lulu Island line, called the “Sockeye Special,” went through the heart of Kerrisdale. Originally part of Point Grey, Kerrisdale was amalgamated with Vancouver in 1929. It retains many original homes and architecture, and includes the rural area to the southwest known as the Southlands.

During the First and Second World Wars, victory gardens, like the Arbutus Victory Garden founded in 1942, were grown across Canada as a way to support the troops by growing food for local families and communities. By eating the vegetables grown in these gardens, commercially- produced vegetables could be sent overseas to the troops, and railcar space was available for other products.

In the 1960s, when green movements were becoming common, SPEC – the Society Promoting Environmental Conservation – was born. SPEC has been working in the Arbutus Corridor and advocating for environmental protection for more than 45 years. In 1981, SPEC partnered with the City of Vancouver to produce the Vancouver Energy Information Centre. While the Centre is now closed, SPEC continues, encouraging community gardens in the West 7th Avenue area, and sustainable urban living broadly (Society Promoting Environmental Conservation, 2017).

The Arbutus Greenway Project team will endeavour to represent the corridor’s cultural history and identity today in its Master Planning; working to develop a Greenway that includes character areas featuring culturally significant public art, wayfinding, and design, and spaces for urban agriculture and aesthetic gardens throughout.



Source: [www.collectionscanada.gc.ca](http://www.collectionscanada.gc.ca)

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The City of Vancouver (2017) <http://vancouver.ca/news-calendar/kerrisdale.aspx>

The Georgia Straight (2013) <http://www.straight.com/movies/344781/saying-goodbye-ridge-theatre>

Museum of the Jewish People (1996) <http://www.bh.org.il/5541-2/>

Society Promoting Environmental Conservation (2017) <http://www.spec.bc.ca/since1969>

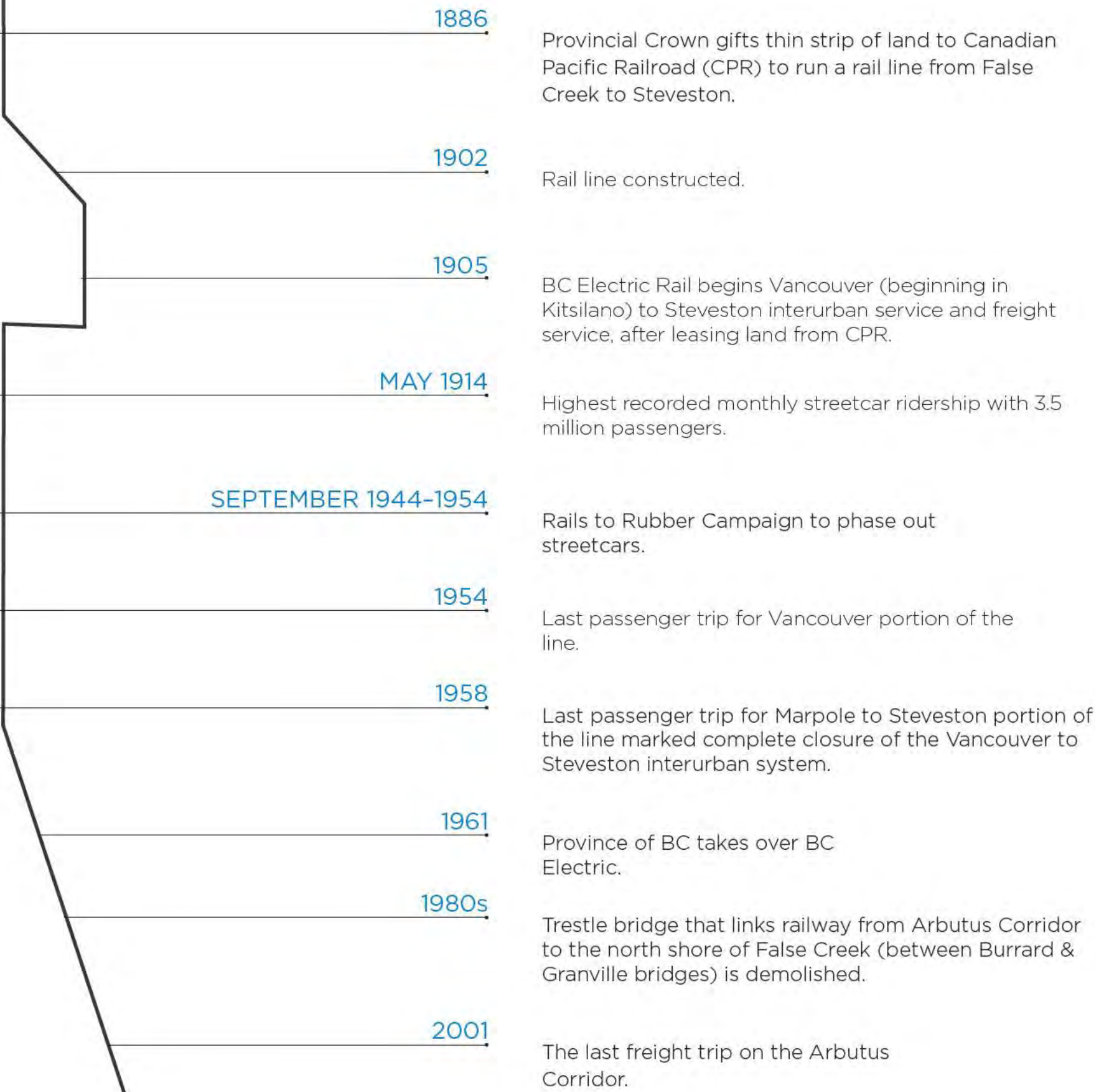
Victory Gardens (2017) <http://victorygardensvancouver.ca/about>

Willmot, W. E. (1968) <http://ojs.library.ubc.ca/index.php/bcstudies/article/viewFile/581/624>





# Rail Operations









As the future Greenway is imagined, consideration of its past is a valuable reference especially within the context of the City's vision for the return of streetcars in the Corridor. The following images chronicle several historic landmarks and events along the Corridor and appear courtesy of the City of Vancouver Archives and the City of Richmond Archives.

1. B.C. Electric Lulu Island Interurban tram station on the west side of the Granville Street Bridge at 3rd Avenue; Oct, 1922, City of Vancouver Archives, AM54-S4-: Bu N60.
2. Passengers board the Lulu Island-Eburne Interurban tram on the foot of Granville Street at False Creek; 1908, City of Vancouver Archives, AM54-S4-: Out P680.
3. Street car on 4th Avenue between Maple and Arbutus Street; 1910, City of Vancouver Archives, AM54-S4-: Str N6.
4. 2200 Arbutus Street [Arbutus Grocery]; 1978, City of Vancouver Archives, COV-S535-F4-: CVA 786-32.01.
5. Arbutus Street and 16th Avenue (looking north towards the Ridge theatre); 1980-1997, City of Vancouver Archives, COV-S505-1-: CVA 772-98.
6. View looking north over Quilchena Park; Dec 1956, City of Vancouver Archives, AM980-S1-1-: CVA 804-57.
7. West 41st Avenue looking east toward West Boulevard; 192-, City of Vancouver Archives, AM1533-S2-4-: 2009-005.255.
8. Parade along West Boulevard near 41st Avenue to celebrate the beginning of trolley bus service on Arbutus Street; July 18, 1952, City of Vancouver Archives, AM54-S4-: Dist P106.2.
9. Passengers boarding the interurban tram 1208, Marpole Station, Lulu Island Run; 1947, City of Richmond Archives, 1999 4 1 267.
10. B.C. Electric Railway Interurban tram cars 1203 and 1220 crossing the Lulu Island Bridge, operating on the Vancouver-Steveston Line; April 21 1957, City of Richmond Archives, 1999 4 2 28.



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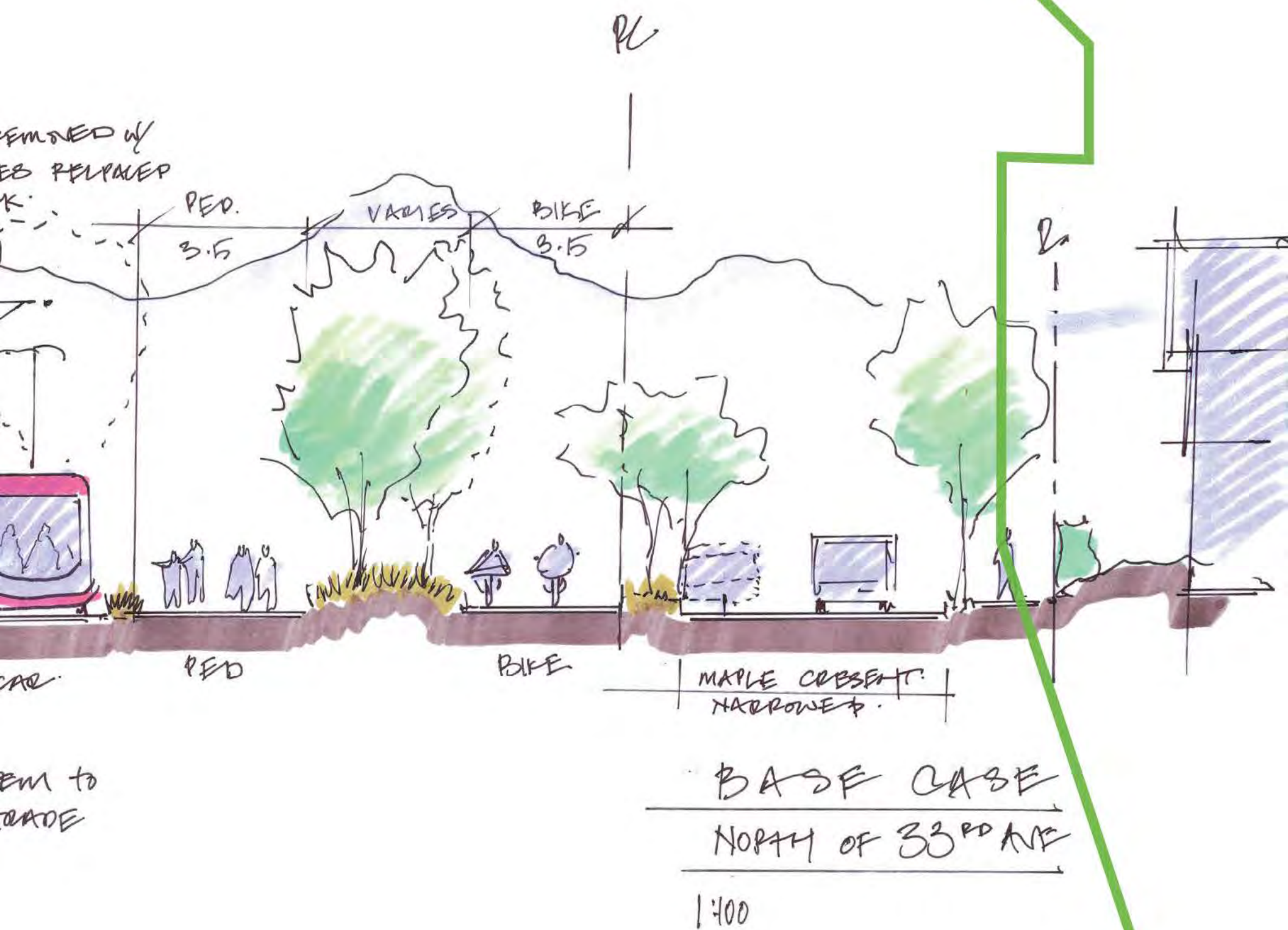
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A GREENWAY IN THE MAKING







Source: [www.vancitybuzz.com](http://www.vancitybuzz.com)

# A GREENWAY IN THE MAKING

## Precedent Plans and Policies

Planning for the Arbutus Greenway has been underway for decades, culminating with the City’s purchase of the land from Canadian Pacific Railway in 2016. Today’s temporary path, and the Arbutus Greenway Project, can only have been realized following this milestone.

The following timeline outlines the Corridor’s precedent plans and policies:

**1995** – The Corridor was still operating as a freight railway when Vancouver City Council approved the City’s *Greenway Plan (the Plan)*, which describes greenways as “green paths” for walking and cycling, which can take several forms, including waterfront promenades, urban walkways and nature trails. The Plan identified the Arbutus Corridor as the “Arbutus Way” Greenway, one of the city’s greenways with the potential to play an important role in connecting the railway divided neighbourhoods of Marpole, Kerrisdale, Arbutus, Kitsilano and Granville Island.

**2000** – Following extensive public and stakeholder consultation, Vancouver City Council approves the *Arbutus Corridor Official Development Plan (ODP)*, designating the Corridor for transportation and greenway purposes. The ODP was developed based on consultation input and other City of Vancouver policy documents, and set the stage for the eventual acquisition and repurposing of the Corridor by designating all land in this area only be used as a public space for walking, cycling, and rail transit.

**2011** – The City of Vancouver develops its *Greenest City Action Plan*, which lays the framework for Vancouver to become the greenest city in the world by 2020. A key component of achieving this goal is green transportation, which identifies walking, cycling and public transit as preferred transportation options. Green transportation can be achieved in several ways, including making active transportation choices comfortable and safe for people of all ages and abilities and increasing access to nature and green space.

**2012** – *Transportation 2040* is a long-term vision for the City of Vancouver that will help guide transportation and land use decisions and public investments. The plan was approved by Vancouver City Council in 2012, and is focused on promoting walking, cycling and transit, with the target to have at least two-thirds of all trips made by foot, bike or transit by 2040. An interim target was also set to have at least half of all trips made by foot, bike or transit by 2020. The City proudly achieved this target in 2015.

The Arbutus Corridor is identified as one of the “emerging areas of focus” in *Transportation 2040*, with the objective to develop the Corridor as an active transportation greenway with high quality walking and cycling routes and a future streetcar or light rail line. Another key focus area in the plan is the importance of improving connectivity across the Corridor itself. The following excerpts from *Transportation 2040* directly pertain that support the Arbutus Corridor project, including:

- W 1.5. Address gaps in the pedestrian network
- W 1.6. Provide a blueprint for great pedestrian realm design
- C 1.1. Build cycling routes that feel comfortable for people of all ages and abilities
- C 1.2. Expand the cycling network to efficiently connect people to destinations
- T 1.1. Advance new and improved rapid transit
- T 1.2. Advance new and improved local transit

Also in 2012, the City releases its Healthy City Strategy: *A Healthy City for All*, a long-term integrated plan for healthier people, healthier places, and a healthier planet. The strategy builds on the transportation targets outlined in *Transportation 2040* and recognizes opportunities to promote physical activity through many ways, including transportation. The strategy clearly outlines the connection between health and transportation and how making walking and cycling accessible for people of all ages and abilities can help encourage more physical activity.





**2013** – The City identifies the Arbutus Corridor as a green transportation corridor in its *Regional Context Statement*, which was approved by Vancouver City Council and the Metro Vancouver Board, and has since been integrated into the *Metro Vancouver Regional Growth Strategy*. This statement supported the Corridor’s potential as an active transportation route and destination.

**2014** – On July 8, 2014, Vancouver City Council resolves to designate itself a City of Reconciliation and begins to align itself with the recommendations of the Truth and Reconciliation Commission. The City of Reconciliation Framework has three foundational components, which include several elements relevant to the Arbutus Greenway Project.

These include:

- Developing protocols with the Host First Nations continue support for Aboriginal community and City department collaborations
- Supporting and facilitating opportunities that bring Aboriginal communities and non-Aboriginal communities together, and
- Creating linkages amongst City initiatives.

In support of this vision, Musqueam First Nation, Squamish Nation, and Tsleil-Waututh First Nation are involved in the Arbutus Greenway Project as intergovernmental partners with the City of Vancouver. Leaders from these First Nations will provide direction on how the Arbutus Greenway Master Plan can honour and celebrate the area’s indigenous history, as well as contemporary aboriginal cultures in this region. In this master-planning phase of the Arbutus Greenway Project, these First Nations have expressed interest in participating in the following elements:

- Identifying key areas of significance
- Adding traditional languages to signage and wayfinding
- Featuring indigenous artists and art in public artworks
- Including traditionally-used native plants

Each of these elements offers an opportunity to educate Greenway users about the historical and contemporary First Nations story of this area.

**2016** – The City finalizes its Active Transportation Promotion and Enabling Plan, which builds on Transportation 2040. A key principle of this Plan is that promoting and enabling active transportation comes from normalizing it as a part of everyday travel.

In step with removing barriers to and normalizing active transportation, the City’s Transportation Design Guidelines for All Ages and Abilities Cycling Routes were developed. This document provides guidance on the design of off-street pathways to ensure that they are comfortable for all users. The guidelines note that separating bicycles from other pathway users makes the facility more comfortable for all and that separation is recommended, particularly in busy areas where the volume of pathway users is high.

Finally, in March 2016, the City of Vancouver purchases the Arbutus Corridor from Canadian Pacific Railway. The City’s agreement with Canadian Pacific Railway was intended to ensure that residents could continue to use the Arbutus Corridor as a sustainable greenway and transportation corridor, including walking, cycling and future streetcar – a clear link to the planning and policy foundation that had been laid to enable its revitalization. Since finalizing the sale, the City has assembled an Arbutus Greenway Project Team to engage with the public and stakeholders across Vancouver to shape the vision and undertake conceptual planning for the future Greenway.



# Community Integration

## VISION AND VALUES FOR THE ARBUTUS GREENWAY

In the winter of 2017, the City of Vancouver invited the public to share their vision and to identify their values for the future Arbutus Greenway. The purpose of this phase of engagement was to gather input on:

- The public and stakeholder aspirations for the future Arbutus Greenway
- Which values are most important
- How people would like to be involved throughout the process

The engagement process used the first three elements of the International Association for Public Participation (IAP2) spectrum of public participation:

- **Inform:** Provide the public with information to understand the project
- **Consult:** Obtaining feedback
- **Involve:** Working with the public to ensure concerns and aspirations are understood and considered

Participants were asked the following questions:

*Try to imagine the future Arbutus Greenway... How would you like to use the greenway? In addition to high-quality infrastructure for walking, cycling, and future streetcar, what would attract you to it the most?*

More than 4,000 participants provided their feedback through a variety of input sources, including an online questionnaire, stakeholder meetings, open houses, “pop-up” events, and advisory committee meetings.

### The Vision

*The Arbutus Greenway will be a defining element of Vancouver’s urban landscape as a vibrant and beautiful public space for walking, cycling, and streetcar. It will be a destination which fosters both movement and rich social interaction—inspired by nature and the stories of the places it connects.*



## WHAT WAS HEARD

Key themes arising as a result of consultation and engagement are outlined below, along with the representative verbatim comments from participants:

### **Provide a high-quality, accessible public space for walking and cycling.**

*"A space for walking and cycling, accessible to everyone, regardless of age, ability or where they live, that entices all of us to get outside, to move, to sit in nature, and to interact with others."*

*"An accessible cycling, walking, and running path with beautiful, unobtrusive landscaping, public art, and good access to nearby businesses on Arbutus."*

### **Create a safe, comfortable, and welcoming destination with places for gathering, socializing, and relaxing.**

*"Not just a corridor, but a destination or series of linked place."*

*"A transportation route and also a destination for walking, strolling, biking, and jogging. Ideally coffee shops alongside, park space, perhaps outdoor exhibits."*

### **Connect to neighbourhoods, parks, and other points of interest along the greenway, as well as the broader transportation network.**

*"It should be a car-free corridor with plenty of opportunity for people to slowly travel its length, stop and enjoy nature, have a bite to eat at nearby restaurants. Parks and open spaces to relax."*

*"I would be delighted if we had a streetcar to take us to various locations along the greenway."*

### **Keep green spaces: Places for tranquillity, to reconnect with nature, to grow food, and to nurture ecosystems and biodiversity.**

*"I would like to see re-introduction of local wildlife, if at all possible, more birds, more pollinators. I want to feel like I'm out in nature while in the middle of the city."*

*"It was a place for nature, gardens, pathways, and trains in the past. Let the future be uniquely Vancouver and blend uses."*

## USING INPUT AND LOOKING AHEAD

Public input will be considered along with other policy, legal, financial, and technical factors in the development of the Arbutus Greenway Master Plan, and the preferred concept for the design of the Greenway. The input received in the visioning and values engagement process was used to inform the Greenway's vision statement, and will be valuable as concepts are developed and presented to the community.

As concepts for the Greenway are developed, the project team will engage with the public to:

- Share project information to allow the public and stakeholders to provide input as the planning progresses
- "Shine a light" on decision-making process and trade-offs
- Generate a preferred concept and Master Plan





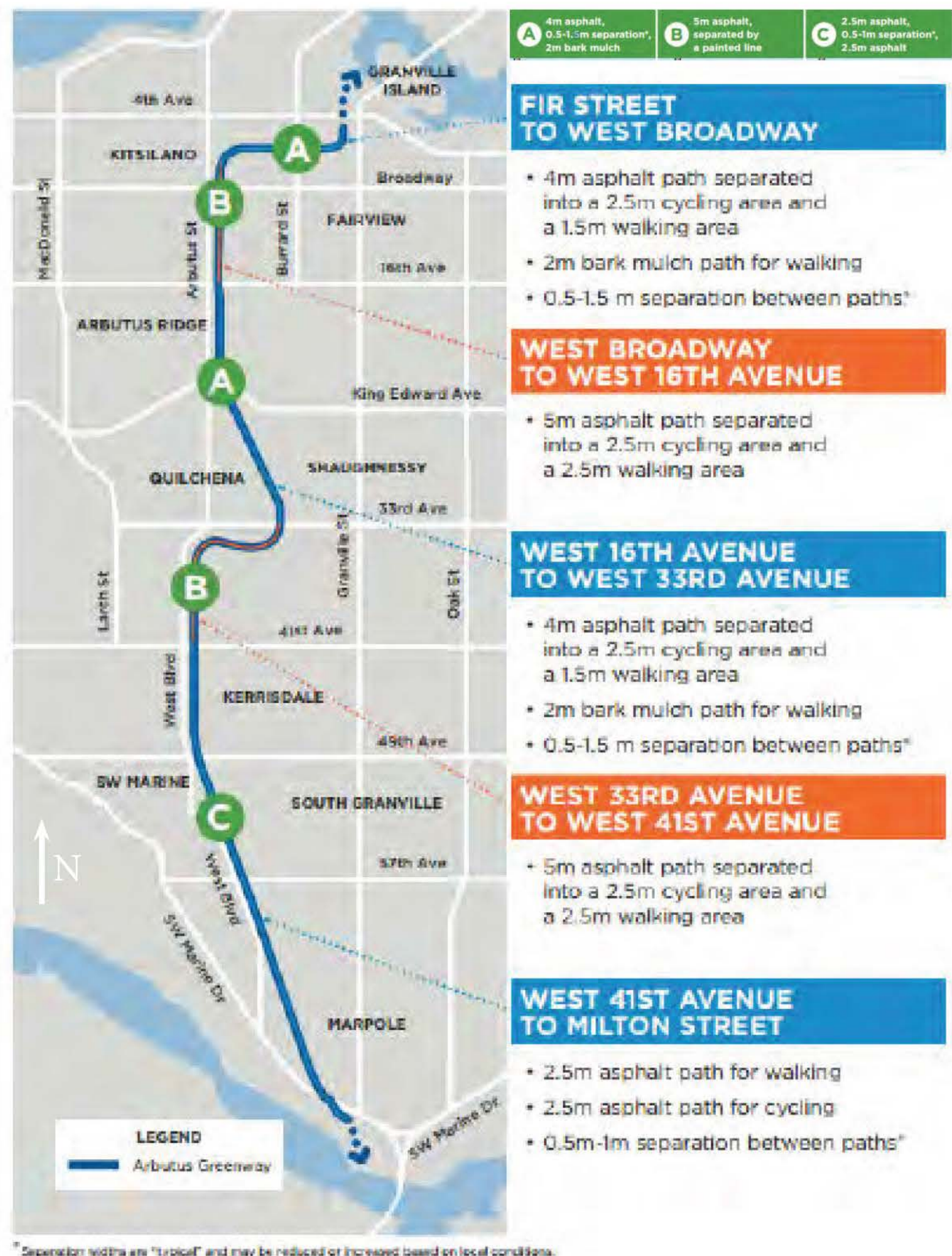




# THE ARBUTUS CORRIDOR TODAY











# THE ARBUTUS CORRIDOR TODAY

## Arbutus Corridor Temporary Path

In the fall of 2016, the City of Vancouver engaged with residents to help shape the design of a temporary pathway for the Arbutus Corridor.

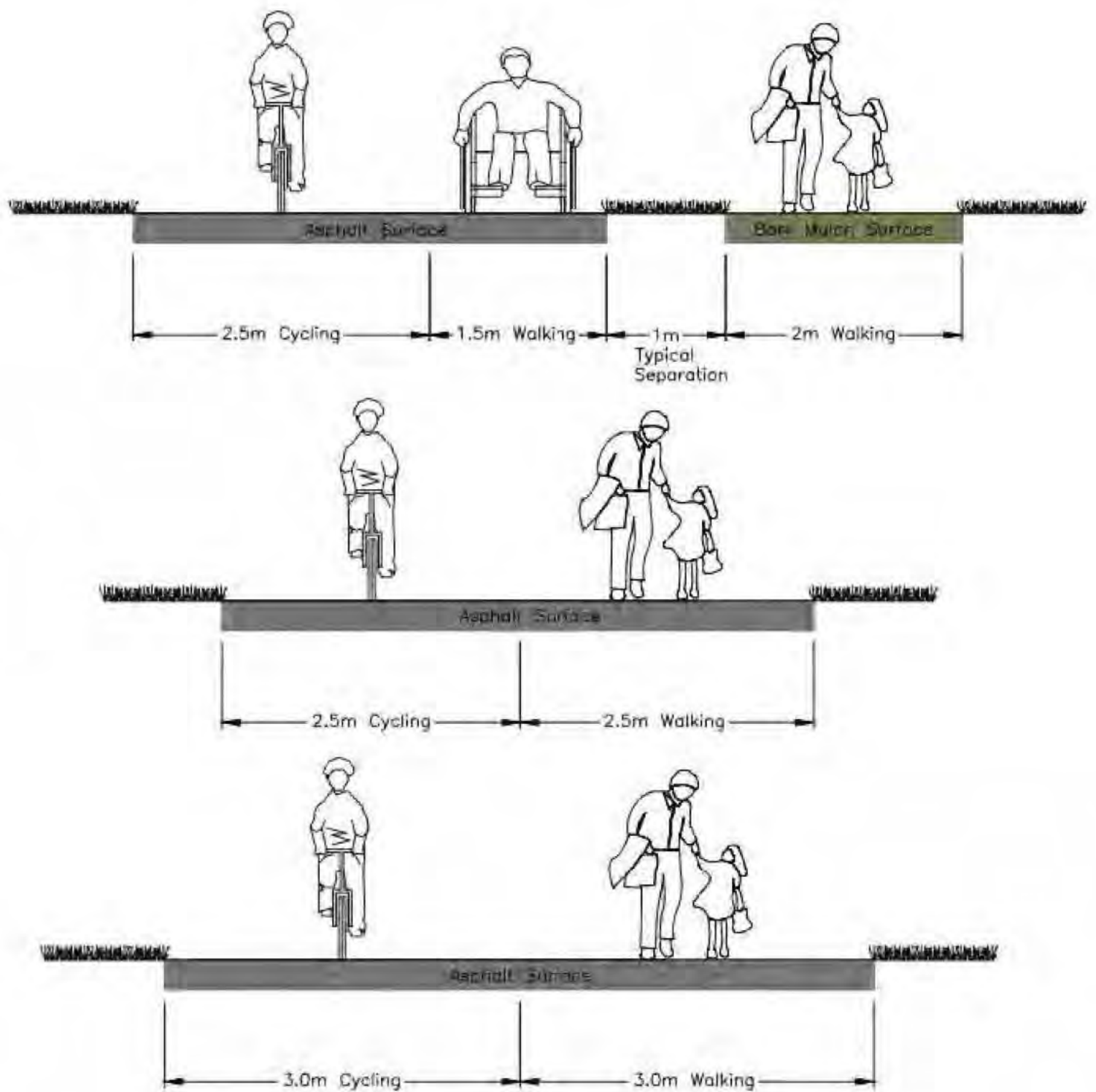
Based on City policies and guidelines, the City identified six design principles for the temporary pathway that were presented to the public: safety, improved accessibility, comfort, connectivity, zero waste, and cost.

Throughout the engagement process, several temporary pathway design options were presented to the public, many of which focused on determining the preferred cross-section for the temporary pathway. Through this process, some participants requested soft surfaces to maintain a more “park-like” atmosphere, or softer surface treatments for those who intend to use the route for running. However, most respondents indicated that safety and Universal Accessibility should be fundamental considerations in the design of the corridor. Universal Accessibility considers the extent to which any human can safely, efficiently, and enjoyably access a physical thing or place. Universally Accessible Design considers users with a range of abilities, including impairments to physical ability and cognition.

In the case of the Arbutus Corridor and its temporary path, Universal Accesibility continues to consider physical and perceived barriers to use of the Corridor for all people. To maximize the Univeral Accessibility of the Corridor and to address concerns raised by stakeholders and the public, an asphalt surface along the entire length of the Corridor was implemented, with a bark mulch pathway bordering the asphalt path where space allowed.

*A young couple living near the Corridor, whose mobility was tragically affected in a recent accident, say that the paving of the Arbutus Corridor has changed their lives. The couple travels the length of the uninterrupted, smooth Corridor safely and side by side—everyday.*









There are 18 locations along the Greenway where formal and informal trails intersect the paved pathway. The City has been working to formalize these connections by paving the existing paths and making the access points more well defined. By doing this, the City is enhancing access to the temporary path and creating more east/west connections between intersections. The identification and formalization of these access points help to connect people to neighbourhoods and destinations on either side of the Greenway. At these locations, zebra crosswalks have been painted on the temporary pathway across the bicycle path. Some of the access points identified provide direct connections to destinations such as Quilchena Park, East Boulevard and West Boulevard, and various neighbourhood streets. Ensuring these connections are marked and formalized has been a high priority for the City.

Today, the temporary path and connections to and from the Arbutus Corridor can be considered accessible to able-bodied people and to people using powered mobility aids. However, there is room within the Corridor and at intersections, including the following:

- Road interfaces, transitions, and grades
- Poor sightlines due to landscaping and challenging geometry
- Constrained areas for both corridor and adjacent road users
- A lack of safe and comfortable rest areas
- Ambient wayfinding information

The preferred concept and Master Plan will include design considerations for later stages of design of the Greenway.

## SIGNAGE AND PAVEMENT MARKINGS

Signage and pavement marking considerations have been made along bikeways that connect to the Corridor, on roadways adjacent to the corridor, and along the length of the temporary pathway. Enhancing wayfinding to, on, and from the Arbutus Corridor is a priority for the City.

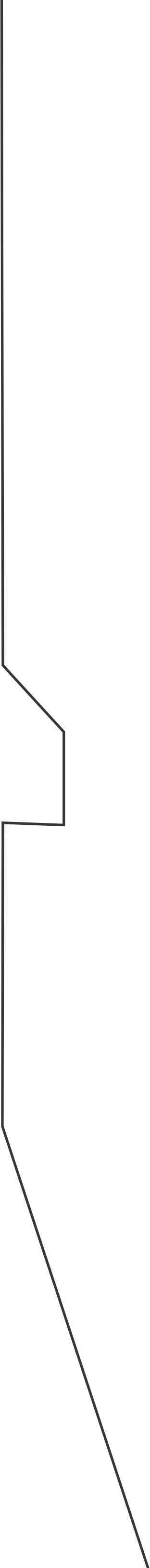
Intersections of the pathway are also signed to provide crossing behaviour information to path users and to drivers on intersecting streets. Intersections are described further in the coming section, Movements Across Modes.

## LIGHTING

Dedicated lighting was not initially included in the temporary pathway improvements; however, the City of Vancouver is in the process of developing a lighting plan for the temporary pathway, with installation targeted for spring 2018.

In many segments of the Corridor, particularly those segments adjacent to a roadway, street lighting provides ambient lighting to the corridor. The future Arbutus Greenway will include lighting that minimizes light pollution and maximizes safety.





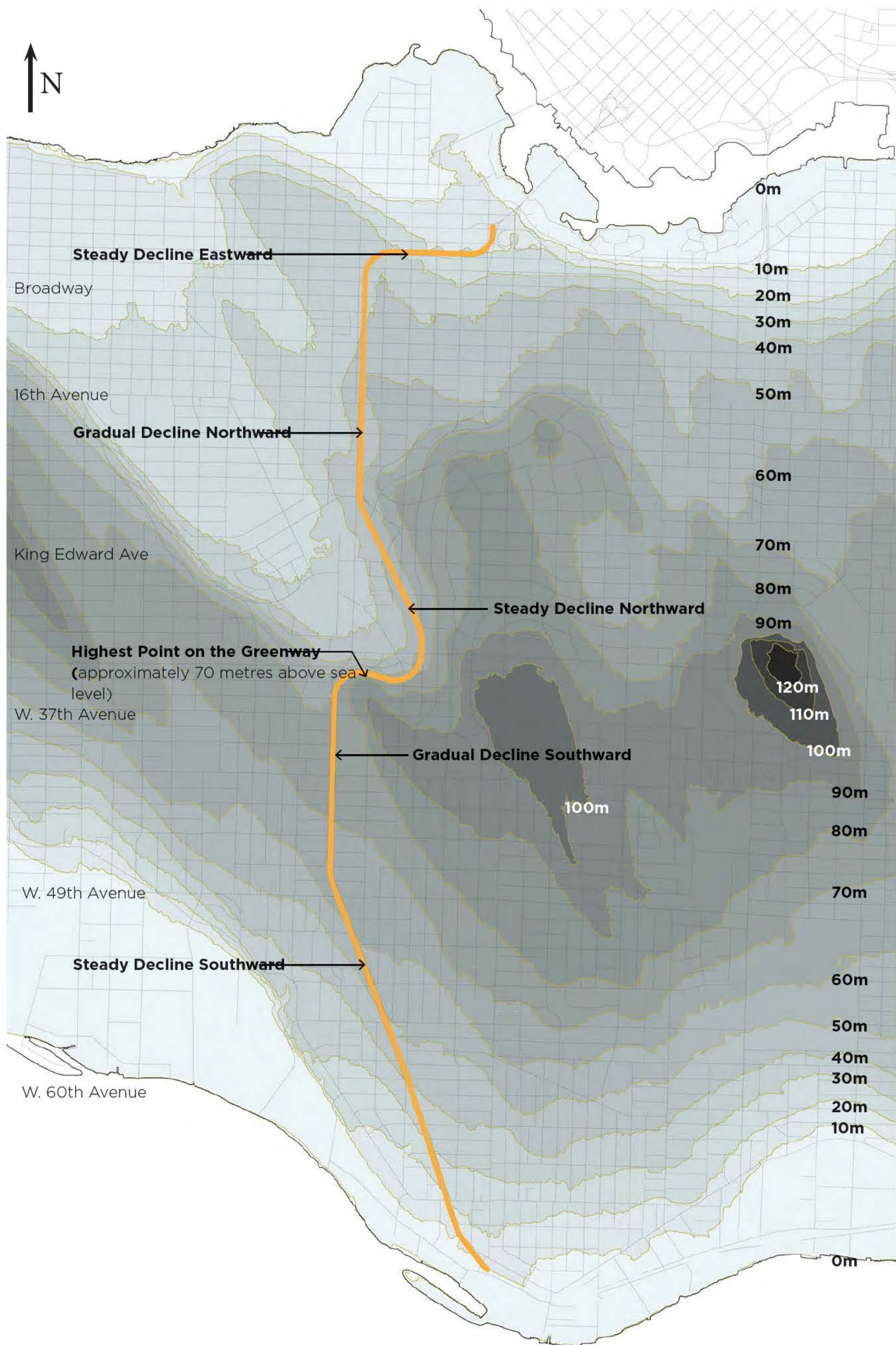
# Topography

The topography of the Corridor has remained unchanged since the CPR developed in the early 1900s. Given that freight rail trains typically require relatively flat terrain for efficient operation, Universal Accessibility is generally achieved along the Corridor for walking and cycling paths.

As the Corridor runs from False Creek to the Fraser River, the current alignment follows the natural alignment of the city, gaining a slow, gradual incline as it reaches inland to an apex of approximately 70 metres above sea level, culminating just south of Quilchena Park. Isolated from vehicular traffic and city streets (excluding at intersections), this elevated portion of the Corridor in Shaughnessy offers unobstructed views of downtown Vancouver, the Burrard Inlet, and the North Shore mountains.

As a defining feature of the corridor, topography will be an important driver in the future planning and design of the greenway, and will includes considerations for transportation infrastructure and universal access.









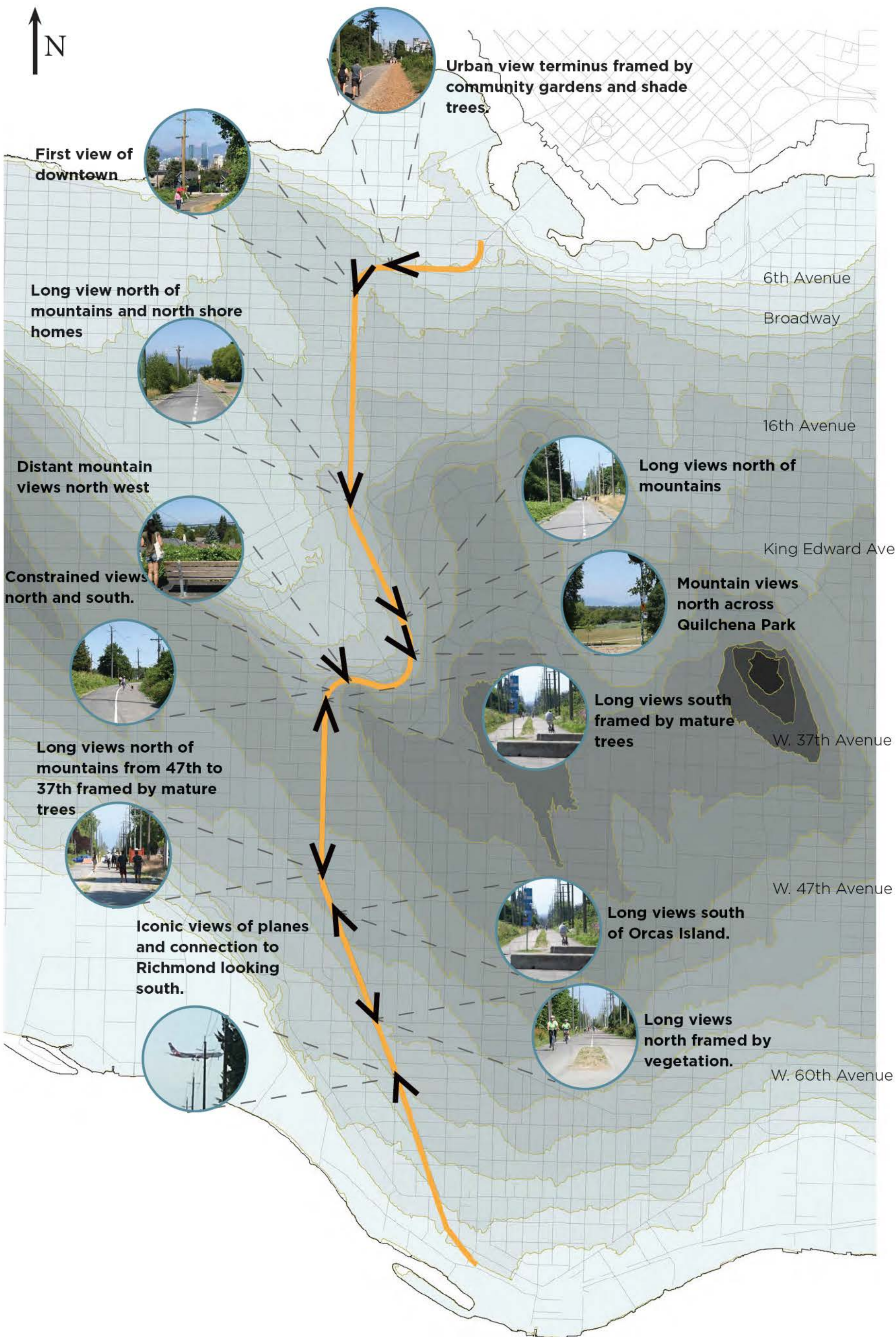
## Views

The Corridor offers long, linear topography, which translates into spectacular, and sometimes unexpected views. This makes for a truly unparalleled travel experience. Notable viewpoints include:

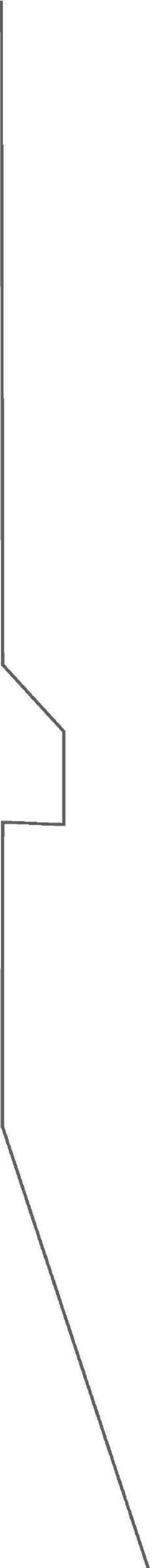
- North of 37th Avenue and along the northwest curve of the Corridor, view expands from limited short-view to long-view
- From south to north near West 47th Avenue, view of Vancouver's iconic North Shore mountains from West 47th Avenue
- From north to south near West 47th Avenue, view of Orcas Island
- Southern point of Corridor, view of large planes overhead travelling to and from Vancouver International Airport

The Arbutus Greenway offers a variety of moments to pause and to immerse in distant vistas, as well as adjacent communities. An important imperative for the future design and planning of the greenway will be understanding how to protect and enhance these unique perspectives of the city.













MOVEMENTS ACROSS MODES







## Walking

The Arbutus Greenway has the potential to be a high-quality, accessible public space for people of all ages and abilities that choose to walk or cycle.

To better understand user demographics, the City collected counts of people walking at three locations along the Corridor:

1. 1900 block of West 6th Avenue, in the northern section of the corridor
2. Nanton Avenue, in the middle of the study area
3. West 49th Avenue, in the southern section of the study corridor

The counts were conducted over a 12-hour period, between 7:00 a.m. and 7:00 p.m., on a weekday and a weekend in May and a weekday and a weekend in June. A review of these counts indicates the following:

- 12-hour counts at each location range between 300 to 700 people walking along the Corridor.
- Significantly different weekday counts in May (approximately 300) and June (approximately 700) at 1900 block of West 6th Avenue indicate that the number of people walking may be impacted by other factors such as weather.
- It was found that there are approximately 250 more people walking along the Corridor on weekends when compared to weekdays.
- The breakdown of people walking based on gender is generally balanced; the number of females appears to be slightly higher than males on both weekdays and weekends.
- 80 per cent of people walking along the corridor are adults and the age profile is generally the same on weekday and weekends.
- Most of the people using the temporary pathway were walking on the asphalt rather than the bark mulch, especially on weekends.



The Greenway will act as a linear public corridor that will open up a critical new north-south active transportation link that spans Vancouver, between the Fraser River and False Creek, while enabling new walking and cycling connections to neighbourhoods, parks, retail areas, historic sites, cultural features and other points of interest along the Greenway, as well as the broader transportation network.

Key considerations for Active Transportation along the corridor include:

- Create a greenway that is safe and comfortable for people of all ages and abilities, whether they choose to walk, cycle, or use other forms of active transportation
- Recognize the different needs of people walking and cycling by separating them as much as possible
- Provide generous widths for the pedestrian walkways and bicycle paths to allow for social interaction
- Ensure the Greenway is accessible to everyone
- Design intersections and conflict zones to make people walking and cycling safe and visible
- Prioritize people walking and cycling at intersections wherever possible
- Integrate with the broader transportation network by providing high quality connections to transit, cycling routes, and Mobi bike share stations

By focusing on these considerations, the Arbutus Greenway will be designed to make walking and cycling safe, enjoyable, comfortable and convenient mobility options for all residents and visitors.

## SIDEWALKS AND PATHWAYS

The City has a well-developed sidewalk network with most streets intersecting or adjacent to the Corridor having sidewalks on both sides of the street. Many of the sidewalks are concrete and at least 1.5 metres in width. The temporary path generally intersects streets where the sidewalks are asphalt and at grade with the street. There are some locations along the corridor where gravel or informal trails intersect the paved pathway.





## Cycling

To better understand the cycling volumes on the Corridor, counts and observations were conducted at three locations:

1. 1900 block West 6th Avenue, in the northern section of the corridor
2. Nanton Avenue, in the middle of the study area
3. West 49th Avenue, in the southern section of the study corridor

The counts were conducted over a 12-hour period, between 7:00 a.m. and 7:00 p.m., on a weekday and a weekend in May and a weekday and a weekend in June. A review of these counts indicates the following:

- Weekend cycling volumes appeared to be higher than weekday counts. The counts show approximately 300 to 500 users on weekdays and 700 to 2,000 users on weekends.
- Of the three locations, Nanton Ave had the highest volumes (~2,000) and W 49th Ave had the lowest (~700).
- There were more males than females cycling along the Corridor on both weekdays and weekends (65 per cent vs. 35 per cent on average).
- Adults makes up to 80 per cent of total number of people cycling on both weekends and weekdays.
- On weekdays, the bike volumes peak during hours similar to traffic volumes patterns. On weekends, cycling occurs throughout the day but increases in the afternoon.





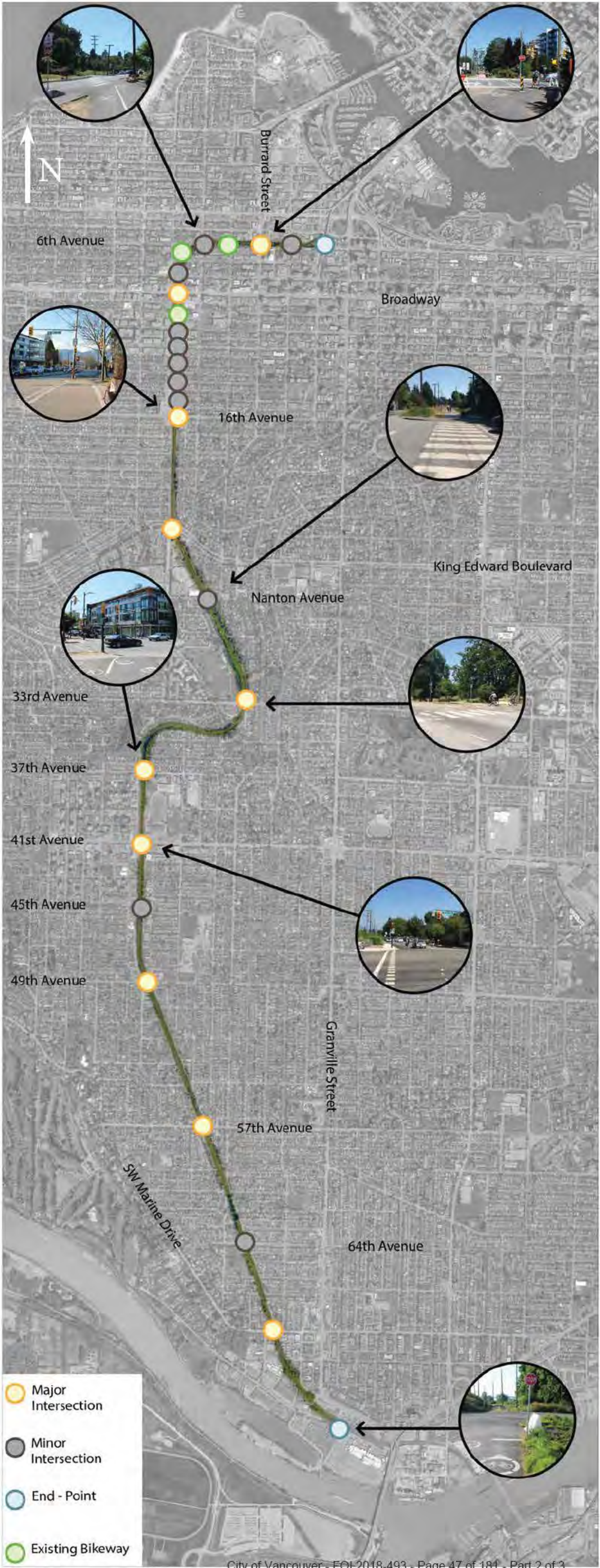
SURROUNDING BICYCLE NETWORK CONNECTIONS

Since the installation of the temporary pathway, the Arbutus Corridor has become an important link in the City's All Abilities cycling network. The Arbutus Corridor intersects a variety of existing cycling facilities.

- **Protected Bicycle Lanes** separate cyclists from motor vehicles by the use of a physical barrier. Protected lanes intersect the Arbutus Corridor at Burrard Street in the southbound direction.
- **Local Street Bikeways** allow cyclists to share the roadway with motor vehicles in relatively quiet neighbourhoods.
- **Painted Bicycle Lanes** allow cyclists to ride in a designated lane, typically between a parking lane and a moving vehicle lane, or between a sidewalk and a moving vehicle lane.

The transition on and off the Arbutus Corridor at these locations is an important consideration in the design of the corridor and intersection treatments.

*The revitalization of the Arbutus Corridor from its freight rail status has given Vancouverites a new place to walk, bike, and run for the first time in decades. Visitors to the Corridor from across the region now delight in discovering a new part of Vancouver.*





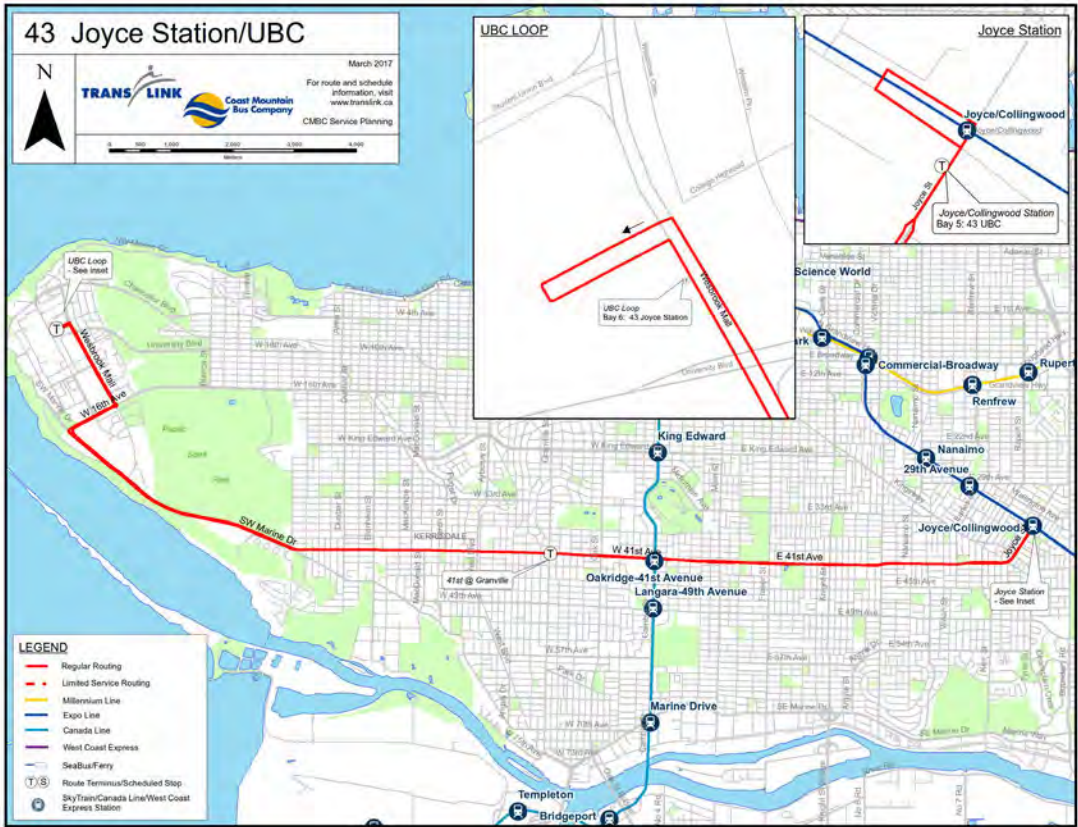
# Transit Network

The areas surrounding the Arbutus Corridor are well-served by bus transit today, with all but one intersecting corridor (West 16th Avenue) operating at the Frequent Transit Network (FTN) level. The FTN is defined as a network of corridors that have transit service every 15 minutes, or better, for most of the day.

The following table outlines the different connections and level of bus transit services at key intersecting locations.

The Arbutus Corridor will continue to be well served by bus transit as described above. The 41st Avenue B-Line, planned to replace the Route 43 conventional bus service, will connect key destinations along the city’s second busiest east-west bus corridor with a frequent, all-day, limited-stop service. This is an important consideration in planning for the Greenway, as it will be critical to consider the travel speeds and potential delays to transit service along West 41st Avenue. It will also be important to ensure the Arbutus Greenway is well integrated with bus stops along 41st Avenue; as well as understand the impact of additional bus service along 41st Avenue on walkers and cyclists connecting from the greenway to 41st Avenue.

In future, streetcar may replace to complement frequent transit service in the area.









# Roads and Intersections

The City’s road network consists of a hierarchy of streets that serve distinct needs. These roads provide access to a variety of destinations and allow residents and visitors to fulfill travel needs for employment, education, recreation, shopping, socializing and others. The City’s street network is typically divided into major and minor arterial streets, major and minor collector Streets and local streets.

In general, there are four types of intersections along the corridor.







## SIGNALS

Traffic signals control traffic by assigning right of way to various traffic movements at intersections. This includes movements by motor vehicles, as well as people walking and cycling.

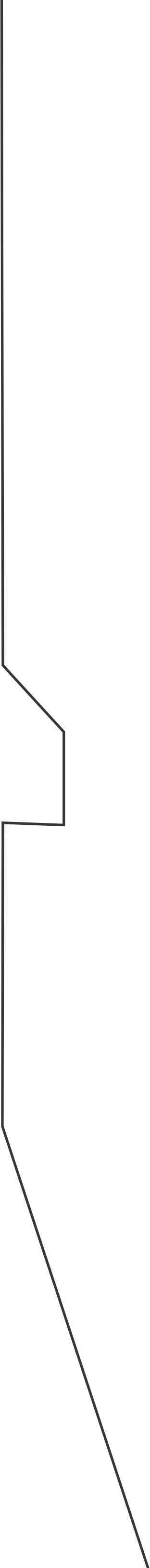
As detailed above, there are seven half signals, nine full signals and two cluster signals along the Corridor. The signal timing at these intersections may be impacted by changes to the Corridor and the future streetcar operation.

The overall performance of a roadway is typically measured by the delays experienced at major intersections, commonly referred to as Level of Service (LOS). LOS is calculated based on current intersection turning movement volumes. The LOS assigned to an intersection can range between LOS “A” and “F”. LOS “A” through “C” generally indicate that the intersection experiences very few delays during the peak hour. LOS “F” suggests that the delays are significant (greater than 50 seconds/vehicle for unsignalized and greater than 80 seconds/vehicle for signalized) and/or the traffic demand is greater than the available capacity.

Recently completed traffic analysis of existing conditions at signalized intersections along the Arbutus Corridor indicates that:

- Most of locations along the study corridor operate at acceptable level of services (LOS “D” or better) with moderate delays with the exception of West Boulevard at West 49th Avenue (LOS “F”) during both AM and PM peak hours.
- At West Boulevard and West 49th Avenue, traffic in the northbound approach is operating at LOS “F” with more than at least five minutes of delays. T
- Within the study area, it appears that most congestion takes place at intersections at West King Edward Avenue, West 41st Avenue, and West 49th Avenue.





## INTERSECTIONS

The critical locations on the Arbutus Corridor are at intersecting roadways. Crossing treatments can be used to assist pathway users in crossing major roads, and to minimize potential conflicts with motor vehicles. Users of the Arbutus Corridor currently cross 27 intersecting streets and two laneways.

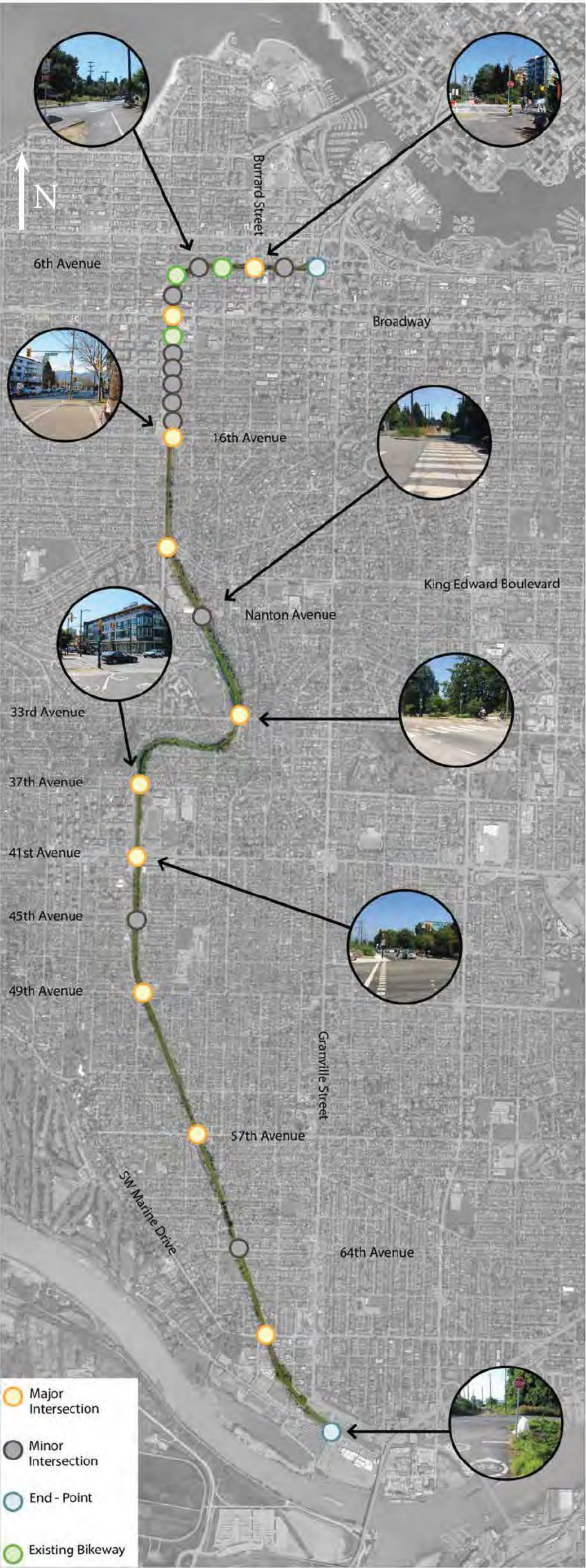
In general, there are four types of intersections along the corridor.

- **End-Point:** End-points refer to locations where the greenway ends and users must transition to a sidewalk or on-road facility. Fir Street and Milton Street are the two end-points along the corridor.
- **Major Intersection:** These intersections are identified as crossings at multi-lane streets. They are generally characterized as having higher vehicle volumes and speeds and are typically controlled with a traffic signal. There are 11 major intersection crossings along the Arbutus Greenway.
- **Minor Intersection:** These intersections are located at streets with lower vehicle volumes and speeds. These streets are single lane crossings and are unsignalized and are stop controlled, whereby motor vehicles on the street are required to stop for pathway users who have the right-of-way. There are 11 minor intersection crossings along the Arbutus Greenway.
- **Existing Bikeway:** These are locations where the Arbutus Greenway intersects an existing well used on-street bikeway. The design of the existing pathway provides the users on the local street bikeway with the right-of-way, with the expectation that pathway users will yield to existing traffic along this route. There are three locations where this occurs: Cypress Street, West 7th Avenue and West 10th Avenue.

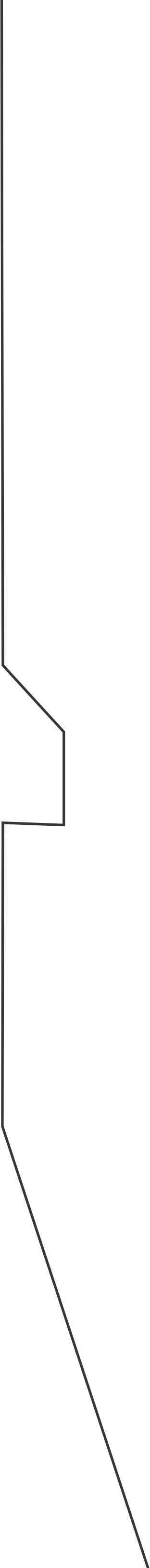


The City has undertaken intersection improvements through the use of pavement markings, signage, and the use of barriers, and has plans to signalize select intersections in 2017-2018. Many of the signalized intersections along the corridor have audible signals to inform people when it is safe to cross. However, very few have countdown timers. Users of the Arbutus Corridor currently cross 27 intersecting streets and two laneways.

At busier signalized intersections, such as King Edward Avenue, West 16th Avenue, and West 41st Avenue, where crossing volumes are higher, space can feel constrained which may lead to user conflicts. Separating road and greenway users in the future, as well as providing clear and safe universal access, will be critical – particularly when the future streetcar is in operation.







# Utilities

There are several utility and electrical infrastructure considerations along the Arbutus Corridor.

Before the Canadian Pacific Rail line was decommissioned and the temporary path installed, the Corridor contained several active rail crossings, including electrical infrastructure required to alert road users to freight train crossings.

The electrical infrastructure that remains in place today includes:

## RAIL EQUIPMENT

The majority of the rail-related infrastructure was decommissioned; however, some at-grade rail equipment still exists, including bungalows, service panels, poles, supporting structures, and warning lights.

### Gantries

Gantries along the Arbutus Corridor are remnant infrastructure from the days of rail. They are located at 10 intersections and announce the presence of the rail corridor to vehicles. Similar to the Switch Boxes, which have been adopted by a local guerrilla artist, gantries could be adaptively reused as a placemaking device along the Arbutus Greenway.

## STREET LIGHT POLES

While there are no street light poles along the Corridor, most of the intersecting roads have street light poles and underground electrical conduits as part of the City of Vancouver’s street lighting infrastructure.

## BC HYDRO INFRASTRUCTURE

BC Hydro power-line infrastructure spans the corridor, including hydro poles, overhead power and third party telecommunication lines, and transformers required to provide electrical services to the properties along or adjacent to this corridor.

BC Hydro’s Sperling substation is also located at West King Edward Avenue and Arbutus Street.



The City will undertake further consultation with stakeholders and BC Hydro as part of the design process, to determine potential locations of the utilities along the Greenway.

Trolley line infrastructure is used to power TransLink's trolley bus fleet.

In order to accommodate multimodal movements at intersections across the length of the Corridor, the City has installed new and temporary traffic signal infrastructure on the Corridor, with additional future infrastructure planned.

Solar-powered Mobi Stations are installed at three locations on the corridor:

- North end of Fir Street
- West Broadway
- West 14th Avenue

Eight other solar-powered stations are located within two blocks of the Corridor.

The City has undertaken a high-level assessment of underground water utilities along the Corridor, with further detailed analysis planned as part of the Greenway design.

Other considerations include the City's 10-year Capital Plan for sewer separation and the planned transmission and distribution water main upgrades on West Boulevard from 37th Avenue to 33rd Avenue.

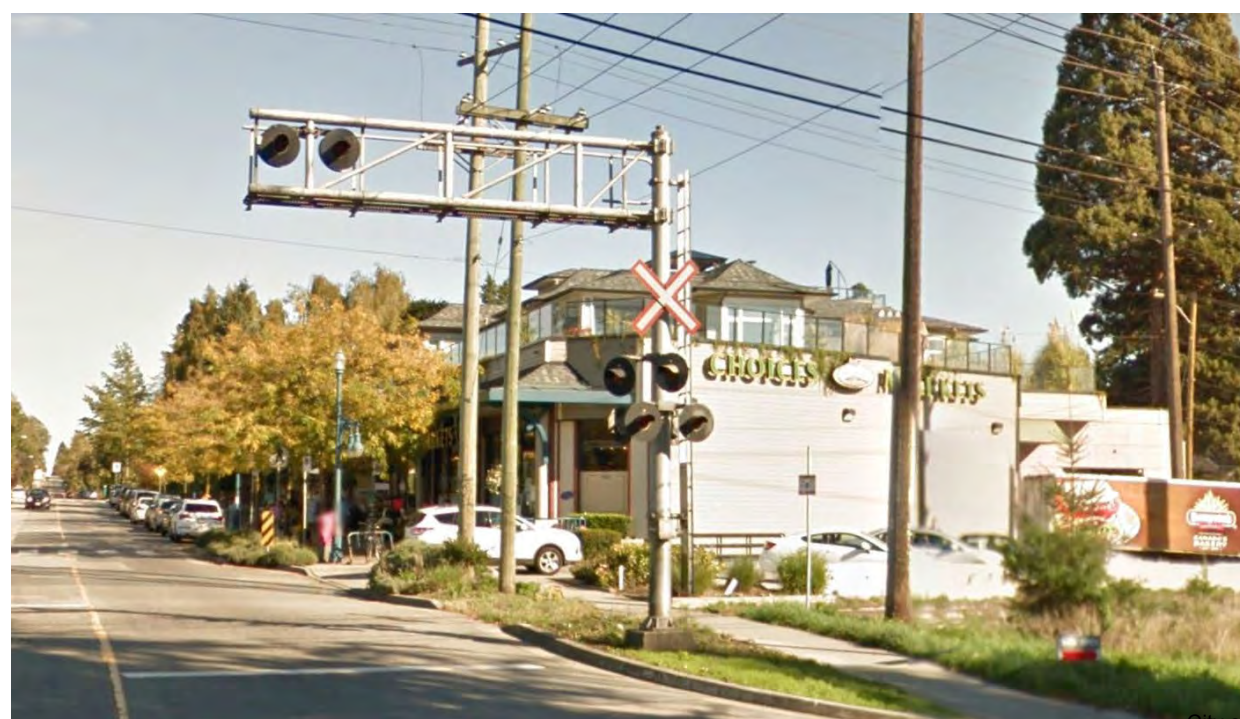
There is also significant piping infrastructure along the Corridor, and at all municipal road crossings. A high-level assessment identified the following:

According to VanMap, the City's online geographic information system (GIS) database, there are 16 combined sewers crossings along the Arbutus Corridor, with an additional 11 combined sewer crossings at intersecting public roads.

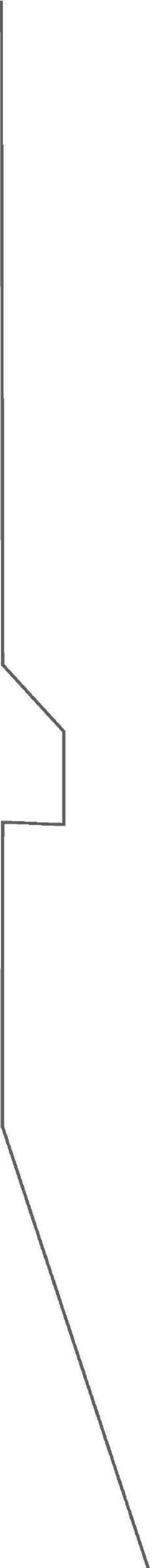
Two of the crossings are identified for sewer separation in the City's 10-year Capital Plan – one at 53rd Avenue and one north of 36th Avenue, which will influence planning for the Greenway.

There is limited drainage and storm sewer infrastructure within the Arbutus Corridor. Rainfall is generally absorbed through the ground, and any runoff is disbursed along the adjacent areas. A July 2017 site visit suggested no apparent signs of erosion or slope instability.

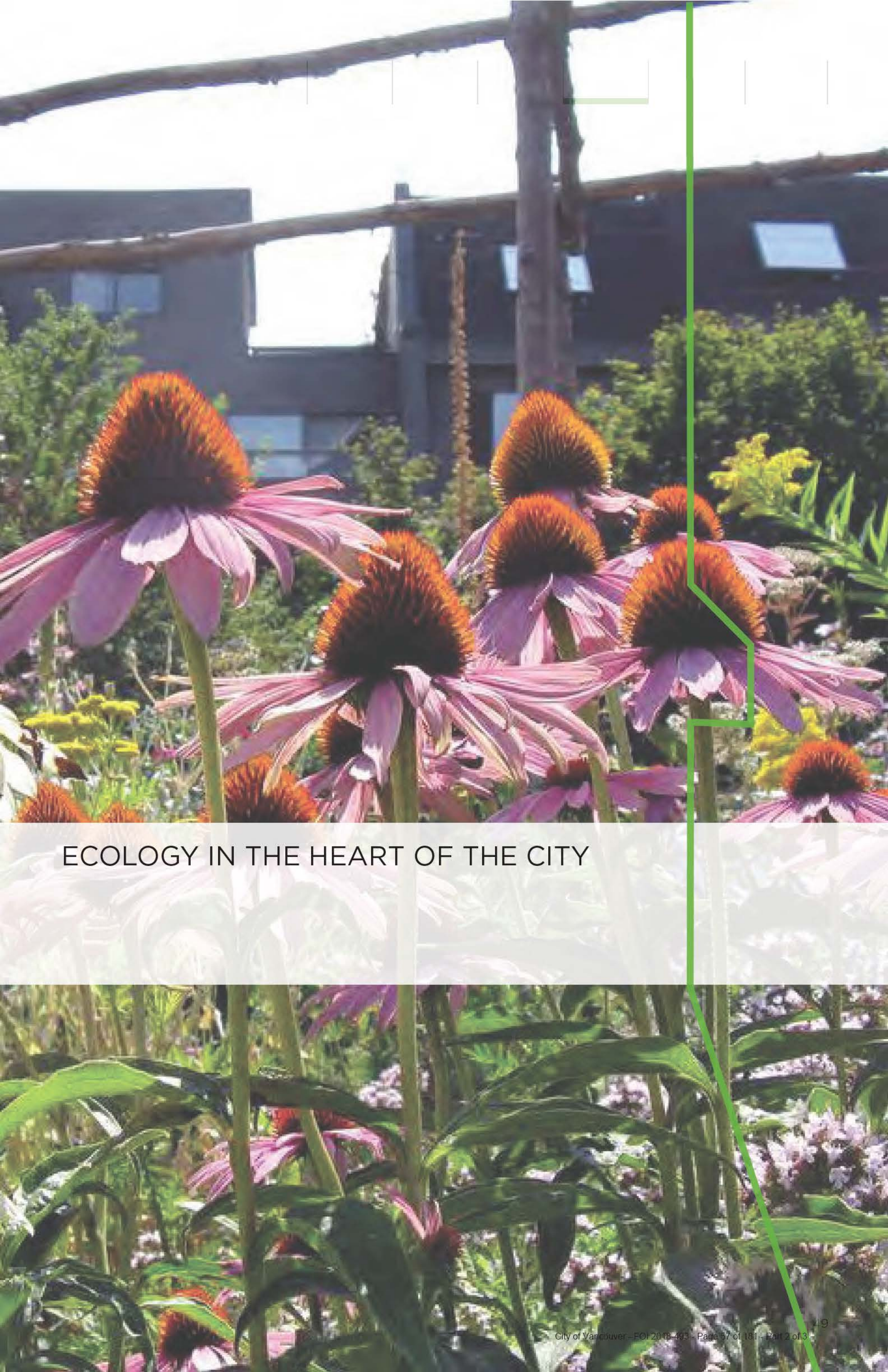
Additional electrical and water infrastructure will be required for the Greenway, including lighting, restroom facilities, potable water, and provisioning for proposed concessions and public art. Further analysis to determine total utility inventory and future need will be required as Project planning progresses.





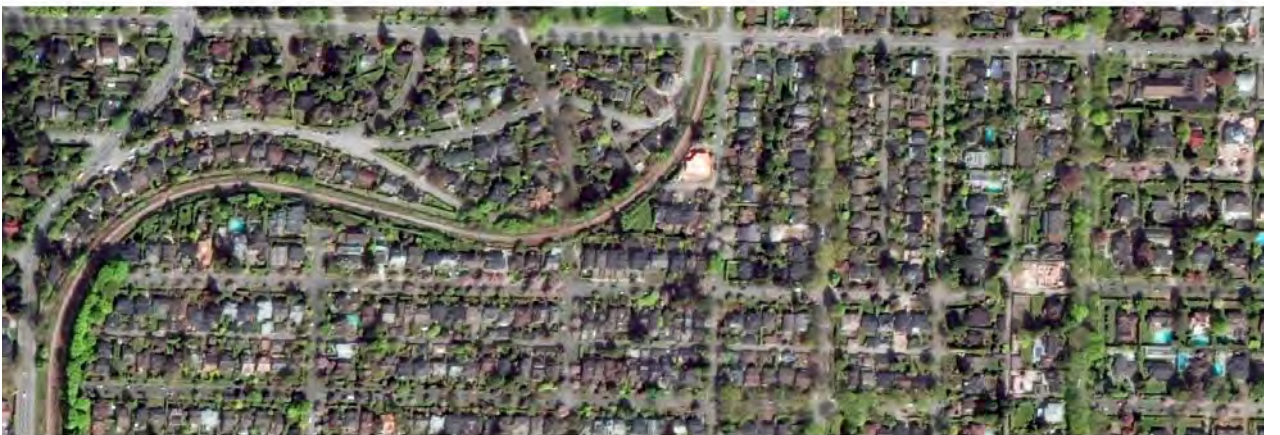






ECOLOGY IN THE HEART OF THE CITY





Seasonality along the Arbutus Corridor





# ECOLOGY IN THE HEART OF THE CITY

The current and imagined use of the Arbutus Corridor must be safe for humans, plants, and animals, and the redevelopment of the Corridor must limit environmental impact and foster environmental benefit.

It is important to reflect on the current state of the Corridor’s vegetation, fluvial history, and species compositions through the seasons when imaging a future Greenway that can increase habitat richness, biodiversity, and ecological health.

It is also important to reflect on the history of the Corridor as a freight rail line, as well as its permitted surrounding industrial land uses, as the area is revitalized for continued food production and habitat enhancement.

A Phase One Environmental Site Assessment (ESA) of the Arbutus Corridor was undertaken in 2016. The ESA identified the following Areas of Potential Environmental Concern (APECs):

- On-site rail operations (i.e., use of lubricants, and presence of ‘treated’ rail ties and ballast material)
- Herbicide use along the Corridor
- Off-site operations of concern adjacent to the Corridor (i.e., auto repair shops, gas stations and drycleaners)
- Potential poor-quality fill at stream courses

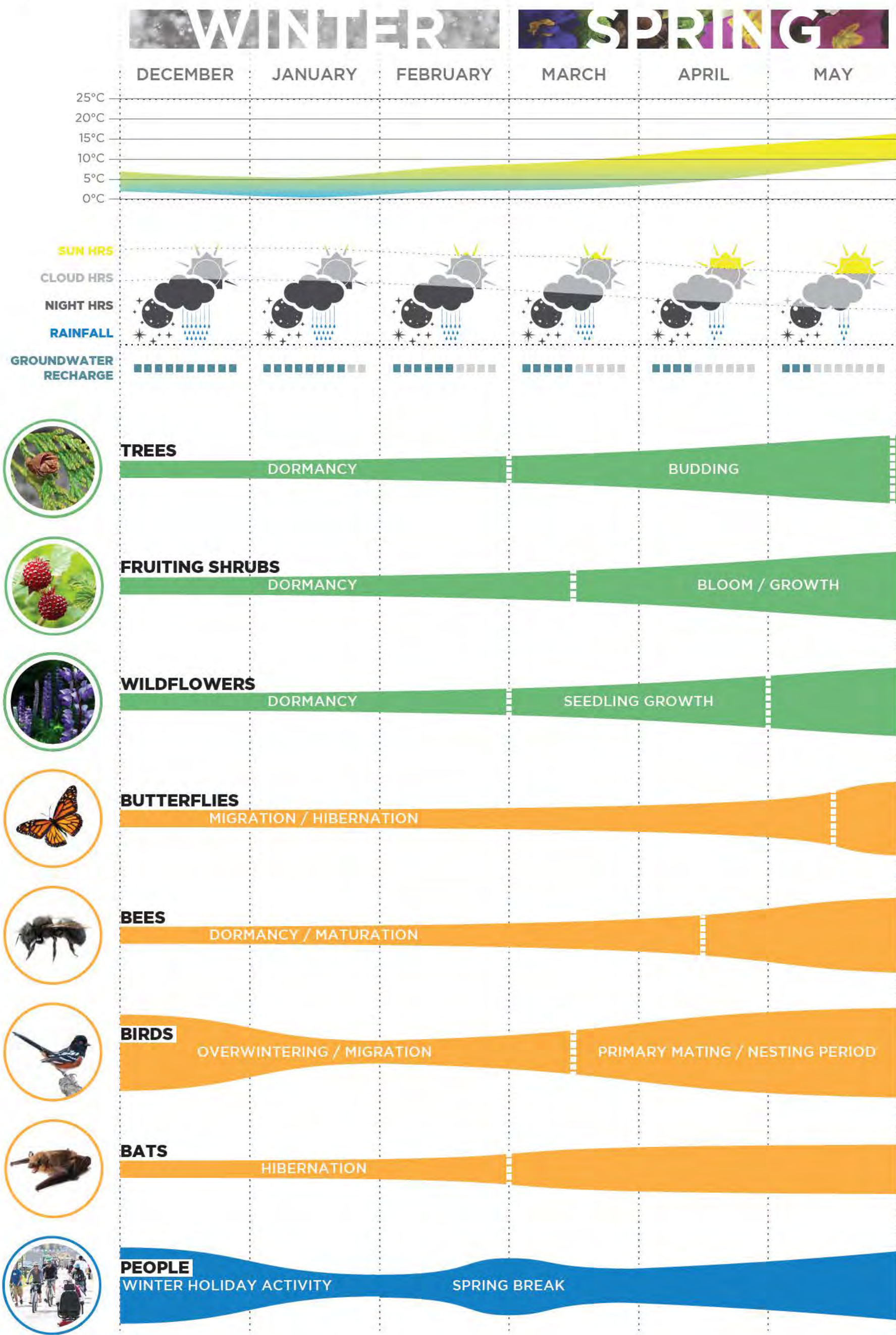
With these APECs in mind, ongoing environmental assessment and monitoring is required as the Corridor transforms, particularly for areas in which agricultural, park, or residential land uses are considered.

Understanding these systems, and the life within them, requires a look at things that alter character and biodiversity, including topography, proximity to existing open spaces and greenways, the mix of species that currently call the area home and the changes the seasons bring. In many ways, the Corridor’s current condition provides a great snapshot of its historical uses, with patterns of disturbance, vegetative communities, and topography all reflecting its past states.

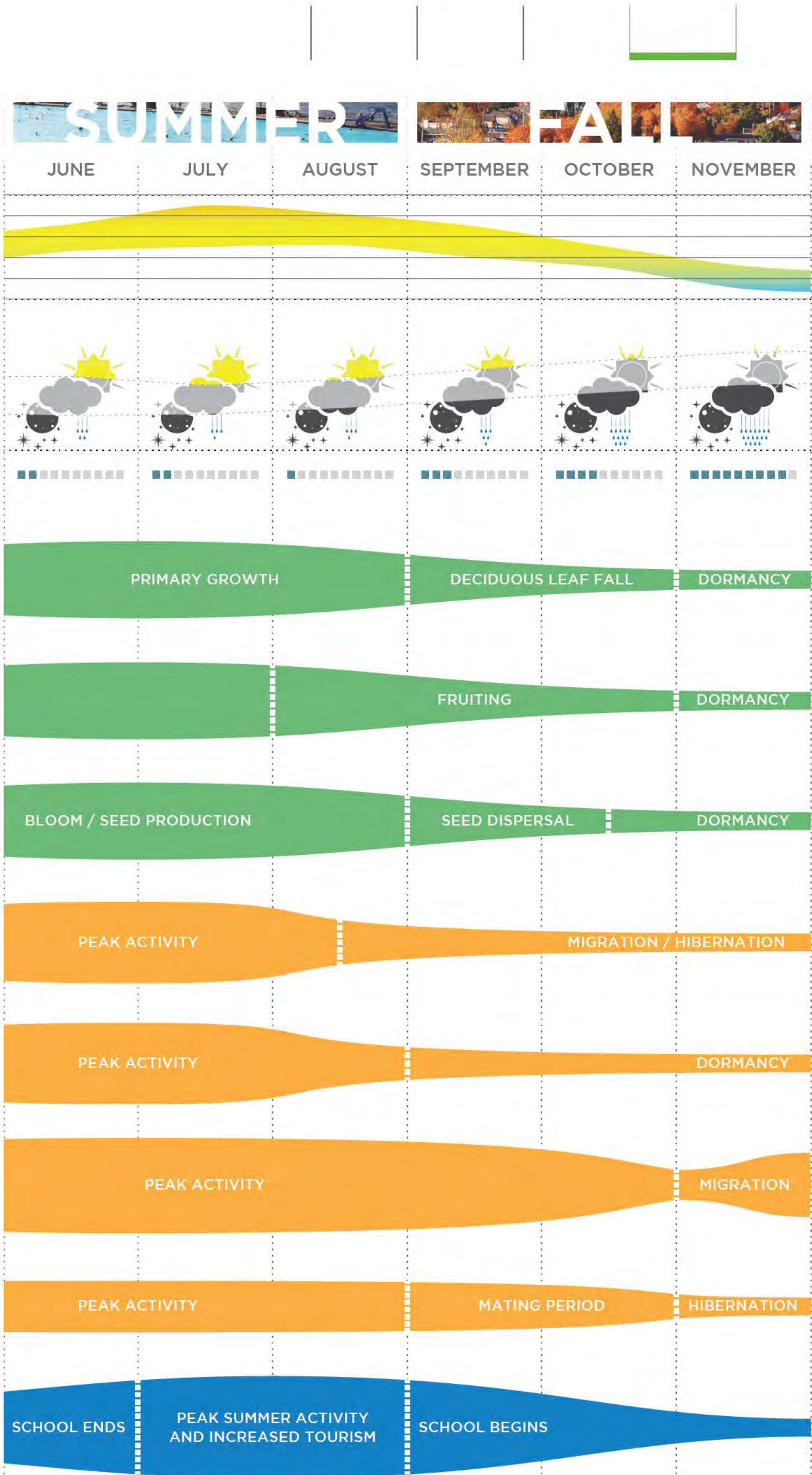
The Arbutus Corridor experiences a large amount of change over the course of a year, with differing plants and animals all adapting their behaviours as light levels, temperatures, and precipitation amounts fluctuate. Mirroring this, human use also follows a defined seasonal trend, with increased activity in the warmer, dryer summer months.

Balancing these seasonal uses encourage a wide number of species to coexist, including human and nonhuman coexistence.









Seasonality along the Arbutus Corridor





## Vegetation

The Arbutus Corridor falls within the coastal Douglas fir and coastal western hemlock biogeoclimatic zones (Egan 1999; Green and Klinka 1994; Meidinger and Pojar 1991). Existing vegetation is not particularly representative of these zones due to its history of urban development, but it is important to understand when considering future landscaping plans. The corridor has seen extensive development and disturbance, first due to the historical development of the Canadian Pacific Railway line and then subsequent municipal developments including road building.

A 2016 survey of the Corridor mapped locations of established native plant communities. Less than one per cent of the surveyed land area had well-developed native plant communities, with the largest between West 18th Avenue and West 20th Avenue, and between West 35th Avenue and West 38th Avenue.

As temperatures rise in the spring, and rainfall starts to decline, much of the vegetation along the Corridor enters its active growth phase. Flowering species such as Lupines and Salmonberry produce blooms, giving way later in the season to other natives like Hardhack. Western red cedar and Western hemlock produce pollen and seed cones in late spring and early summer and species like Thimbleberry produce berries through mid to late summer.

There are numerous pollinators along the Corridor, including native bumblebees and mason bees. Their life cycle follows blooms times, with hibernation occurring in the winter months. Butterflies such as the monarch migrate North for the summer months to lay eggs, before returning to their winter ranges.

A preliminary tree inventory was conducted along the corridor to size, condition, and other notable characteristics. This data provides information about location and attributes of trees to help with planning



and recommendations for tree retention mitigation, enhancement and removal. The Tree Inventory Map Book can be found in Appendix B.



Salmonberry  
(*Rubus spectabilis*)  
Source: Wikimedia  
Commons Photo by A.  
Pond



Thimbleberry  
(*Rubus parviflorus*)  
Source: UBC Farm  
Agroforestry



Hardhack  
(*Spiraea douglasii*)  
Source :UBC Farm  
Agroforestry



Snowberry  
(*Symphoricarpos albus*)  
Source: UBC Farm  
Agroforestry



Bracken fern  
(*Pteridium aquilinum*)  
Source: Wikimedia  
Commons Photo by  
Brewbooks



Big Leaf Maple  
(*Acer macrophyllum*)  
Source: Wikimedia Commons  
Photo by Arnold C



Douglas fir  
(*Pseudotsuga menziesii*)  
Source: Wikimedia Commons  
Photo by Walter Siegmund



Pacific crab apple  
(*Malus fusca*)  
Source: Wikimedia Commons  
Photo by K. Krzysztof Ziarnik



Vine Maple  
(*Acer circinatum*)  
Source: NRCAN.jpg



Western red cedar  
(*Thuja plicata*)  
Source: UBC Faculty of  
Medicine



Western hemlock  
(*Tsuga heterophylla*)  
Source: Wikicommons  
Photo by Alex O'Neal



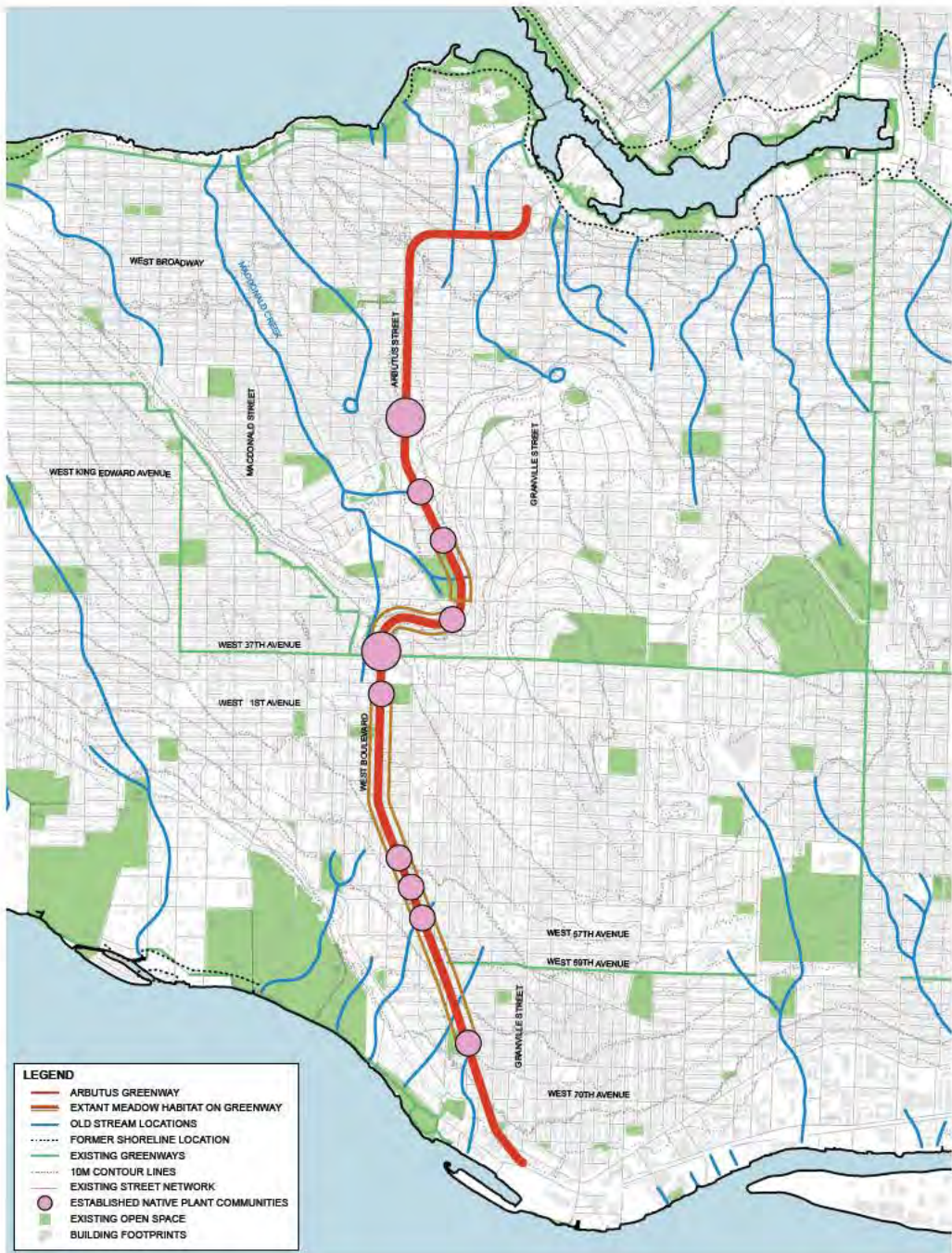
Arbutus tree  
(*Arbutus menziesii*)  
Source: Wikimedia  
Photo by T. Radulovich



The potential for ecological restoration is greatest in the southern portion of the Arbutus Corridor. From Milton Street north to West 49th Avenue, there is a good mix of trees at varying stages of structural development. There are also several parks in this southern reach with good connecting habitat in close proximity offering a mixture of young trees, mature trees and shrubby vegetation.

Between West 49th Avenue and West 41st Avenue, trees are less abundant and there are fewer nearby parks. From West 41st Avenue north to King Edward Avenue, the vegetation is well suited for many species of wildlife as there is a diverse community of native trees and shrubs, and several parks are connected by young and mature trees that line the streets.

North of King Edward Avenue, there are very few trees along the edge of the corridor, and very little connecting habitat to suitable areas nearby.



Biophysical conditions along the Arbutus Greenway



# Invasive Species

The Arbutus Corridor has had a long and varied history of development types and usage. European settlement and modes such as the old rail corridor set the stage for numerous rounds of human-driven incursions, each bringing their own forms of change and disturbance to the natural area. Each of these incursions has disturbed the once-native plant communities in the area, introducing a host of invasive species common now throughout the region.

The Invasive Species Council of BC defines these as “plants, animals or other organisms not native to BC whose introduction and spread harms the province’s native species and economy.” As invasive plants began to be recognized as potentially detrimental to native ecosystems, legislation was introduced to keep them under control, with the Thistle Prevention Act introduced in 1877, the Noxious Weeds Act in 1888, and eventually, the BC Weed Control Act in 1996. Additional provincial legislation that governs the management of invasive plants includes the Community Charter Act, Forest and Range Practices Act, and the Integrated Pest Management Act.

A 2016 survey of the invasive vegetation along the corridor mapped the most commonly found invasive species. The survey found that the nutrient-poor soils supported invasive species over 99 per cent of the land area, and that this extensive number is having a large ecological effect on biodiversity and habitat value. In addition, European fire ants (*Myrmica rubra*) were also identified. The future success of the corridor’s ecological health will be based on the removal and management of the species listed below.



Blackberry  
(*Rubus amaericanus*/  
*Rubus laciniatus*)



Bindweed  
(*Calytiegiaspis*)



Wild chervil  
(*Anthriscus*  
*sylvestris*)



Common hops  
(*Humulus lupulus*)  
Source: [http://www.wikiwand.com/en/Humulus\\_lupulus](http://www.wikiwand.com/en/Humulus_lupulus)



Knotweed  
(*Fallopia japonica*/  
*Fallopia x bohemicum*)



Giant hogweed  
(*Heracleum*  
*mantegazzianum*)

Invasive plants found on or near the Arbutus Corridor today, not pictured:

- Cherry laurel (*Prunus laurocerasus*)
- English ivy (*Hedera helix*)
- Reed canary grass (*Phalaris arundinacea*)
- English holly (*Ilex aquifolium*)
- Common tansy (*Tanacetum vulgare*)
- Goutweed (*Aegopodium podagraria*)
- Clematis (*Clematis vitalba*)
- Lamium (*Lamium galeobdolon*)
- Scotch broom (*Cytisus scoparius*)
- Butterfly bush (*Buddleja davidii*)



## Waterways

The City of Vancouver sits within the Lower Mainland ecoregion, an area with a yearly maximum of precipitation in the winter months. Underlain with glacial deposits, marine sediments, and clay, its wet sites and streams have traditionally been framed by Douglas fir, western hemlock, and western red cedar, and have supported a wide variety of aquatic, semi-aquatic, and riparian life. The map on the opposite page highlights the locations of historical watercourses within Vancouver, most of which have been in-filled and buried over as part of Vancouver urban development.

Streams in seven locations historically crossed the Arbutus Corridor, with one of these –MacDonald Creek – having its major headwaters along the Corridor. These headwaters encompassed the area of present day Quilchena Park. The Corridor’s hydrological profile has been altered extensively since that time, but would originally have supported various salmon species like Coho and Sockeye among others, amphibians like the Northern Red-legged Frog (*Rana aurora*), and a rich community of shoreline birds.

Along the Corridor of today, the historical locations of streams often coincide with parks, notable viewpoints, or established native plant communities. These locations recognize the varied biophysical history the corridor once possessed.







# Wildlife

Wildlife composition has changed over time. Species that would have once been common in the area are now in decline or absent altogether, while others that have no historic occurrence in the area now flourish. Bird life and mammals along the Corridor align with the seasons – various times for nesting, mating, and migration.

## INVERTEBRATES

With the loss of native vegetation and the proliferation of invasive plant species, many invertebrates no longer have suitable habitat to meet various life requisites. One of the most noticeable declines, both locally in Vancouver and globally, is the decline of pollinators like bees and butterflies. Replacement of native plants that pollinators rely on, including members of the Rubus genus, with invasive species has resulted in conditions that are not conducive to recovery of this group in decline.

## AMPHIBIANS

Many amphibians that breed in streams and slow-moving water, including long-toed salamander, northwestern salamander, and western toad, likely occurred in the area historically. With the elimination of historic surface water streams, suitable breeding habitat for these species has also disappeared. Some amphibians that breed in standing water, such as Pacific tree frogs, are still relatively abundant in Vancouver, while others, such as red-legged frogs, are rarely seen. (Vancouver Board of Parks and Recreation 2016)





American Wigeon  
(*Anas americana*)  
Source: Wikicommons Photo by  
Alan Schmierer



Snow Geese  
(*Chen caerulescens*)  
Source: Wikicommons  
Photo by Walter  
Slegmund



Black Scoter (*Melanitta  
americana*) Source:  
Wikicommons Photo by  
Peter Massas



Canada Geese  
(*Branta canadensis*)  
Source: Wikicommons  
Photo by Daniel Mayer



Bonaparte's Gull  
(*Chroicocephalus  
philadelphia*) Source:  
Wikicommons  
Photo by Alan Vernon



Mew Gull  
(*Larus canus*)  
Source: Wikicommons  
Photo by Donna A. Dewhurst



White-winged Scoter  
(*Melanitta fusca*)  
Source: Wikicommons  
Photo by Vince



American Coot  
(*Fulica americana*)  
Source: Wikicommons  
Photo by Michael L.  
Baird



Mallard  
(*Anas platyrhynchos*)  
Source:  
Wikicommons Photo  
by Keith



Brant  
(*Branta bernicla*)  
Source: Wikicommons  
Photo by Alan  
Schmierer



Ring-billed Gull  
(*Larus delawarensis*)  
Source: Wikicommons  
Photo by Walter  
Slegmund



BIRDS

Common native birds that have been documented within two kilometres of the Arbutus Corridor over the last 25 years include a mix of water- and terrestrial-associated birds.



Wilson's Warbler  
(*Cardellina pusilla*)  
Source Wikicommons  
Photo by Donna Dewhurst



Golden-crowned Kinglet  
(*Regulus satrapa*)  
Source Wikicommons  
Photo by Walter Siegmund



Northwestern Crow  
(*Corvus caurinus*)  
Source Wikicommons  
Photo by Alan D. Wilson



Bushtit  
(*Psaltiriparus minimus*)  
Source Wikicommons  
Photo by Eyesplash Photography



Golden-crowned Sparrow  
(*Zonotrichia atricapilla*)  
Source Wikicommons  
Photo by Alan & Elaine Wilson



Pine Siskin  
(*Spinus pinus*)  
Source Wikicommons  
Photo by Linda Tanner



Fox Sparrow  
(*Passerella iliaca*)  
Source Wikicommons  
Photo by Walter Siegmund



Barn Swallow  
(*Hirundo rustica*)  
Source Wikicommons  
Photo by JJ Cadiz



Common Redpole  
(*Acanthis flammea*)  
Source Wikicommons  
Photo by Jyrki Salmi



House Finch  
(*Haemorhous mexicanus*)  
Source Wikicommons  
Photo by Nigel



Purple Finch  
(*Haemorhous purpureus*)  
Source Wikicommons  
Photo by Alan D. Wilson



Black-capped Chickadee (*Poecile atricapillus*)  
Source Wikicommons  
Photo by Alan D. Wilson



Cedar Waxwing  
(*Bombycilla cedrorum*)  
Source Wikicommons  
Photo by Kevin Cole



Yellow-rumped Warbler (*Setophaga coronata*)  
Source Wikicommons  
Photo by John Harrison



Ruby-crowned Kinglet  
(*Regulus calendula*)  
Source Wikicommons  
Photo by Donna Dewhurst



MAMMALS

The composition of mammals in Vancouver has also undergone significant change. While some are occasionally observed within city limits, large native mammals such as black-tailed deer, black bear, grey wolf, and cougar have been extirpated from the area for many decades. Today, coyote (*Canis latrans*) are now the top predator in Vancouver.



Source: Vancouver Sun

Stakeholders and the public envision the future Arbutus Greenway as an ecological haven, able to host food and flower gardens (and the bees that love them), grassy areas in shade and in sun for gathering, playing, and relaxing, and spaces for ecological learning and stewardship. It will be important to plan the future Greenway in a way that is responsive to its desired uses, and such that the maintenance of the Greenway is not cost or effort prohibitive.





Smaller native mammals are more abundant within city limits, and some are likely to be found within or near the Arbutus Corridor today:



Big Brown Bat  
(*Eptesicus fuscus*)  
Source: Wikicommons  
Photo by Ann Froschauer



Hoary Bat  
(*Lasiurus cinereus*)  
Source: Wikicommons  
Photo by Paul Cryan



Little Brown Myotis  
(*Myotis lucifugus*)  
Source: Wikicommons Photo  
by Ann Froschauer



Striped Skunk  
(*Mephitis mephitis*)  
Source: Wikicommons  
Photo by Keith Penner



Raccoon  
(*Procyon lotor*)  
Source: Wikicommons  
Photo by Ken Thomas



Coast Mole  
(*Scapanus orarius*)  
Source: Flickr  
Photo by Peter Paquet  
of Northwest Power and  
Conservation Council



Common Muskrat  
(*Ondatra zibethicus*)  
Source: Wikicommons  
Photo by Alan D. Wilson



Douglas Squirrel  
(*Tamiasciurus  
douglasii*)  
Source: Wikicommons  
Photo by Walter  
Siegmund



Northern Flying Squirrel  
(*Glaucomys sabrinus*)  
Source: Wikicommons  
Photo by Bob Cherry

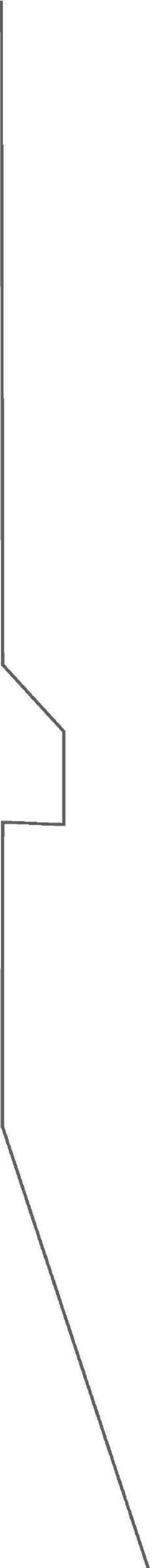


Keen's Mouse  
(*Peromyscus keeni*)  
Source: [www.centralcoastbiodiversity.org](http://www.centralcoastbiodiversity.org)



Deer Mouse  
(*Peromyscus maniculatus*)  
Source: Wikicommons  
Photo by Dawn Marsh of Seney Natural History  
Association









A PLACE FOR PEOPLE





# Neighbourhoods

## POPULATION DEMOGRAPHICS

The following diagrams provide a high-level demographic overview of the neighbourhoods in closest proximity to the Arbutus Corridor. The analysis includes dominant age, mother tongue, and dwelling type, in support of imagining a future Arbutus Greenway for people that is responsive to its users.

The analysis is based on the latest available community statistics – unrounded data from the 2011 Census of Canada. Findings suggest that many patterns emerge between the neighbourhoods. There is generally more similarity between neighbourhoods that run east-west and greater differences between north-south neighbourhoods.

### Population Change + Dwelling Type

Population change and change in dwellings per hectare (DPH) are tightly connected.

Data from the 2011 Census of Canada reported a population decline in Arbutus Ridge, Shaughnessy, and Oakridge. It is projected that the 2016 Census data will show increased development and improved amenities in the area, particularly the transformation of the Arbutus Corridor and even its temporary path status, are likely related to increased population in the area and dwelling type. With more people forecast to live in the Arbutus Corridor area, there is a direct need to design accordingly to accommodate this increase in population.

In 2011, Fairview underwent the greatest change in terms of population growth (7 per cent) as well as 3.4 new DPH. Kitsilano ranked second for population growth with a 2 per cent increase, reporting an increase in DPH of 0.8. It is expected that the continual intensification of these neighbourhoods through infill and laneway housing development will result in significantly higher numbers in the 2016 Census data.

Areas of population decline – Arbutus Ridge, Shaughnessy, and Oakridge – all had a decrease or net zero increase of DPH (from 0 change to 0.1 fewer DPH between 2006 and 2011). Marpole and Kerrisdale, which saw minimal population growth, also had a minimal increase in DPH (0.1 - 0.5 more DPH).

*Significant development and population changes have occurred since 2011. To ensure an accurate understanding of the Arbutus Corridor and demographics of the area, the City will undertake further analysis using the updated Census data available in fall 2017.*







Dominant Age

Kitsilano and Fairview, the northern neighbourhoods of the Corridor, are home to a generally younger population, with the dominant age between 20 and 39 years old. The second most dominant age group in this area consists of 40 to 64 year olds (35 per cent), with less than 15 per cent of the population 19 and younger or 65 and older. It is anticipated that the most significant population changes represented in 2016 Census data will be seen in these northern neighbourhoods.

The dominant age group of residents living south of West 16th Avenue is between 40 and 64 years of age. Arbutus Ridge, Shaughnessy, and Oakridge have a fairly even age profile outside of this dominant category. In 2011, Marpole and Kerrisdale were home to fewer seniors over the age of 65 (13 to 16 per cent).

In terms of expected daily or regular users, data would suggest that from the local population, more children and youth would use the Greenway south of West 16th Avenue. Overall, the dominant user age group would be between 40 and 64 years of age. However, it is expected that visitors of all ages and abilities—local to and visiting Vancouver—will visit the future Arbutus Greenway.

Dominant Mother Tongue

English and Chinese are the dominant first languages of residents in neighbourhoods around the Arbutus Corridor. North of West 16th Avenue, English is the dominant mother tongue. There are nearly equal proportions of Chinese and English speaking residents around the southern part of the Arbutus Corridor.

The 2011 Census of Canada noted other mother tongues around the Arbutus Corridor as:

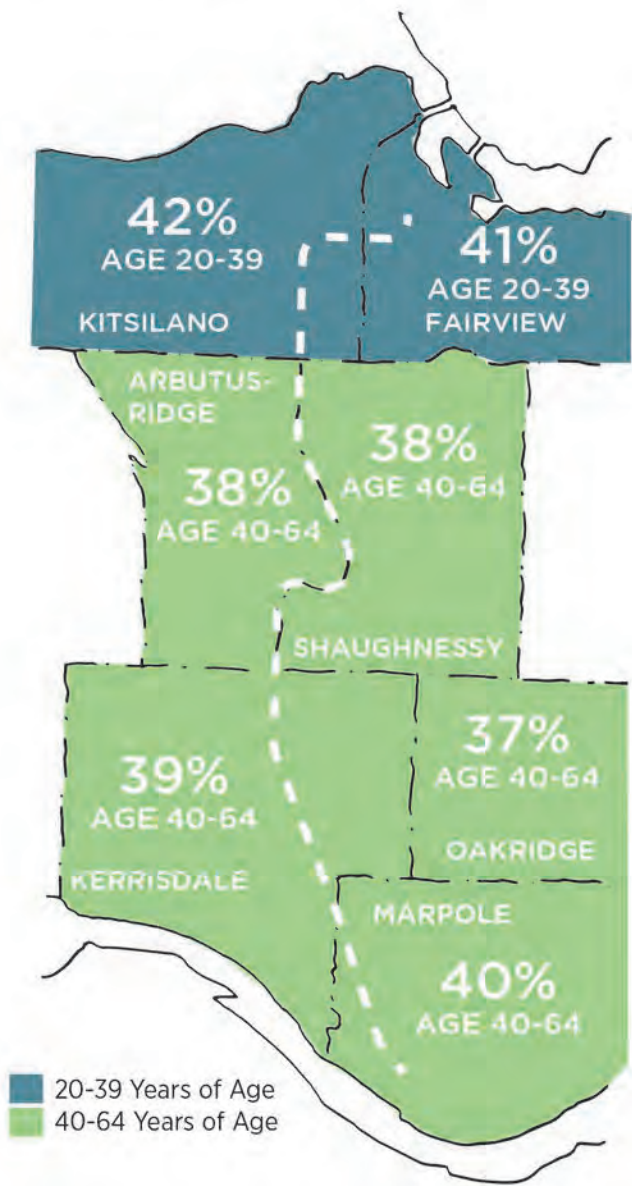
- French
- German
- Japanese
- Korean
- Tagalog
- Taiwanese
- Punjabi
- Russian
- Spanish
- Greek

Recognizing the languages spoken in and around the Arbutus Corridor will become directly relevant when developing wayfinding and other signs to honour the area’s cultural diversity and to increase the usability of the future Greenway.

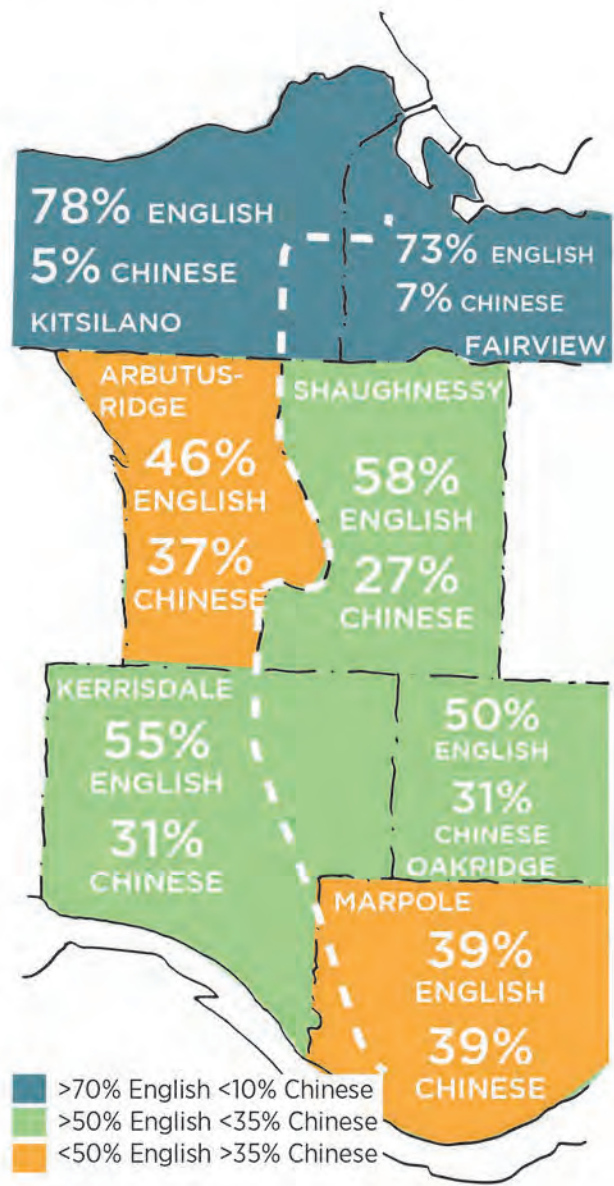
In Schematic Concept development, it will be important to consider how the Arbutus Greenway can best support the people living nearby, particularly in areas where there are higher densities of people who lack open space amenities, such as the Marpole Apartment area. At the same time, the design must recognize that the greenway is a city-wide amenity and destination for residents across all of Vancouver’s neighbourhoods.



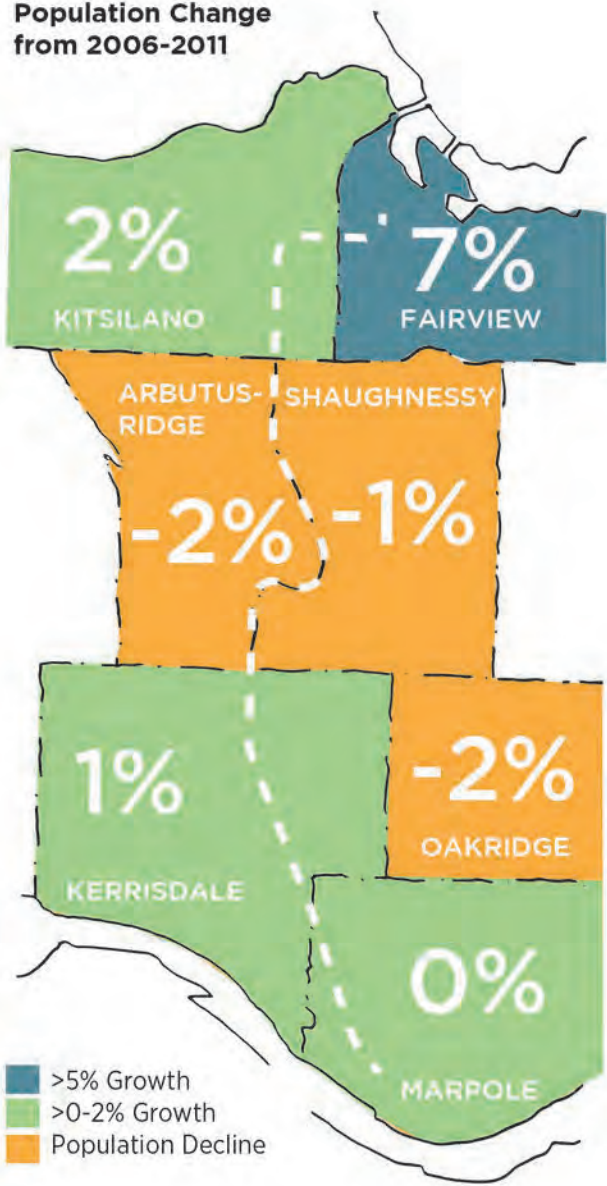
Dominant Age



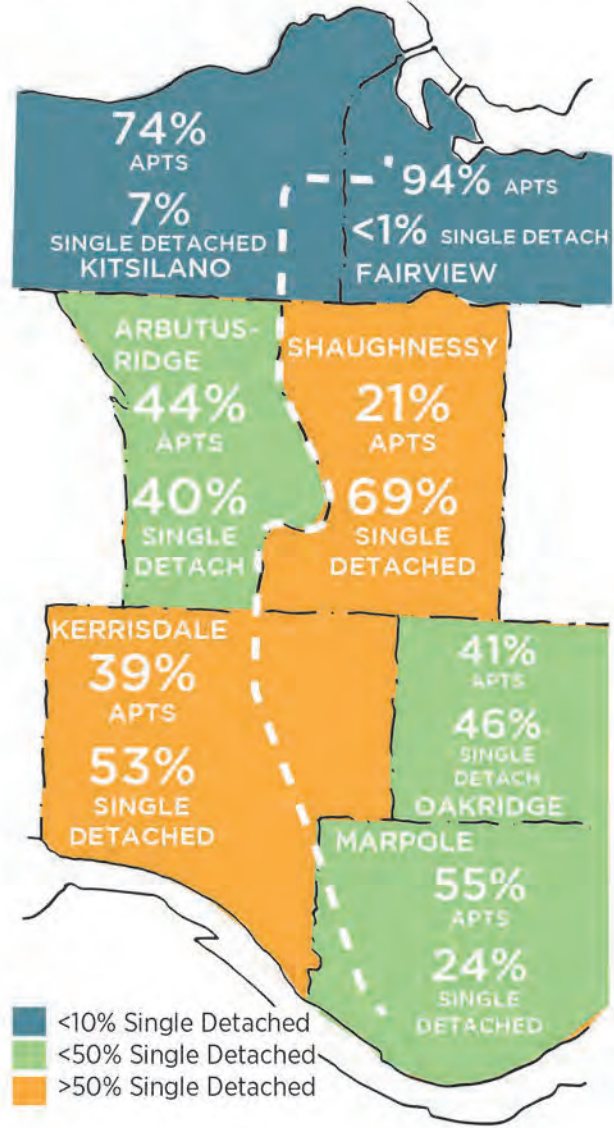
Dominant Mother Tongue



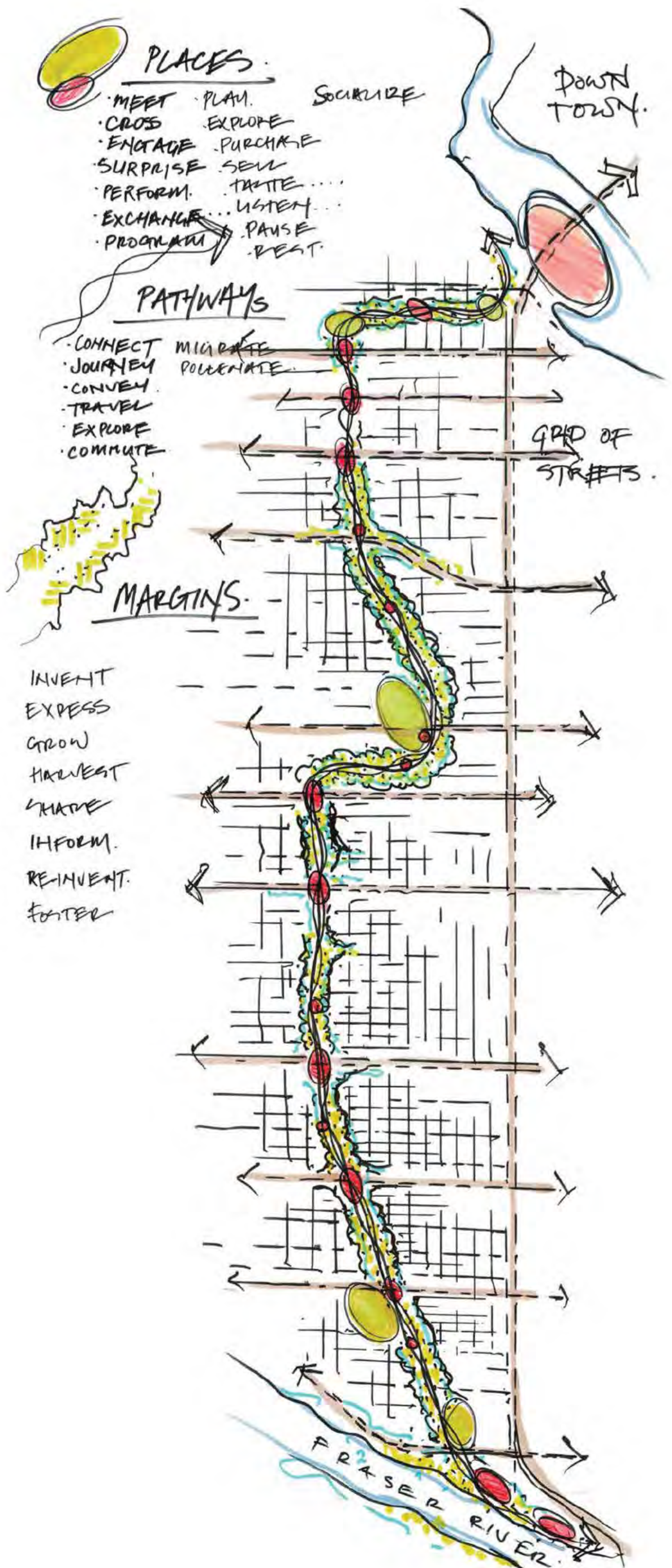
Population Change from 2006-2011



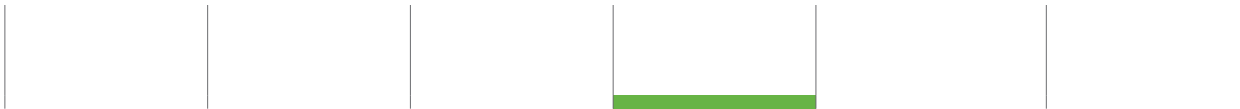
Dwelling Type: Apartments v. Single Detached











# Precincts

The Arbutus Corridor includes several distinct character areas and precincts. The edges and margins of the Corridor today blur into the adjacent parks, neighbourhoods, roads and vibrant retail streets – presenting rich opportunities to form new connections and strengthen existing ones.

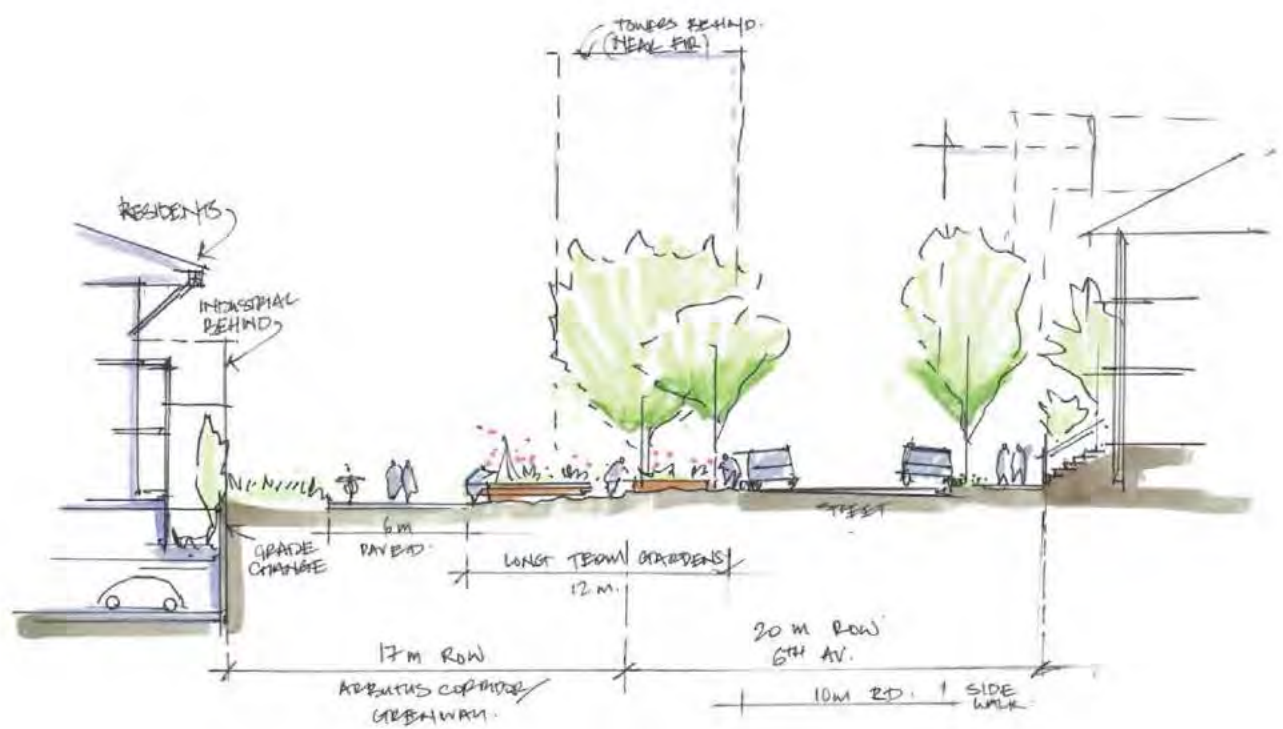
The Corridor comprises distinct nodes and places. Some are well established, such as the Kerrisdale precinct, and others will be reinvented and formed with the development of the future Greenway. These places will offer opportunities to meet, cross, engage, exchange, explore, pause and rest.

The design process must consider how to celebrate and enhance these unique characteristics of diverse places and zones along the corridor.

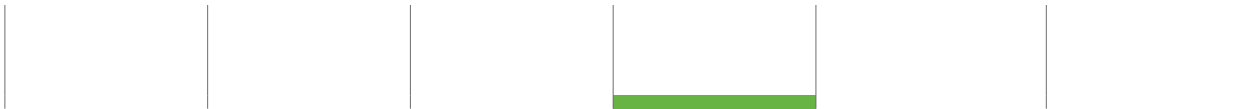




seagulls kids play  
views dogs city  
hummingbirds  
butterflies  
runners footsteps  
garden



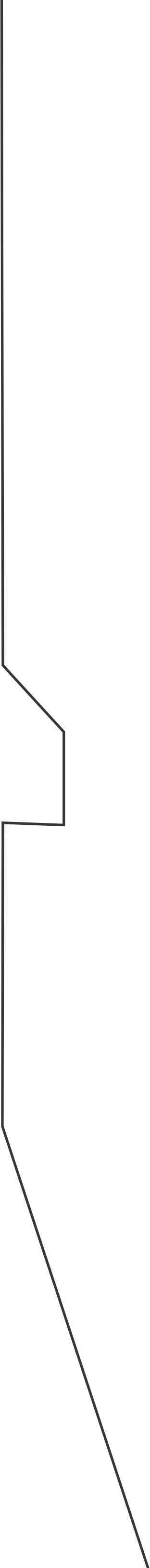




**6th Avenue from Fir Street to Maple Street**

This section of the Corridor is distinct in terms of its east-west alignment and its sunny southern exposure from West 6th Avenue to the south. While the Corridor is within a two-block radius of extensive commercial, light industrial, food, and entertainment activities, the experience is defined more directly by the multi-family residential portions of the Kitsilano neighbourhood on both sides. The traffic-calmed streets and neighbourhood feel provide a sense of calm to the Corridor. Delamont Park and traditional “corner store” style retail contributes to a distinct “local” quality.





**West Broadway**

The section of the Arbutus Corridor from West 6th Avenue to West Broadway is heavily influenced by its nearby and immediately adjacent light industrial and commercial uses. West Broadway’s status as one of the City’s most significant mixed-use and transit routes has a weighty influence on the Corridor. Further south from West Broadway, the adjacent buildings and their relationship to the Corridor greatly influence its character.

While additional public amenities and facilities are not adjacent to the Corridor today, several destinations are found east and west of the Corridor along West 11th Avenue: Kitsilano Secondary School, Connaught Park, Arbutus Greenway Park, and Lord Tennyson Elementary School.



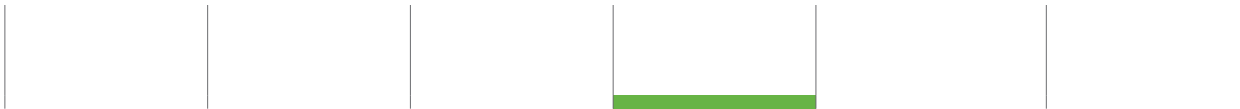






views  
walls  
narrow  
traffic  
squeeze  
noisy  
aware  
blank  
back





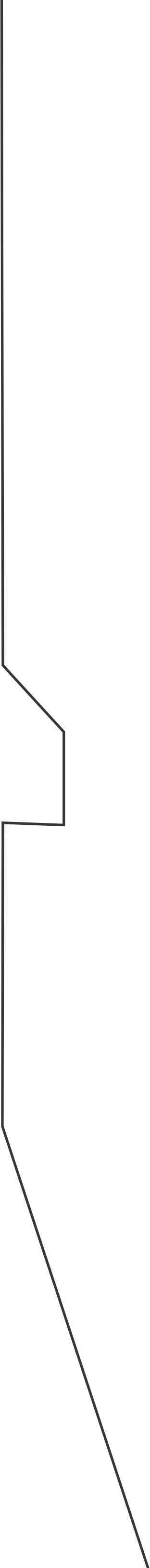
**12th Avenue**

This stretch along the Arbutus Corridor narrows to 15 metres and is abutted by away-facing residential, commercial, and light industrial buildings, as well as surface parking lots with frequently-intersecting east-west roadways. Currently, concrete barriers mark these intersections, prompting Corridor users to slow at crossings, providing a visual cue for pedestrian safety.

One block west of the Corridor is the vibrant retail street of the Arbutus Village and to the east are multi-family and single-family dwellings. Bessborough Armoury, the Canadian Forces Armoury is located on West 11th Avenue, and an elementary school lies just further west of it.

This area along the Corridor mainly consists of blank walls, creating a “back lane” feel with significant opportunity for aesthetic enhancement. The scale is intimate and comfortable with excellent views of the mountains to the north.





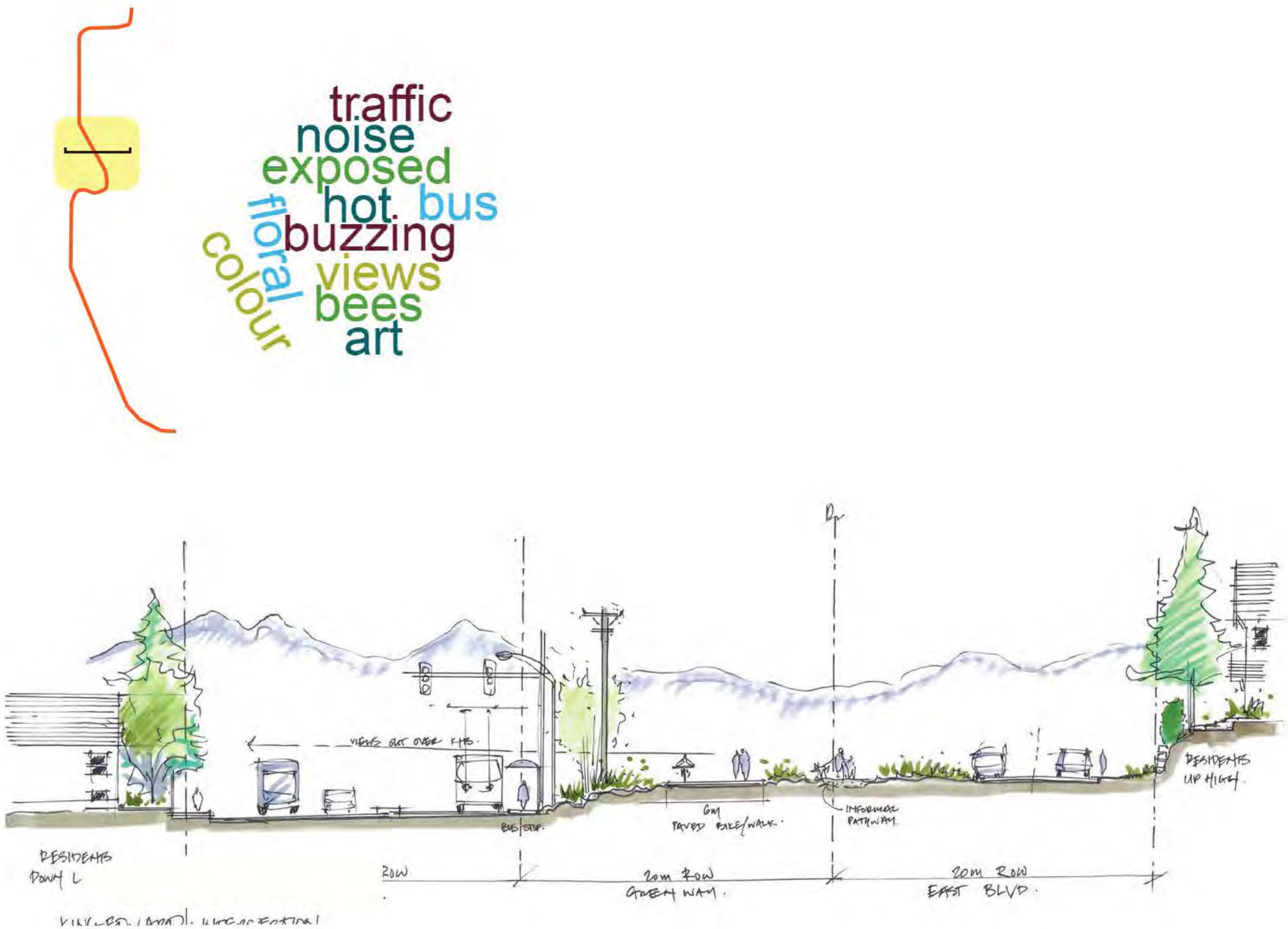
### King Edward

The Corridor approaching King Edward from the north is exposed and relatively uniform. Established large trees, hedges, and shrubs screen the adjacent single-family homes on both sides of the Corridor. However, the planting in most areas is set back from the pathway, providing full sun exposure to the pathway. Along this stretch, the hydro poles stationed along both sides of the Corridor provide a consistent rhythm.

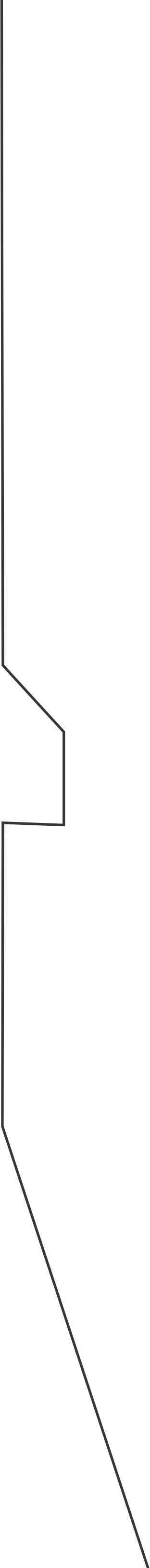
An art installation by a nearby second-grade elementary school class provides a point of interest with colourful rocks that line part of the pathway. Descriptive words and aspirations for the future Greenway are written on the rocks. This intervention is a wonderful expression of community support for the Corridor and demonstrates the interest that the local community would like to have in the future of the Greenway.

As the Corridor approaches the King Edward intersection, there is a relatively large, noisy hydro substation, which is unscreened and fully exposed.





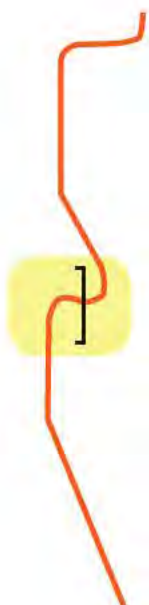




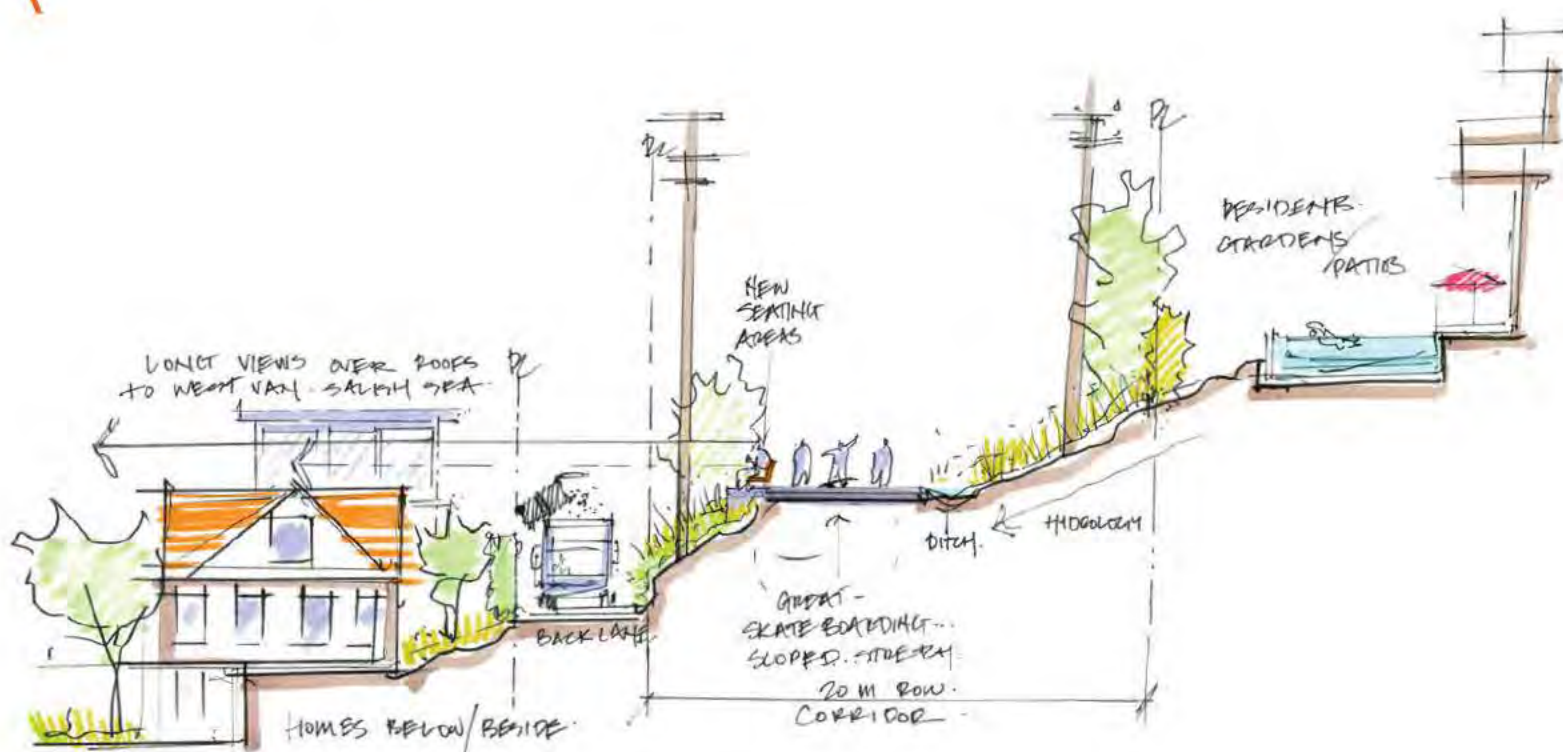
**Quilchena - “The Bend”**

The Bend offers distinct characteristics only found in this location along the Corridor. A long stretch of this segment abuts sprawling Quilchena Park, and the remainder of the curve is situated between two rows of large single-family homes. These park and residential land uses mean that this segment of the Corridor feels calm, quiet, and safe. Along this span of the Corridor, there are significant long views to the northwest with glimpses of mountains and water.

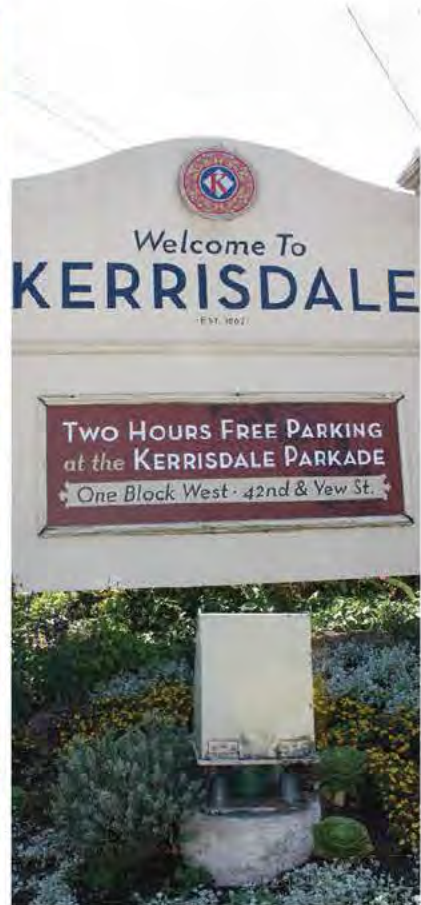
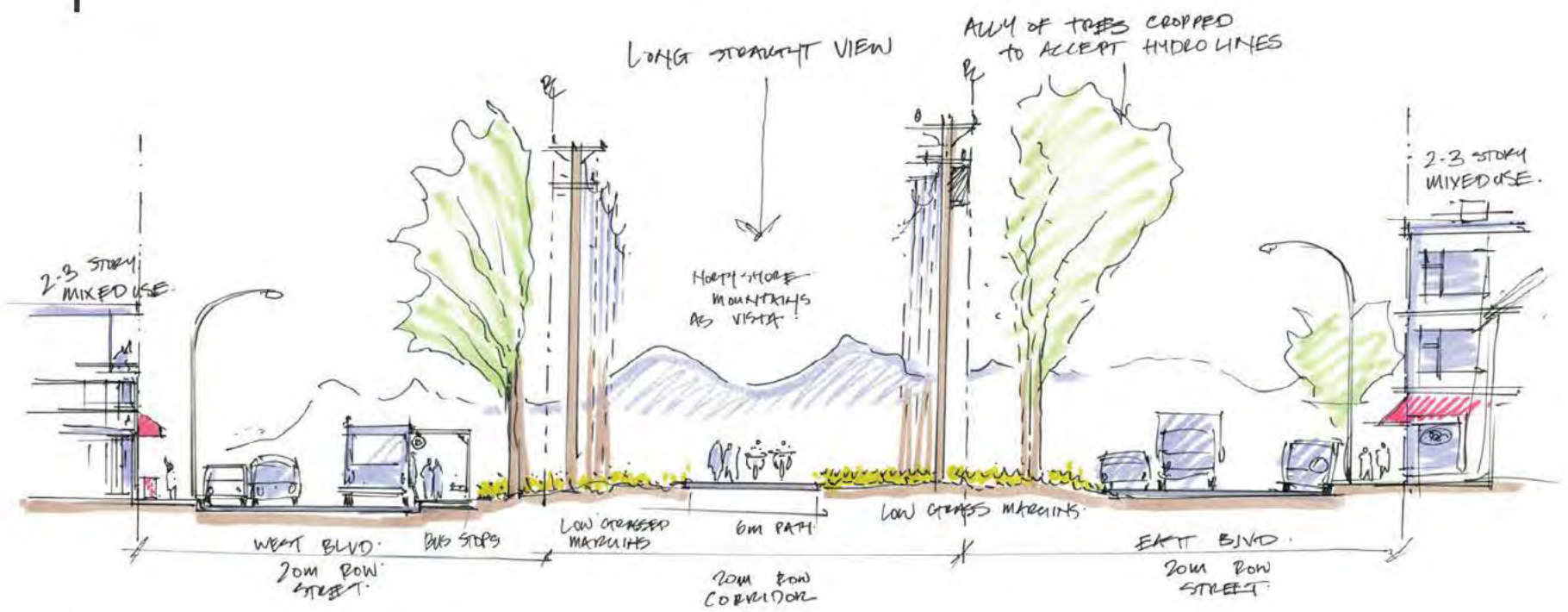




bikes  
grasses  
songbirds  
calves  
peaceful  
views  
mountains  
water  
quiet  
slopes  
skateboard











### Kerrisdale - 43rd Street

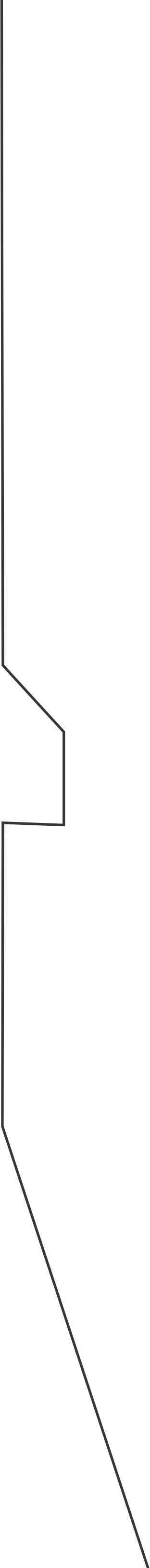
This section of the Arbutus Corridor is distinct in terms of its immediate edges - both east and west - consisting of additional transportation right-of-way in both East and West Boulevards. The adjacent and continuous retail along West Boulevard will influence the Corridor considerably in addition to the shopping environment along West 41st Avenue. Significant recreational amenities such as Kerrisdale Cyclone Taylor Arena, Kerrisdale Community Centre and Vancouver Public Library, and the running track at Point Grey Secondary School are also nearby. These amenities offer significant public recreational and social opportunities - including large gatherings and events - suggesting that there may be similar hosting opportunities on the temporary pathway and/or on the future Greenway.

To the east, residential development is primarily single-family scale beyond the immediate “band” of multi-family residential. To the west, residential building types vary with a range of ground-oriented multi-family up to tower-type dwellings. The Greenway may be perceived as an additional benefit for those living in buildings with limited or reduced outdoor amenity space and function as a kind of shared “front yard” for the neighbourhood.

Kerrisdale is known for its historic character, with the use of brick as a defining building material, along with prominent displays of railway artifacts and heritage station signage.

This area is also home to the most complex intersection along the Corridor - West 41st Avenue. Today, this is an all-way, signalized multimodal intersection. The Corridor bisects West 41st Avenue between the major West and East Boulevards on either side. This creates a complex arrangement of signals for both vehicle and pedestrian movement, along with on-street parking to the west and bus stops to the east. The presence of a number of coffee shops and eateries creates some conflicts between the pedestrians and cyclists travelling straight through and those exiting the Corridor.



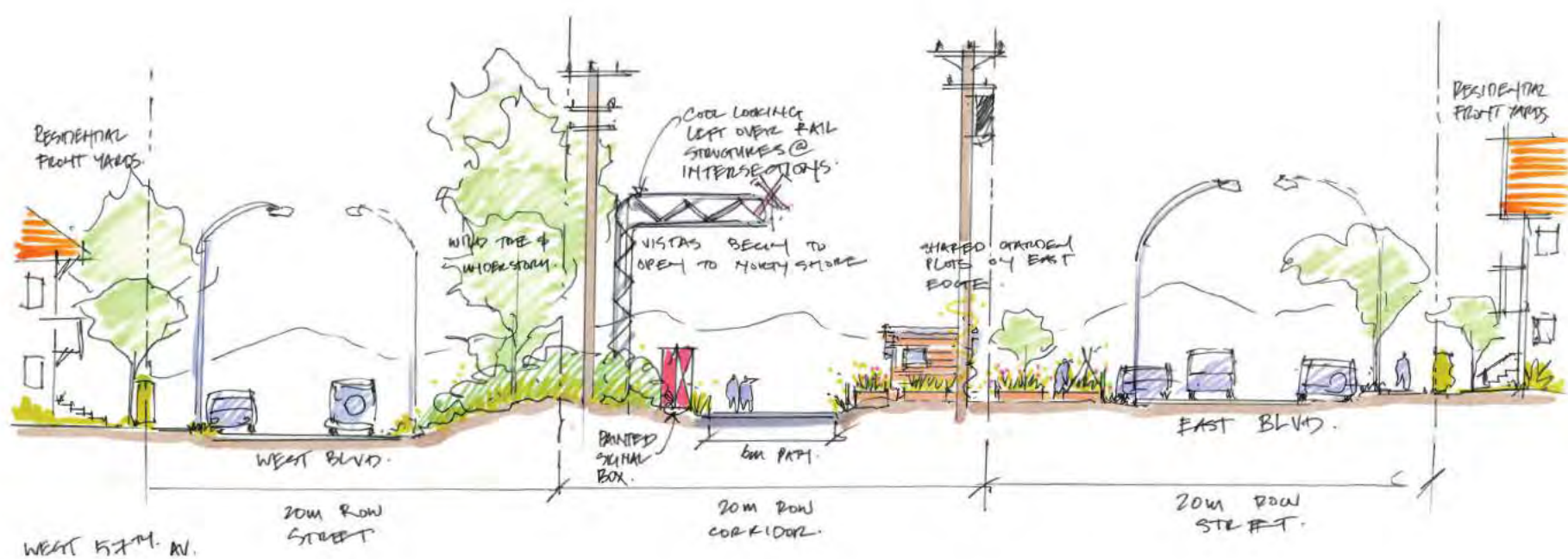


### West 57th Avenue

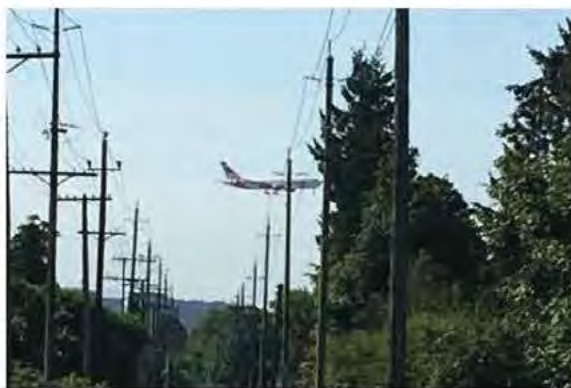
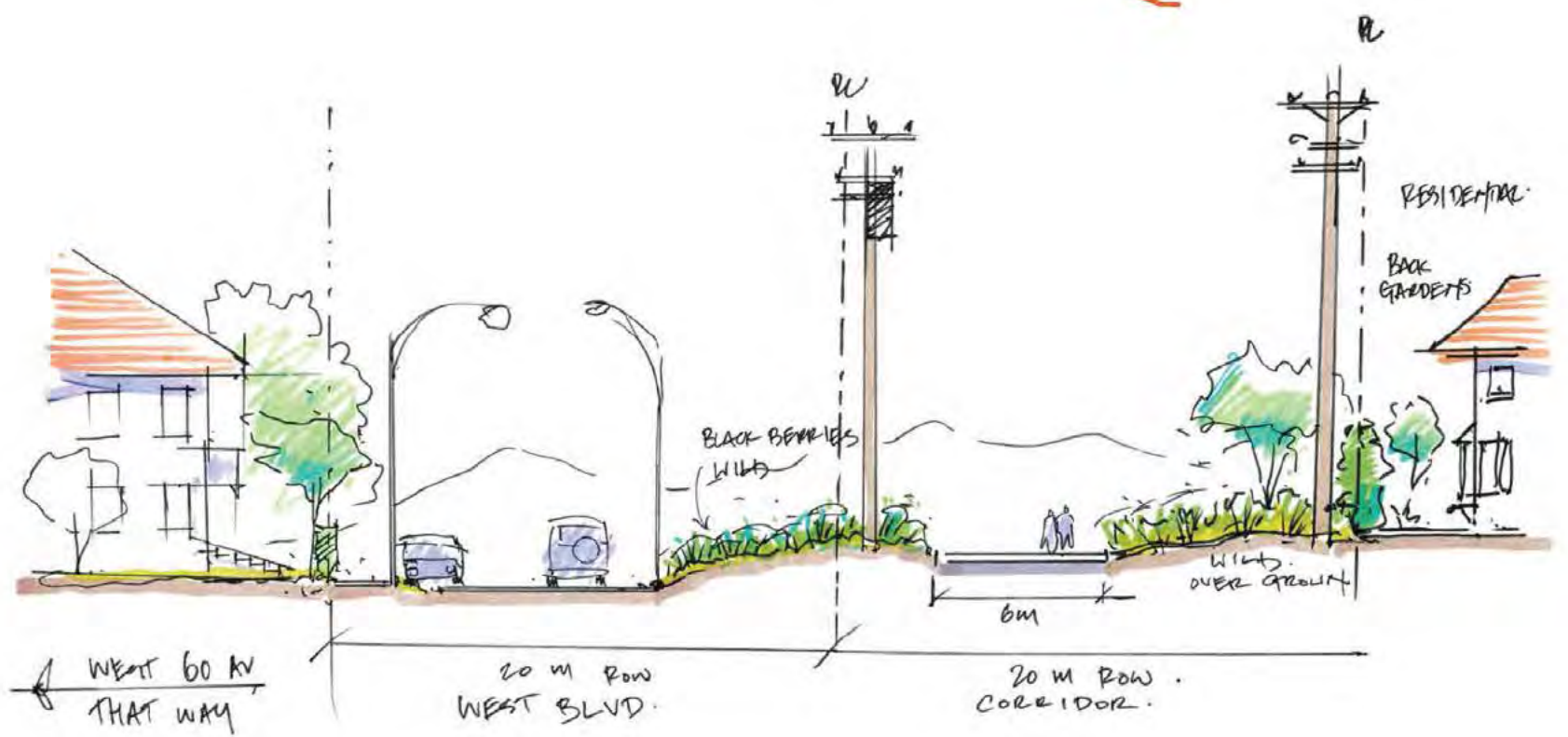
This section of the Corridor shares many of the same characteristics with segments further south. One notable distinction is the presence of a small neighbourhood commercial node including a grocer, a restaurant, and a coffee shop, which is already a local destination along the route.

The presence of West Boulevard adjacent to the Corridor provides greater exposure to afternoon and evening sun. Homes along West Boulevard are oriented towards the Corridor whereas to the east, the corridor runs primarily adjacent to backyards.

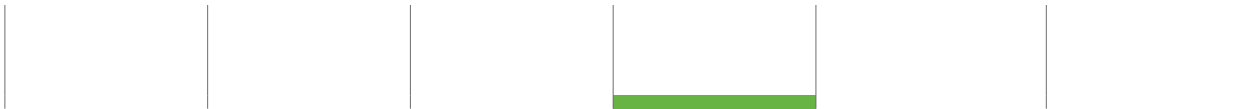












**West 60th Avenue**

Similar to the area around West 57th Avenue, the West 60th Avenue segment of the Corridor is characterized by the low scale of its surroundings and the presence of the West Boulevard. The angled orientation of the surrounding streets results in additional open space currently being used as community gardens.



### West 66th Avenue

Riverview Park has a dramatic influence on this segment of the Corridor. Its broad size and downward westward slope create potential for activity and community events.

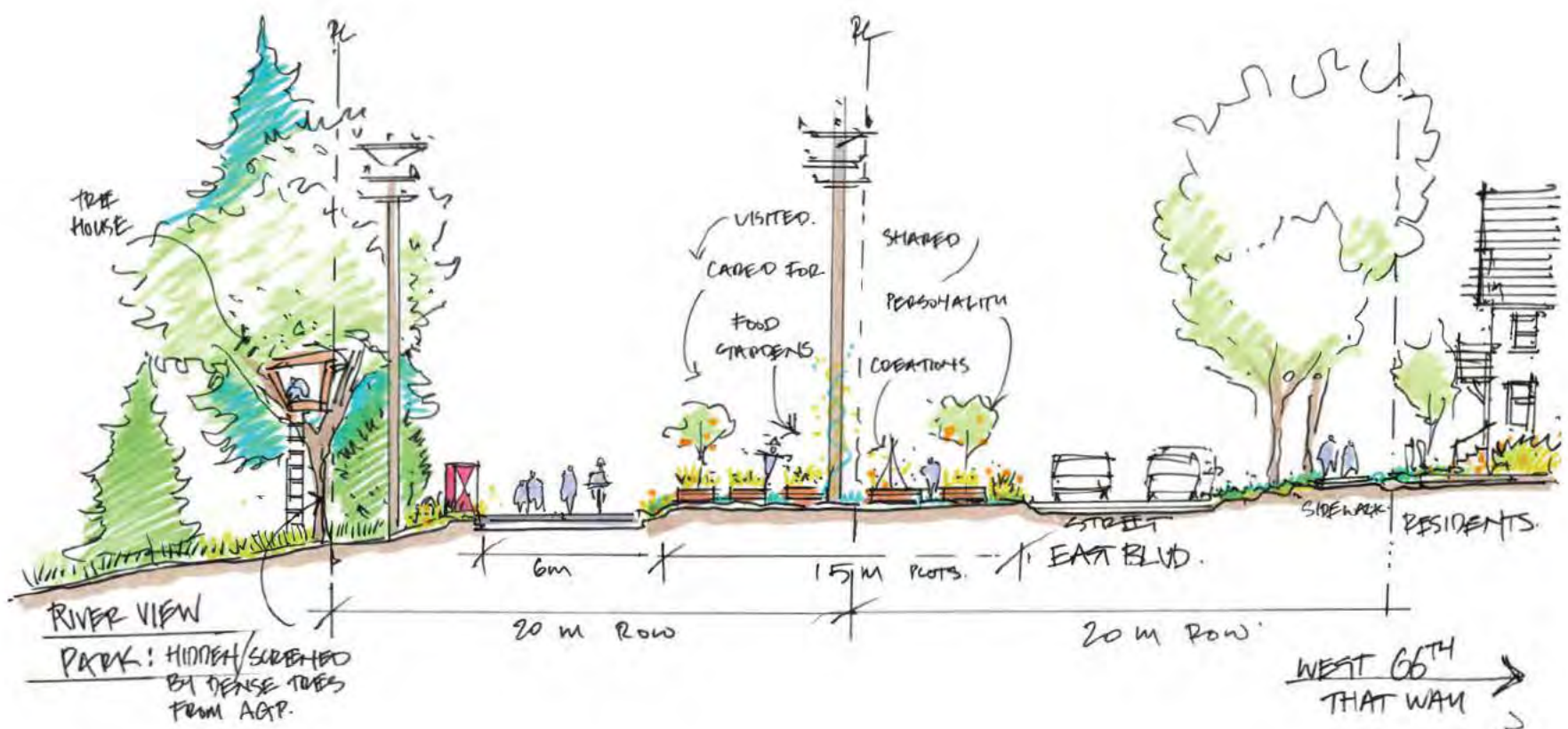
Along this stretch of the Corridor are the Arbutus Victory Gardens, which were established during World War II in response to the government's call to action for food production.

Forming a unique part of the Corridor's history, the gardens were founded in 1942 by Dr. Donald Flather, a local resident who lived on East Boulevard. With a doctorate in botany and biology, Dr. Flather continued gardening up until his death in 1990. Local area residents continue to maintain the gardens today.

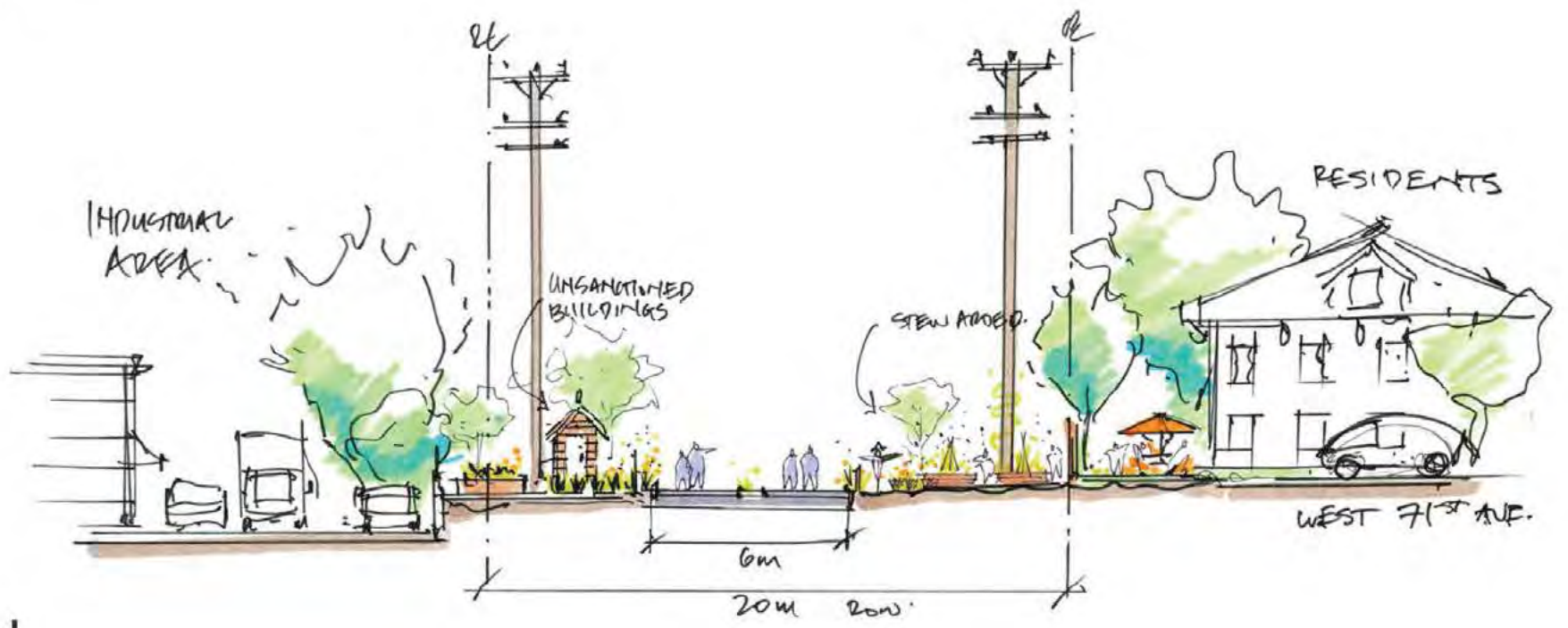
As a well-vegetated part of the greenway, many butterflies, bees, and songbirds populate this area.



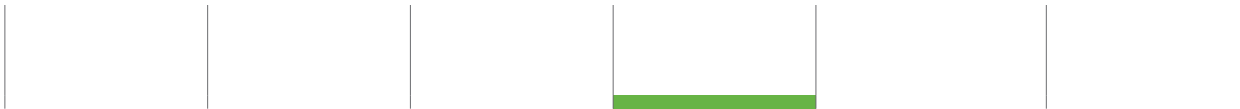
bright floral  
songbirds  
butterflies lawn  
bees interesting song  
wildflowers  
discovery  
gardens











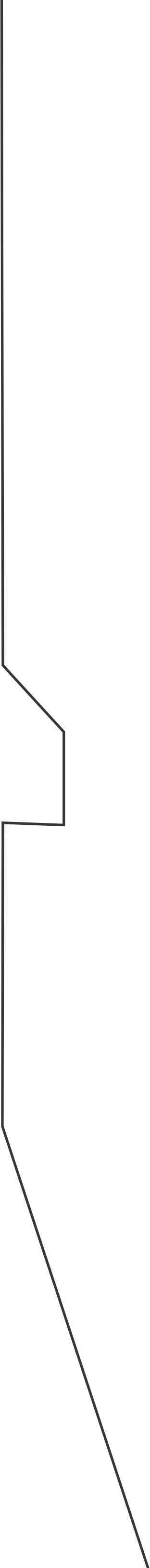
**Marine Drive**

The nearby industrial areas create the greatest influences on this segment of the Corridor. As is typical in these environments, larger block edges and a “back of house” feel influence the experience as well as a dramatic difference in existing landscape characteristics.

Further north of the industrial area are single-family home residential areas in the community of Marpole, which line the east side of the Corridor. Unique to this part of this segment are informal pathways that, if not marked by crossing stripes, would be overlooked. The narrow paths lead to small parks or into the adjacent neighbourhood.

Recent wildflower plantings have resulted in bringing back birds, bees and butterflies.





**Milton Street / William Mackie Park**

William Mackie Park provides a neighbourhood quality feel to this south terminus segment of the Corridor. As a well-loved and cared for green space, there is an opportunity for the Greenway to be better visually and physically connected to this neighbourhood destination.

The Corridor terminates at the south end in an industrial area, just north of the Fraser River. This area is not considered a comfortable destination on the Corridor.

The Arbutus Greenway Project will also examine transportation and placemaking connections at the north and south ends of the Corridor.

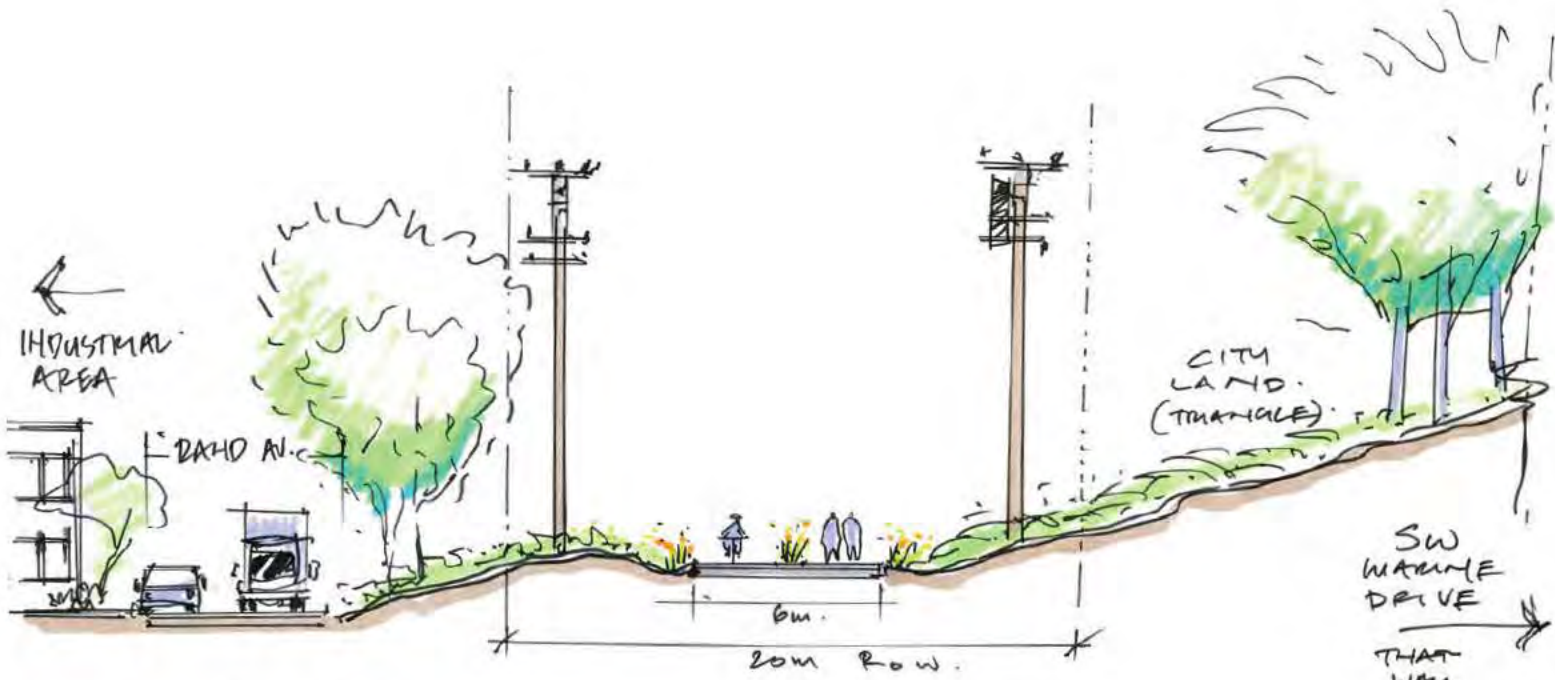
The northern extent of the current corridor terminates at Fir Street just south of West 5th Avenue. This study will also consider high-quality pathway connections to a number of surrounding destinations, including connections to Downtown via Burrard Street and/or Granville Street, the South False Creek Seawall, and Granville Island.

The southern extent of the purchased Corridor currently terminates at Milton Street just south of Southwest Marine Drive. Although the current Corridor terminates at this point, this study will also consider high quality greenway connections to a number of surrounding destinations, including connections to the Fraser River, future potential trails and greenways east and west along the Fraser River, and connections across the Fraser River.





LOUD  
trucks  
Idling traffic  
CONSTRUCTION  
zoom  
Industrial  
exhaust  
plane



MILTON ST SECTION 1:75



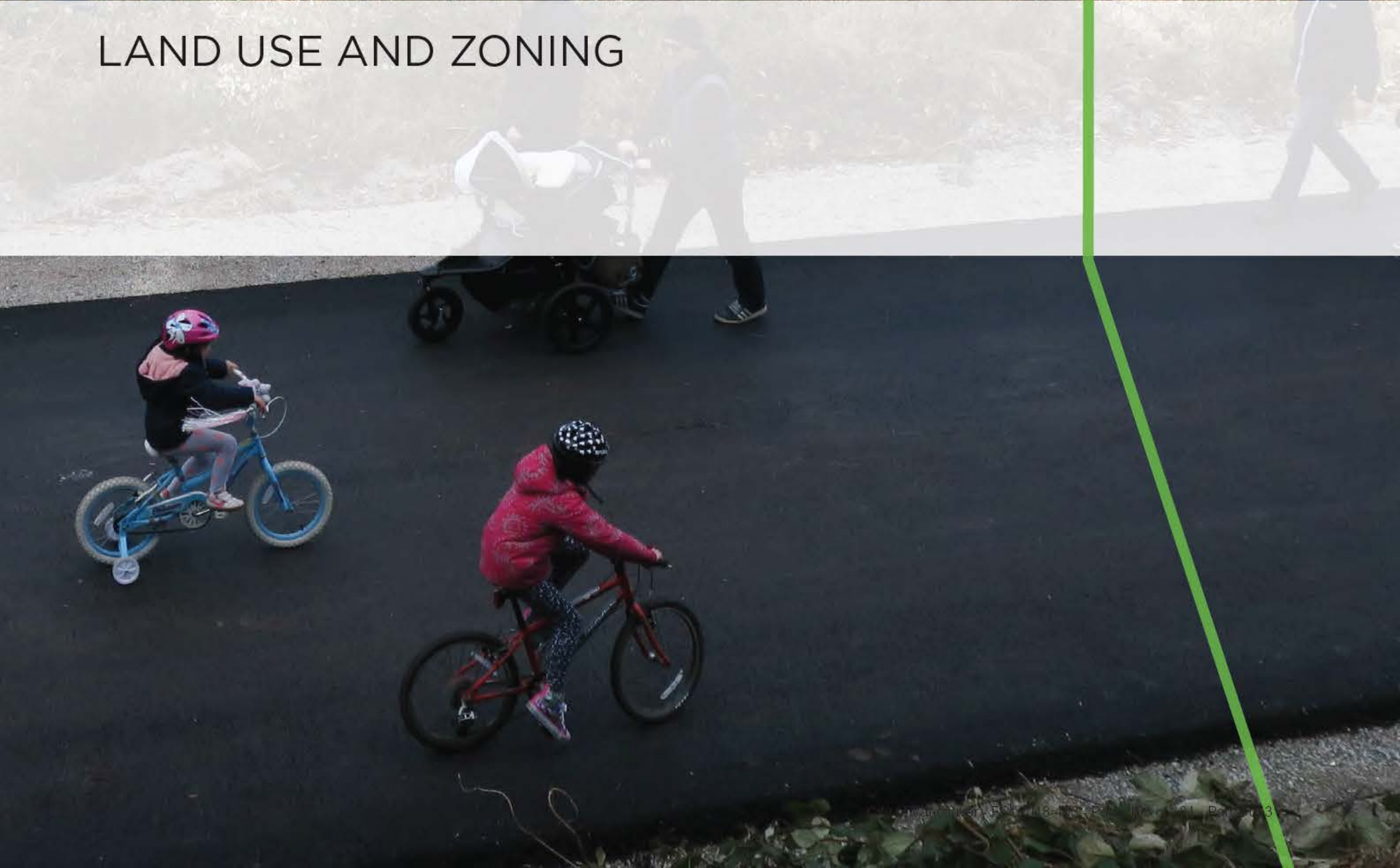








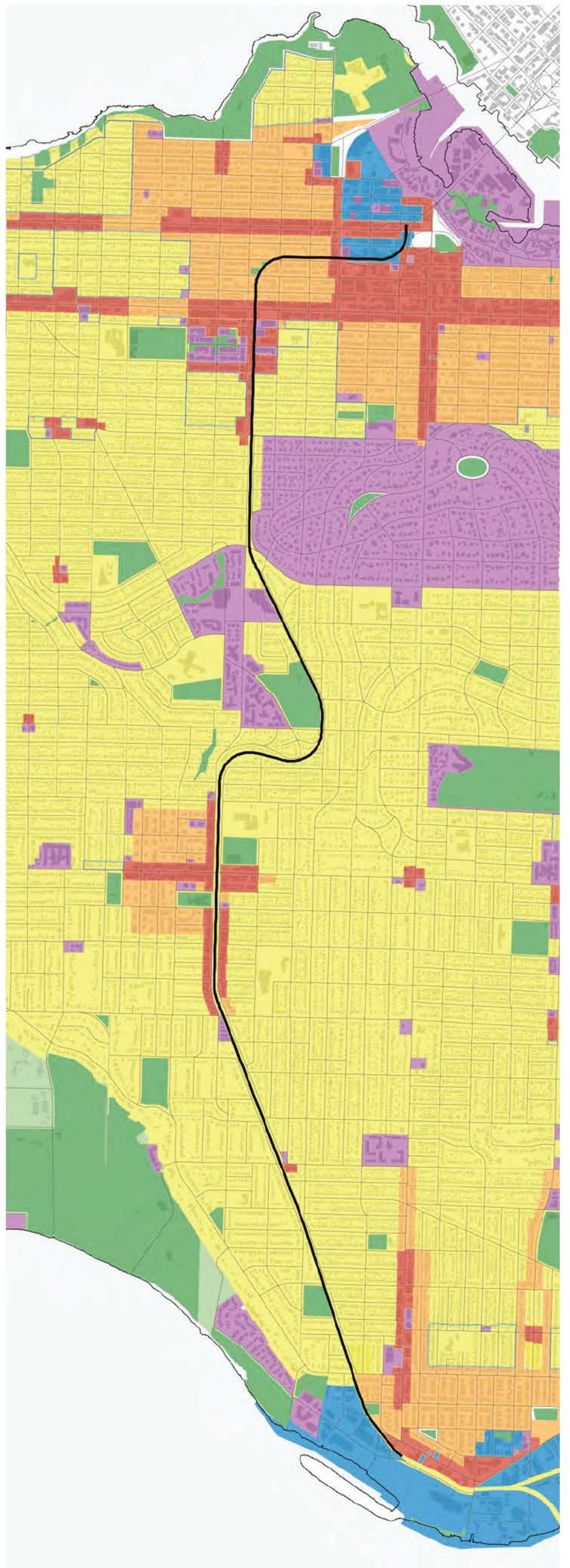
## LAND USE AND ZONING





**LEGEND**

- Industrial
- Commercial
- One-Family and Two-Family Dwellings
- Multifamily Dwellings
- Comprehensive Development
- Parks
- Agriculture







# LAND USE AND ZONING

Current zoning along the Arbutus Corridor consists of five main categories:

**Industrial** – Includes the north and south ends of the Arbutus Corridor. Artist studios, Arts and Culture Indoor Events, Manufacturing, Retail, Service, Transportation and Service, Utility and Communication and Wholesaling are among the permitted uses in this category.

**Commercial** – Provides a wide range of commercial goods and services for the local community and adjacent neighbourhoods. Areas that are zoned commercial from north to south and which intercept several nodes along the Corridor are: Granville Island, West 4th Avenue, West Broadway, Arbutus Ridge, Kerrisdale, Marpole Village and West 57th Avenue.

**One-Family and Two-Family Dwellings** – comprises the largest zoning district along the Corridor, with predominantly One-Family Dwellings. One-Family Dwellings maintain the single-family residential character of the district and conditionally permit laneway houses. Two-Family Dwelling zoning also includes low-density multiple-family housing, which supports relatively low-density areas along the Corridor.

**Multi-Family Dwellings** – Include medium density residential development, low-rise and high-rise apartment buildings, and ground-oriented stacked townhouses or row houses, including courtyard row houses. Multi-family dwellings are along the commercial zoning districts.

**Comprehensive Development Districts (CD1)** – Arbutus Village, False Creek, and First Shaughnessy are approved CD1 districts that make up a notable portion of the zoning districts along the Corridor.

Planning for the Greenway will need to consider potential changes to adjacent districts (commercial, residential, park, and industrial) and opportunities to provide plazas to support retail in nearby commercial areas.

The future planning of the Arbutus Greenway will consider how to integrate with neighbouring uses and programs, co-evolving with adjacent communities and uncovering opportunities for both public and private spaces.





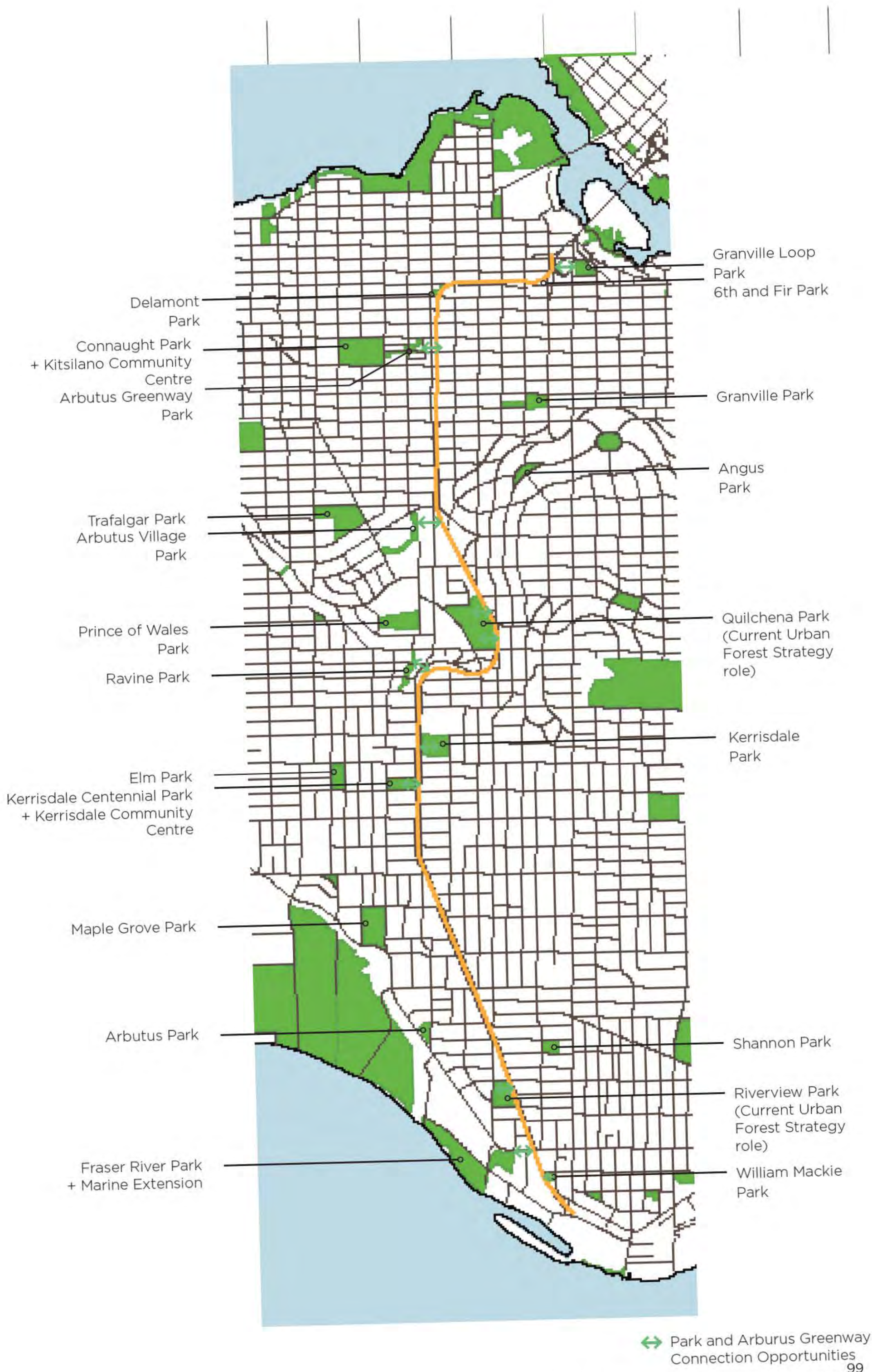
## PARKS

Our large parks provide a place to recreate and experience wildlife amid stunning natural features such as forests, foreshore and wetlands. They make up the major ecological network of our city, and play an essential role in providing habitat for native birds and other wildlife.

In addition to connecting these amenities through healthy and active transportation, the Arbutus Corridor has the potential to act as a habitat corridor for wildlife, connecting larger parks and natural areas from the Fraser River to False Creek. This can be achieved through small interventions and incremental application of habitat, native plants and integrated rainwater management.

Exploring ways to support ecological, recreational and transportation connections will be an important aspect of the Arbutus Greenway design process.









## SCHOOL CATCHMENTS

The role of the Greenway as a transportation route for children to and from school should be considered in the planning and design process.

The Arbutus Greenway intersects four school catchments of the Vancouver School Board. The catchments are distinguished by the name of the secondary school in each area. From north to south the catchments are: Kitsilano, Prince of Wales, Point Grey and Magee. Adjacent to the east boundaries of these regions are the school catchments of Hamber and Churchill.

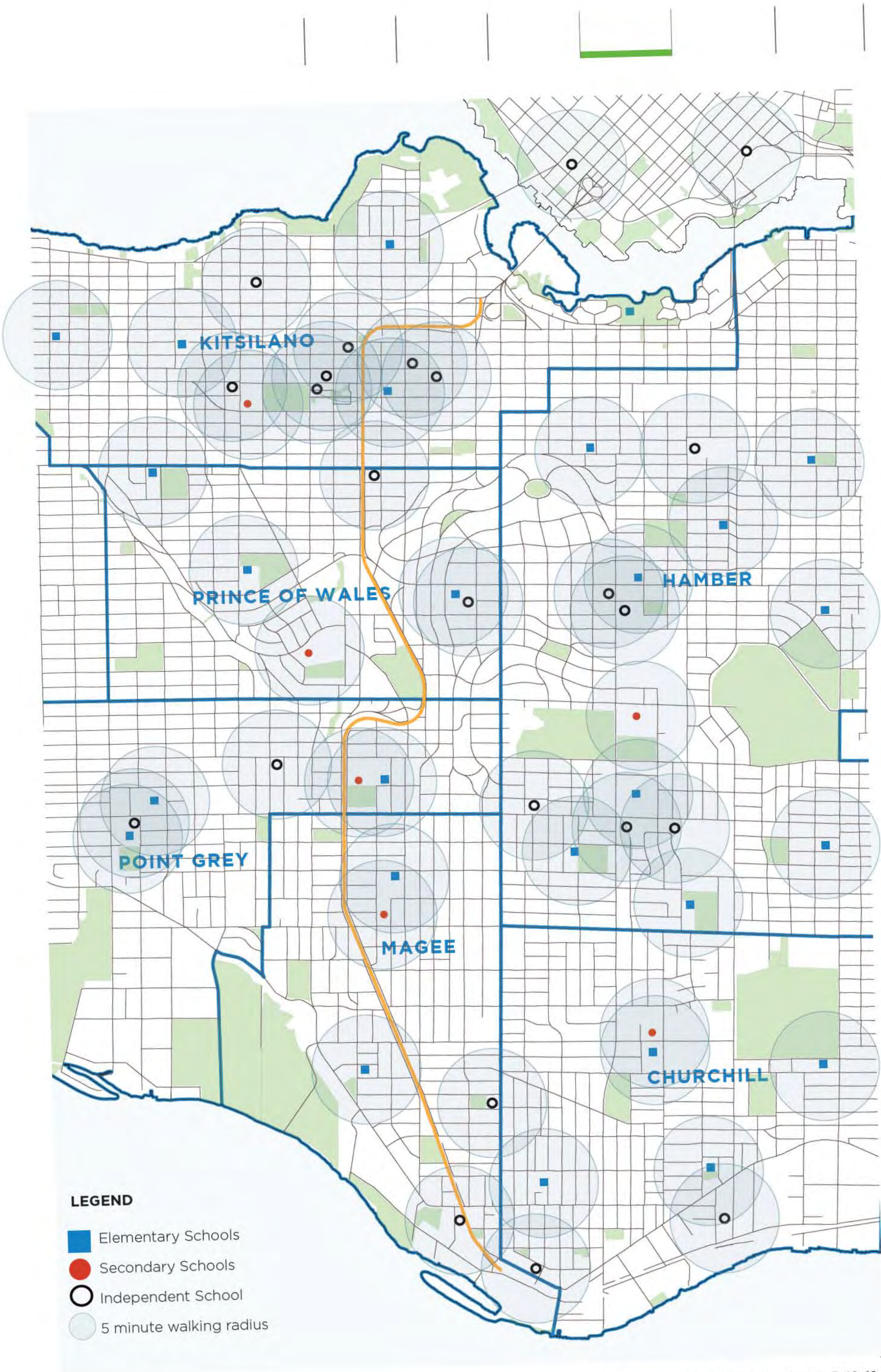
In total, there are three secondary schools (Prince of Wales, Point Grey and Magee) and six elementary schools (Tennyson, Shaughnessy, Quilchena, Maple Grove, McKechnie, and Lloyd George) located within 1km of the Greenway. There are also a significant number of independent schools in proximity to the Greenway.

Students attending the cluster of school between 6th Avenue and 16th; the schools between 37th Avenue and 49th Avenue in the eastern portion of the Point Grey; and, the north portion of the Magee school catchment areas are considered likely to use the Greenway to walk or cycle to school.

Seasonal design for youth in the wet fall, winter and spring months should be considered, especially in these areas where the Greenway may become a daily morning and afternoon route.

The numerous schools in close proximity to the corridor highlight the importance of considering children and youth as active participants and users of the Arbutus Greenway, not only in terms of transporation, but also in terms of play.





**LEGEND**

- Elementary Schools
- Secondary Schools
- Independent School
- 5 minute walking radius





## Planned Development

The new design of the Greenway will need to consider future planned developments in adjacent areas, and allow for the Greenway to grow with the City ensuring that it will be enjoyed by generations to come.

### GRANVILLE ISLAND 2040

Granville Island is one of Vancouver’s cultural hubs and a major destination for locals and tourists. Situated immediately north of the current terminus of the Arbutus Corridor, Granville Island will need to be readily accessible from the Greenway. A new phase of growth and development is planned for Granville Island, including the following anticipated improvements:

- Improving public transit, pedestrian, cycling and ferry access to Granville Island
- Expanding the public market and creating a market district as a major food destination
- Establishing a new art and innovation hub
- Restoring and sustaining the public realm of various parts of Granville Island

### ARBUTUS VILLAGE REDEVELOPMENT

The Arbutus Shopping Centre was built as part of the Arbutus Village residential community. Its redevelopment is anticipated to be one of the largest projects of its kind ever built on the west side of Vancouver. The seven-acre site between the Arbutus Village Park and the Arbutus Club will be developed in phases and will consist of:

- Construction of four mid-rise buildings of mixed-use residential and commercial retail
- Increased density of more than 500 residential units (market rental units and city-owned market units)
- Anticipated completion in 2019



MARPOLE COMMUNITY PLAN

The southernmost portion of the Corridor runs through Marpole, Vancouver’s southern waterfront on the Fraser River. In 2014, Council approved the Marpole Community Plan, which aims to provide a development plan over the next 30 years. Anticipated growth for the area includes 54 per cent increase in population and 81 per cent in employment.

In the future, the area will offer a wider range of housing options such as townhomes, mid-rise (up to 12 storeys) residential buildings, and residential towers (more than 13 storeys). These developments will be built along or near major streets in Marpole, including Granville Street, West 70th Avenue and Cambie Street. Transportation improvements, including the Greenway, will also form part of Marpole’s changing landscape.

For the Arbutus Greenway to serve the present and future communities, consideration and awareness of future planned developments immediately adjacent and in proximal distance will provide valuable insight into how the Greenway may facilitate growth and repose for an ever-changing urban landscape.







## City-Owned Land

The following map provides an overview of City-owned land in and around the Arbutus Corridor. Redevelopment and programming of these lots is an important consideration as the design of the Greenway advances.



