





Appendix B -Arbutus Greenway Design Vision

July 2018



VISION STATEMENT

The Arbutus Greenway will be a defining element of Vancouver's urban landscape as a vibrant and beautiful public space for walking, wheeling, 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.

PROJECT 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. Engage and involve local stakeholders and citywide residents.
- 8. Ensure the Arbutus Greenway design is resilient and adaptable to allow for changing circumstances.
- 9. Allow the Arbutus Greenway to be constructed in phases, to accommodate a variety of funding strategies and changing circumstances.

Introduction

The origins of the Arbutus Greenway can be traced back to the City's 1995 Greenway Plan within which Arbutus Way was identified as "the most desireable Greenway route next to the waterfront routes". Twenty one years later, in 2016, the City of Vancouver purchased the Arbutus railway corrdior from Canadian Pacific Railway for the purpose of creating a high-quality public space for walking, cycling, and future streetcar that connects people, parks, and places from False Creek to the Fraser River.

This document provides a summary of the design vision for the Arbutus Greenway: a vision that is the culmination of a two-year planning, design and engagement process. Public engagement has underpinned the Arbutus Greenway design process, influencing the vision for the future greenway and identifying a broad suite of design ideas that the project team have incorporated within the project. Since 2016, the City has held 50-plus events and had more than 7,000 participant interactions, helping to shape the development of the designs thus far.

Traveling through eight distinct character zones, the Arbutus Greenway provides a range of experiences and spatial qualities. The design concepts represented on the following pages take inspiration from distinct neighbourhood characteristics and features as well as adjacent parks, distant views, and places where people can come together.

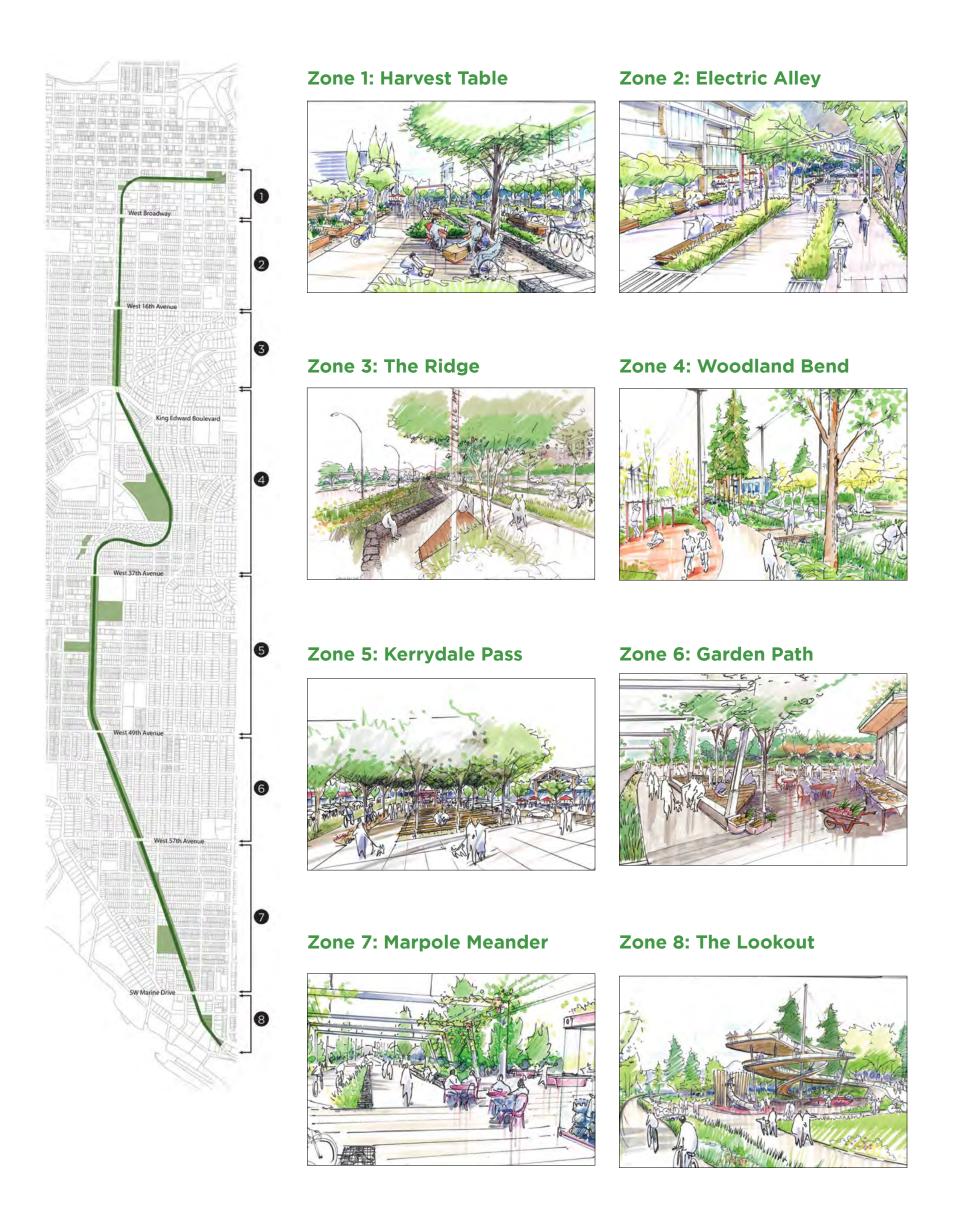
The Arbutus Greenway Design Vision also acknowledges that the greenway is situated on the unceded traditional homelands of Musqueam, Squamish, and Tsleil-Waututh (MST) Nations. As such our commitment to MST Nations is that we will continue to collaborate with them on the overall design of the future greenway, and ensure the design recognizes the history and cultural diversity of the lands.

While this design vision provides a high level direction for the development of the Arbutus Greenway, we anticipate that the detailed design of each of the eight character zones will continue to elaborate on this vision and will include further opportunities for public involvement.

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Overview of Character Zone Themes





DESIGN THEME: HARVEST TABLE

The Harvest Table is a place of coming together to convene over urban agriculture and food. The existing community gardens play an instrumental role in the experience of the zone and two city parks (Delamont, West 6th and Fir) adjacent to the greenway provide places for people to pause, relax and recreate. Harvest tables offer places for people to socialize and enjoy a picnic. Architectural structures at select locations mark gateways onto the greenway, and provide opportunities for public art and overhead lighting.



DESIGN HIGHLIGHTS

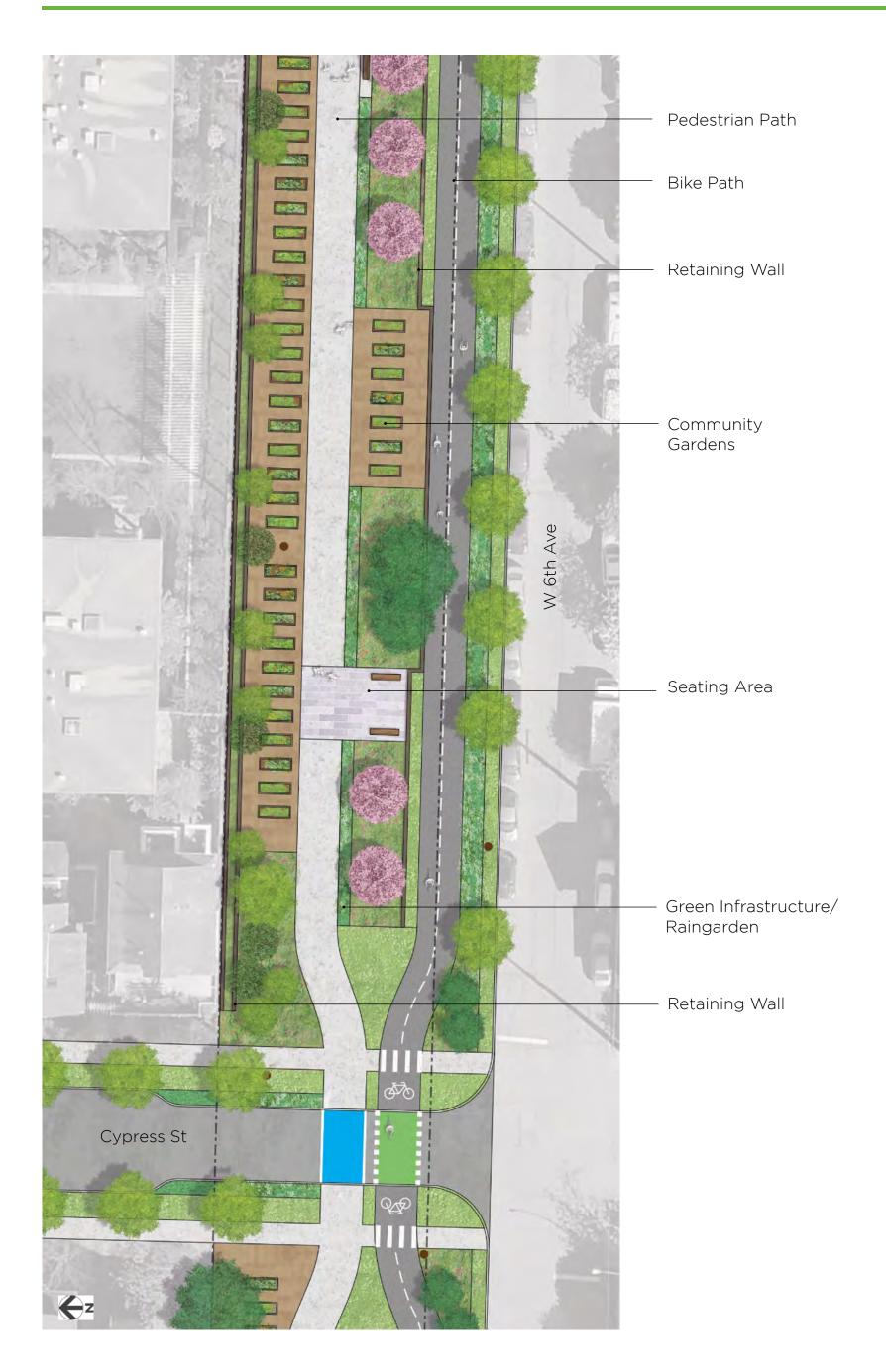
Public realm improvements:

- Benches, a public washroom and other landscape furniture
- Harvest tables for picnics and community gatherings
- Small plaza at Burrard St
- Wildlife habitat and raingardens

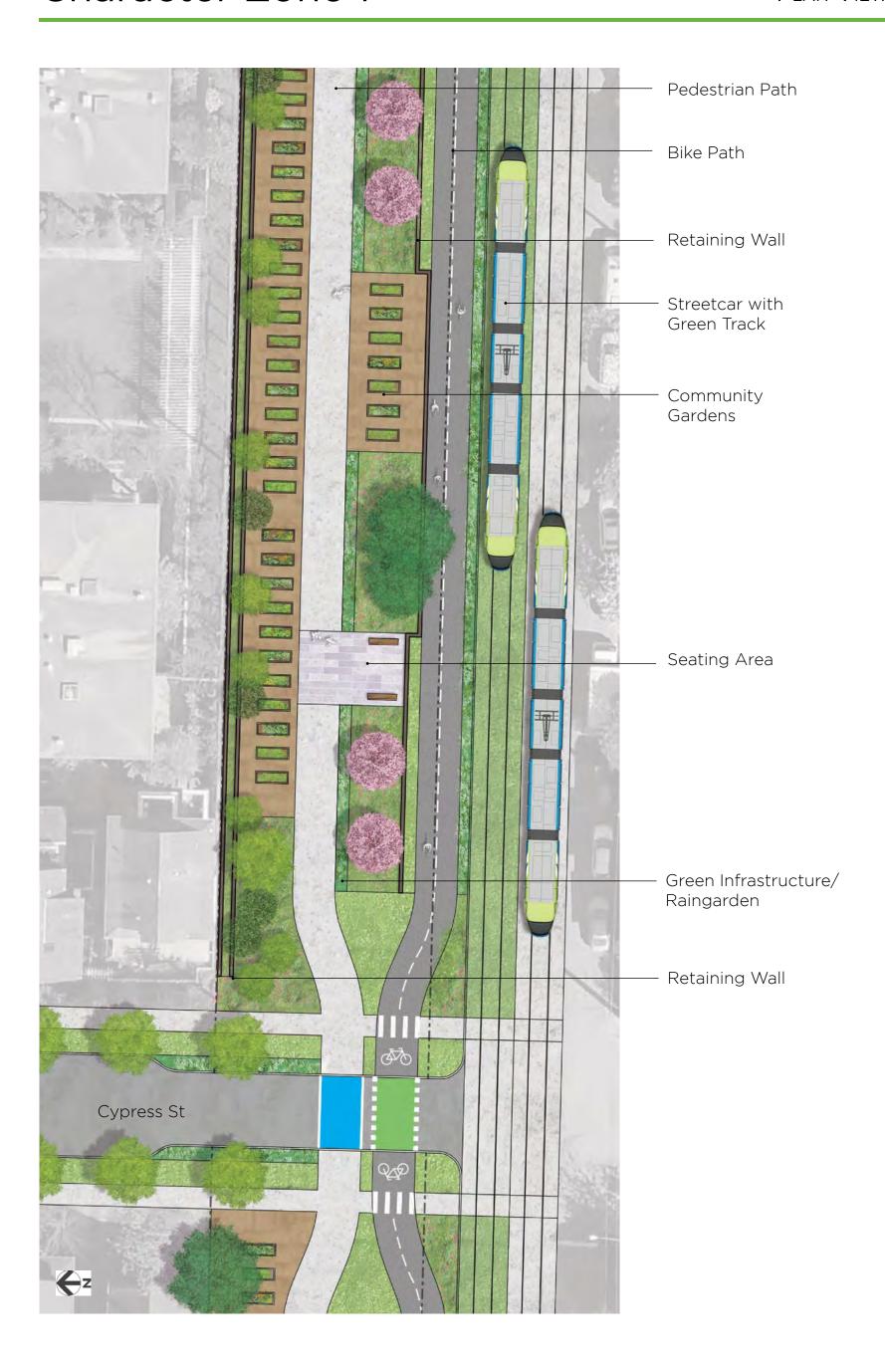
Transportation Improvements

- 3.5 metre walking and cycling paths
- Physical separation between pedestrians and cyclists
- New signalized crossings at Burrard St and W Broadway
- Connections to False Creek and Granville Island
- Dark Sky compliant pathway lighting

- Provide places to sit and relax: "Places to sit, hang out, and have a conversation" and "seating (formal and informal) in sunny spaces close to amenities"
- Integrate food production into design: "Recognize connection to food"
- Be mindful of neighbouring properties for the location of the harvest table.

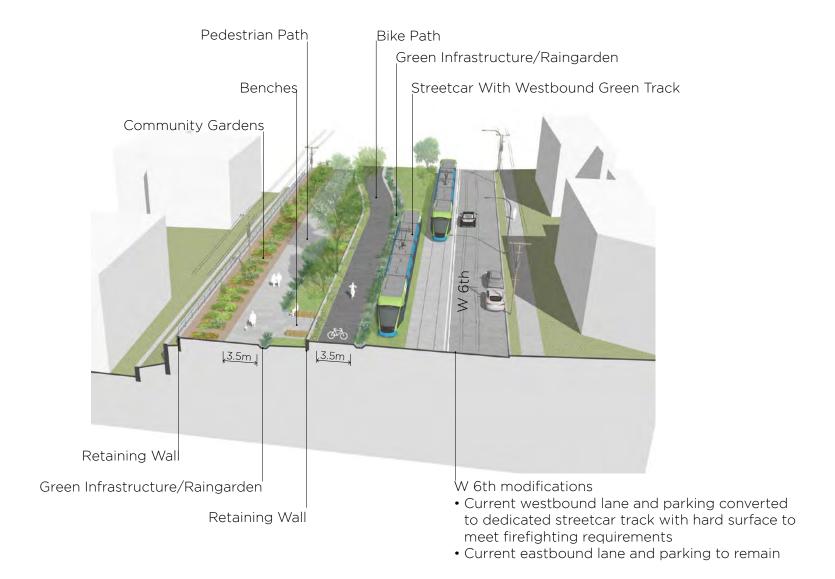


PRE-STREETCAR PLAN VIEW





PRE-STREETCAR 3D MODEL



POST-STREETCAR 3D MODEL



DESIGN THEME: ELECTRIC ALLEY

Electric Alley is the narrowest section (15m) of the greenway and is named after the only remaining interurban power poles along the corridor. It provides a series of garden rooms for seating, public art and native planting that provide respite and enhance the zone's ecology. Small plazas at W Broadway and W 16th Ave mark gateways into the zone. Architectural structures at select locations provide opportunities for overhead lighting, planting and public art. Future development along the west side of the greenway could include a coffee shop/cafe fronting the greenway and offer a place to stop for a drink or a snack.



DESIGN HIGHLIGHTS

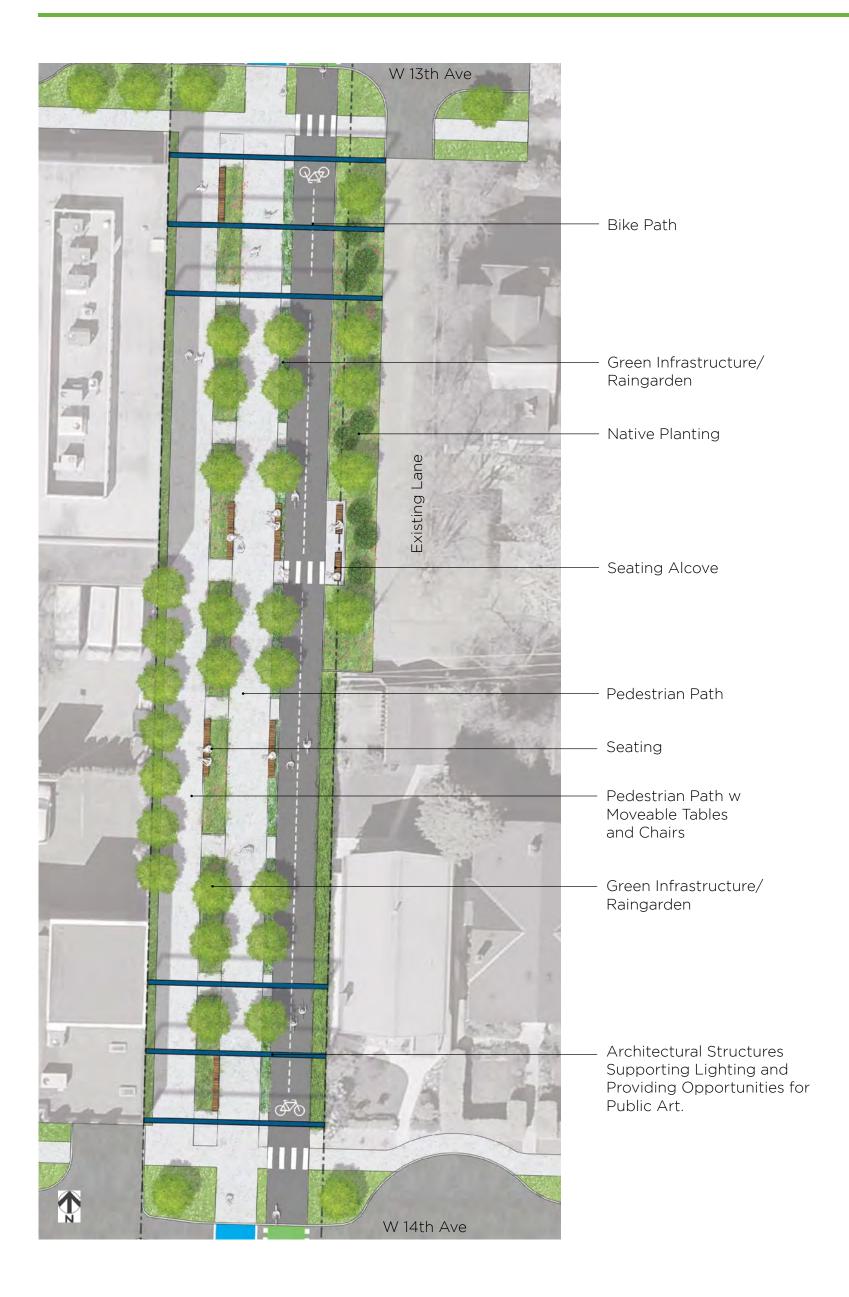
Public realm improvements:

- Architectural elements for gateways, lighting, and public art
- Small plazas at W Broadway and W 16th Ave
- Benches, a public washroom and other landscape furniture
- Trees, wildlife habitat and raingardens

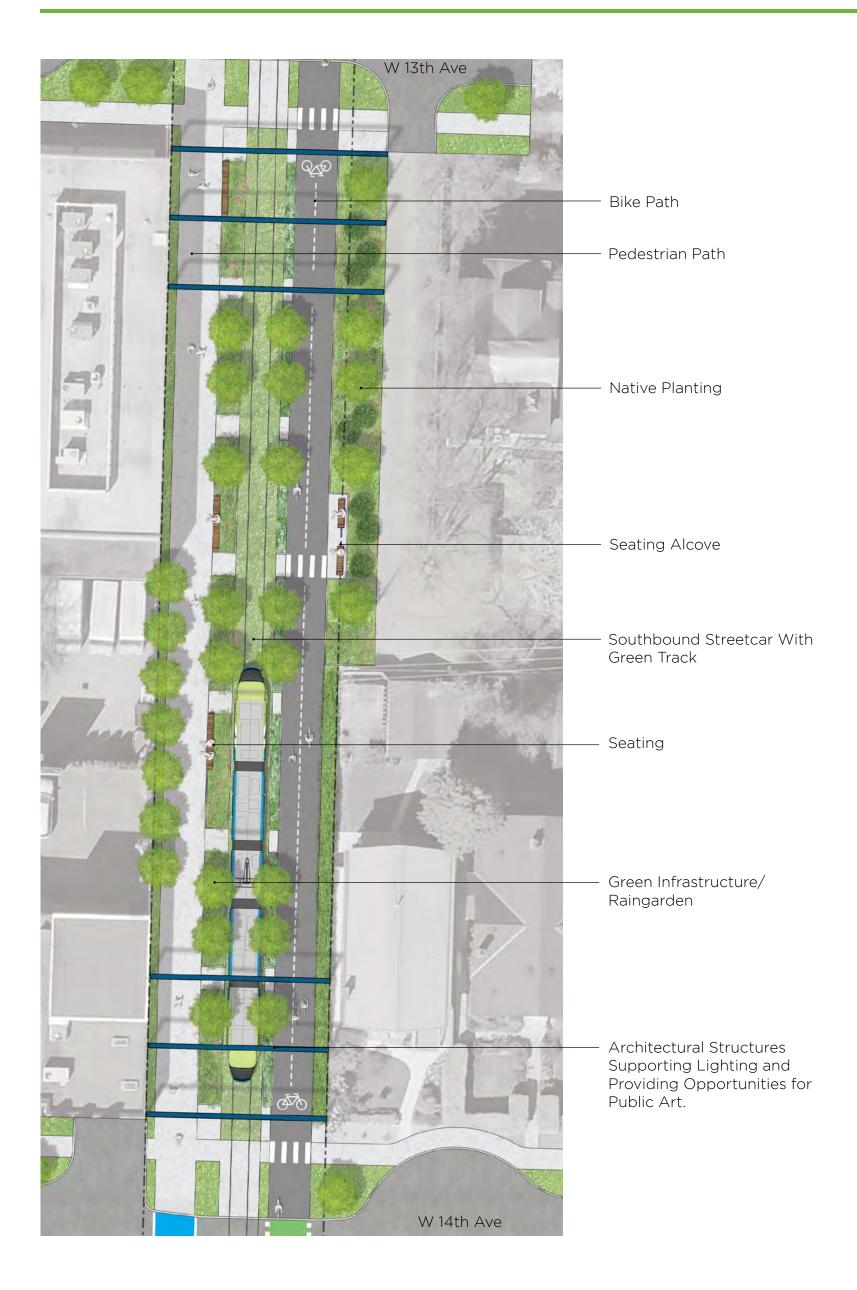
Transportation Improvements

- 3.5 metre walking and cycling paths
- Physical separation between pedestrians and cyclists
- New signalized crossings at W Broadway and W 12th Ave
- Connections to W 10th Ave bike route and future W 14th Ave bike route
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences

- Create different rooms: "Different spaces, different functions, some more urban, some more immersive in nature"
- Connect to the greenway: "Create nodes where bike/bus routes and commercial areas intersect, and provide seating, maps, and shelter"
- Be mindful of neighboring properties "Please be considerate with the lighting, particularly in Electric Alley, but more generally with all the lighting choices"

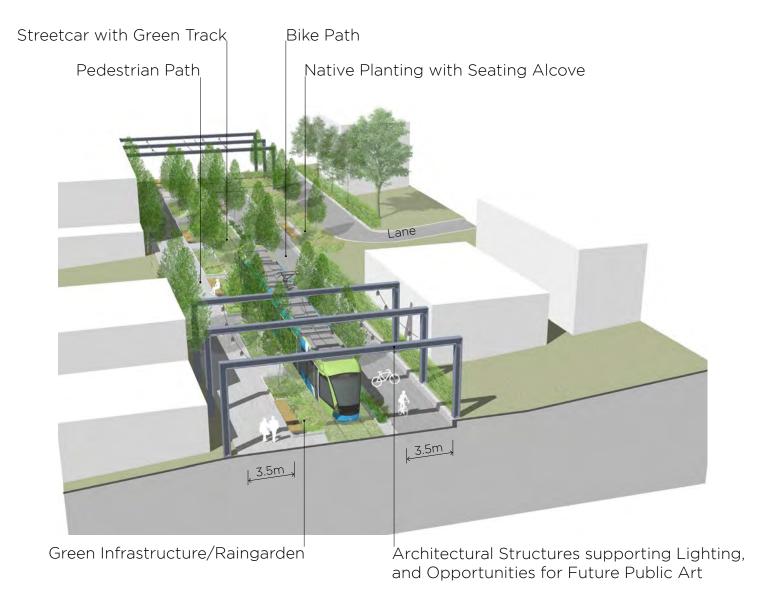


PRE-STREETCAR PLAN VIEW





PRE-STREETCAR 3D MODEL



Post-Streetcar 3D Model



DESIGN THEME: THE RIDGE

The Ridge is the most expansive section of the greenway with panoramic views to English Bay and the distant mountains. The eastern half of the zone sits considerably higher than Arbutus Street and is defined by a series of bold, angular landforms and retaining walls that create promontories for people to sit, relax, and enjoy the views, as well as accomodate public art. Native plants are used extensively, including pollinator-friendly plants, to provide habitat for birds and bees, and to enhance the zone's ecology.



DESIGN HIGHLIGHTS

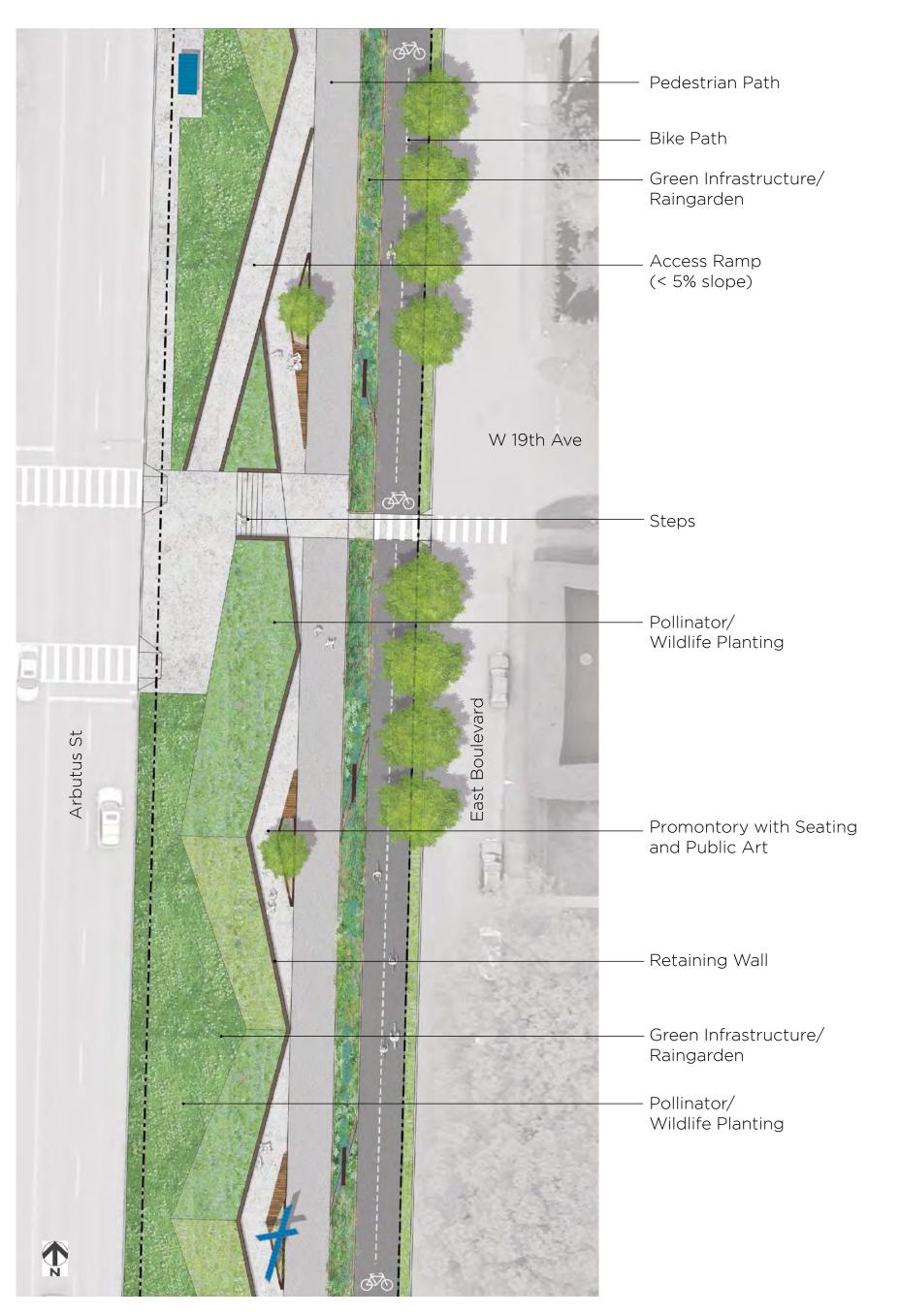
Public realm improvements:

- Angular promontories for seating and public art
- Benches, a public washroom and other landscape furniture
- Wildlife habitat and raingardens
- Small grassy knoll at West King Edward Ave.

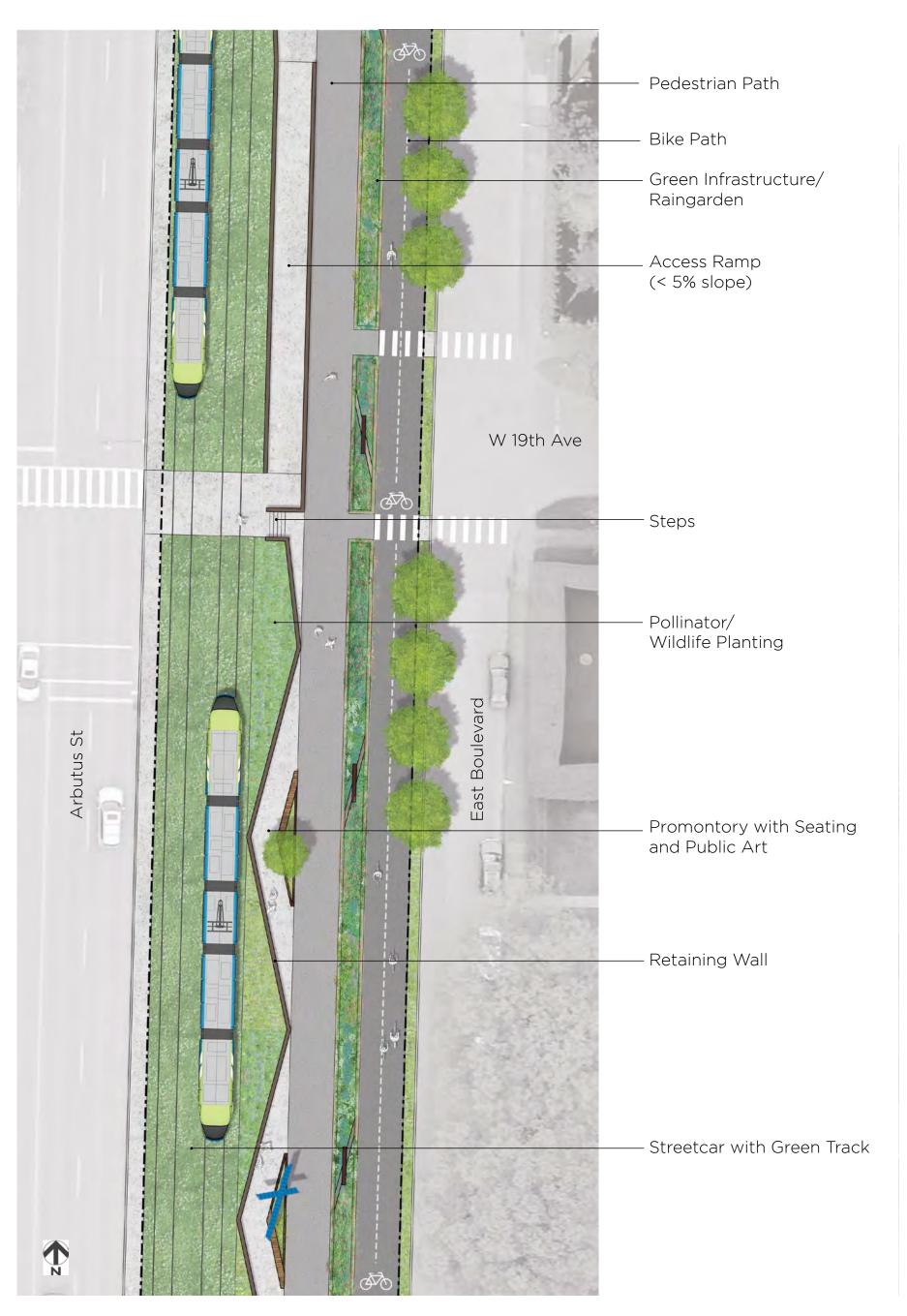
Transportation Improvements

- 3.5 metre walking and cycling paths
- Fully-accessible connection to Arbutus St at W 20th Ave
- Physical separation between pedestrians and cyclists
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences
- Enhanced connections from adjacent neighbourhoods

- Ensure "accessibility both on the greenway and getting to/from the greenway"
- Support biodiversity: "Create pollinator hotels"
- Showcase views: "Frame views and vistas"
- Incorporate public art: "Permanent and temporary art installations from 16th to 25th"



PRE-STREETCAR PLAN VIEW



POST-STREETCAR PLAN VIEW



PRE-STREETCAR 3D MODEL



POST-STREETCAR 3D MODEL



Design Theme: Woodland bend

The Woodland Bend is the quietest zone along the greenway as it is removed from major streets. The design leverages the existing mature trees in the adjacent Shaugnessy neighbourhood and in Quilchena Park to re-establish an immersive Pacific Northwest forest experience, complete with coniferous and deciduous trees. The winding pedestrian path includes a fitness circuit and parkour course that add recreational choices to the zone. Lookout points and seating areas between West 33rd Ave and West 37th Avenue take advantage of views to the North Shore Mountains.



DESIGN HIGHLIGHTS

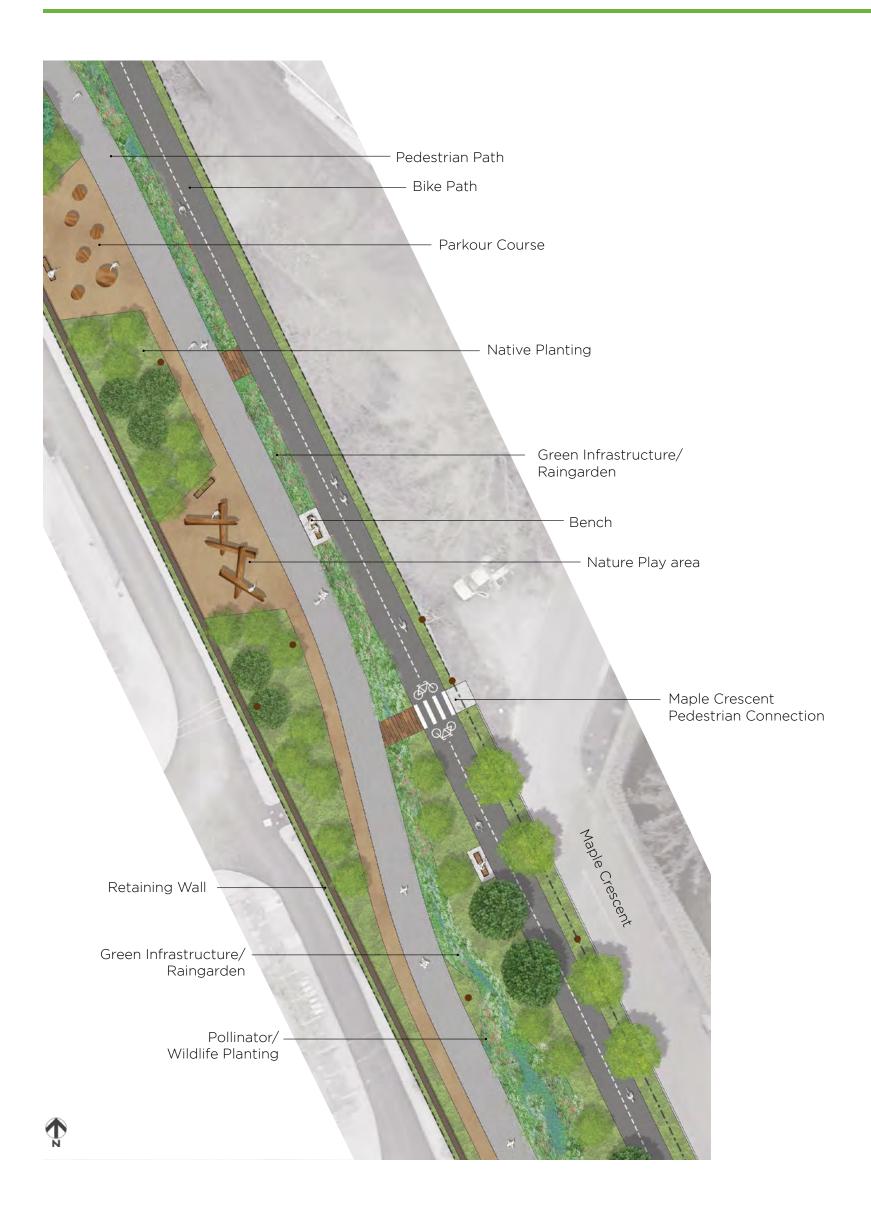
Public realm improvements:

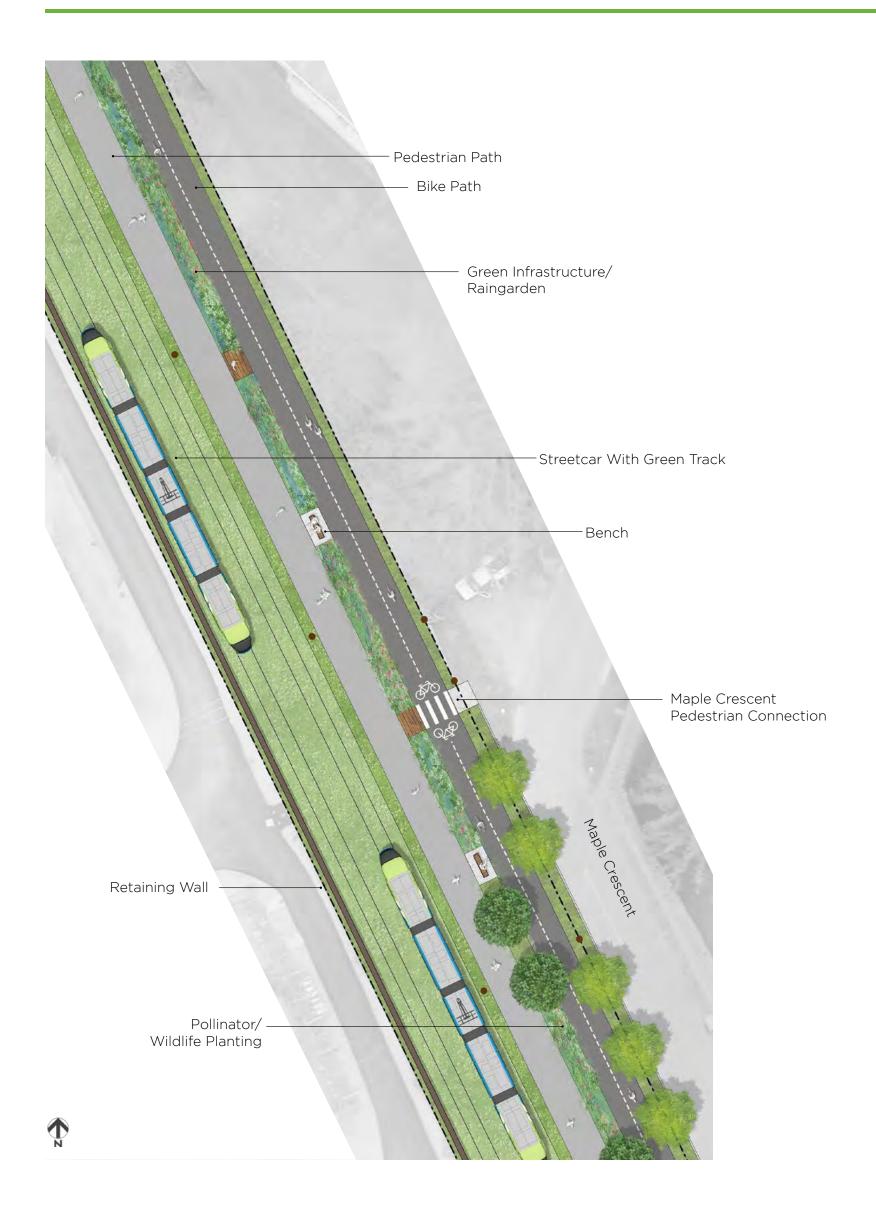
- Pacific Northwest forest canopy
- Benches and other landscape furniture
- Lookout points
- Fitness equipment and parkour course
- Nature play

Transportation Improvements

- 3.5 metre walking and cycling paths
- Physical separation between pedestrians and cyclists
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences
- Enhanced connections from adjacent neighbourhoods

- Showcase views: "I personally really like the Woodland Bend, the opened up view to the mountains is gorgeous. Please keep that and allow the public to enjoy it.
- Provide places to play: "Would be great to have some type of exercise stations along the way"
- Use "Indigenous species in landscaping"







PRE-STREETCAR 3D MODEL



Post-Streetcar 3D Model



DESIGN THEME: KERRYDALE PASS

Kerrydale Pass marks both the middle and highest points along the greenway. It passes through Kerrisdale, the largest retail and civic hub on the greenway. A public plaza on the north side of West 41st Ave provides a vibrant gathering area for programming, performances, entertainment, and celebrations. To the south of West 41st Ave notable features include a variety of seating areas, informal landscaped areas comprised of native and non-native plants, and a potential site for a small, annual garden design competition.



DESIGN HIGHLIGHTS

Public realm improvements:

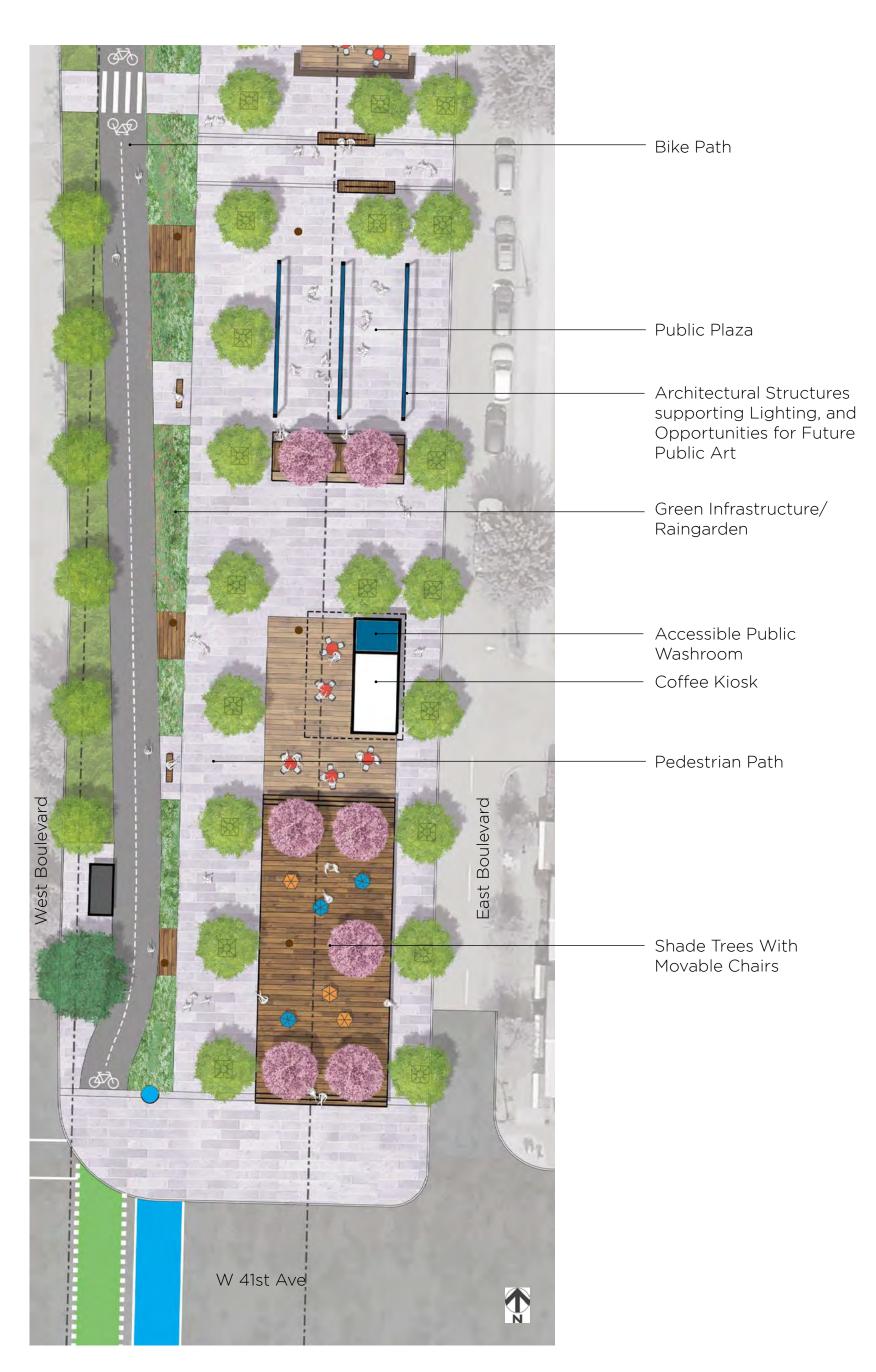
- Public Plaza with possible coffee kiosk
- Moveable tables and chairs for outdoor dining
- Dark Sky compliant lighting
- A variety of seating areas
- Benches and other landscape amenities

Transportation Improvements

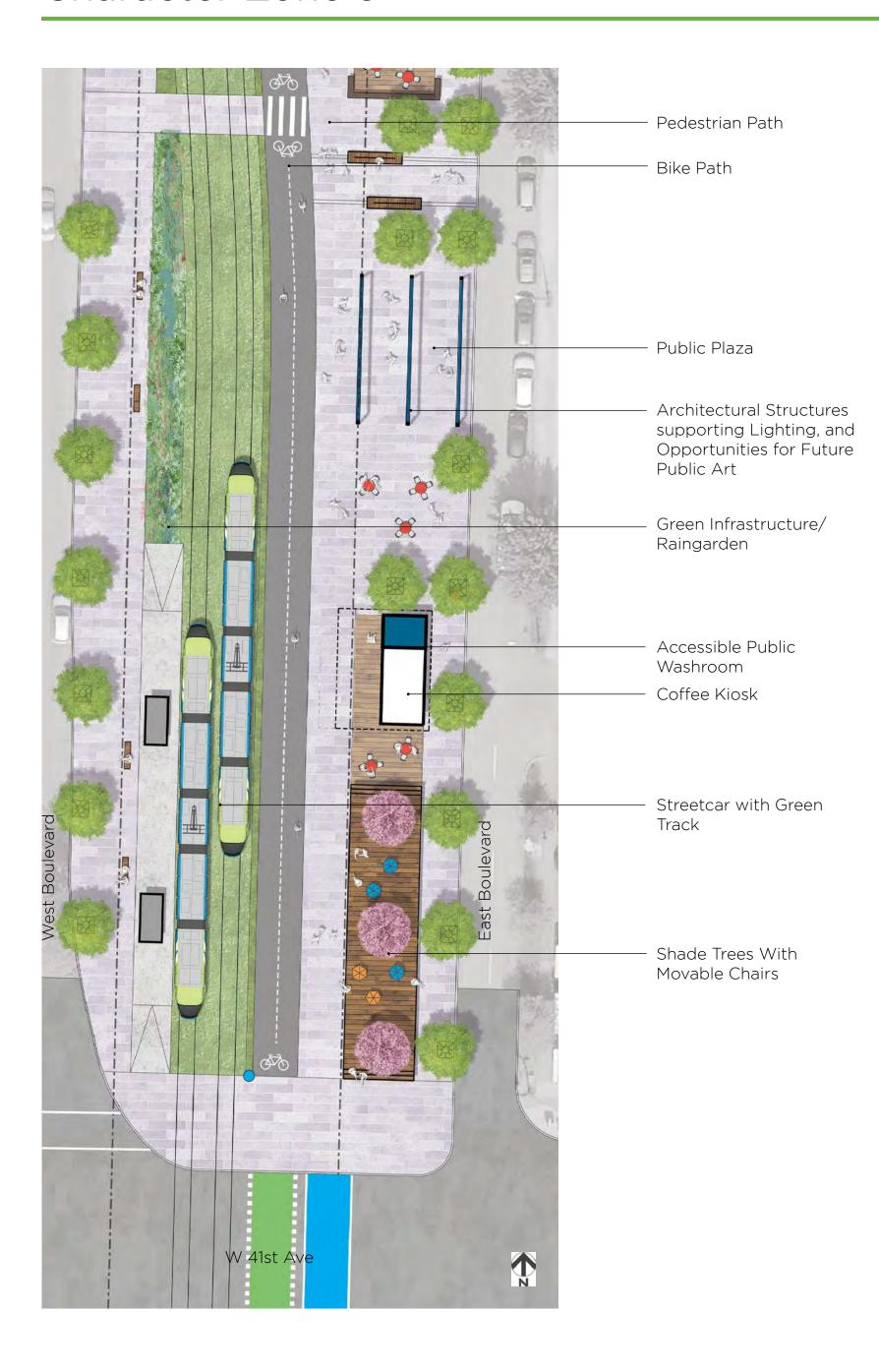
- 4 meter and 3.5 metre wide walking and cycling paths
- Physical separation between pedestrians and cyclists
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences
- Enhanced connections from adjacent neighbourhoods

Public Feedback

- Provide places to eat and drink: "Allow cafes and coffee shops on the greenway"
- Provide places to sit: "Ensure there are enough benches for people wanting to have a rest while in Kerrisdale"
- Celebrate distinct "Greenway Villages Kerrisdale has food and shops"



PRE-STREETCAR PLAN VIEW





PRE-STREETCAR 3D MODEL



POST-STREETCAR 3D MODEL



DESIGN THEME: GARDEN PATH

Garden Path celebrates the existing and historically noteworthy Victory Gardens located along the east side of the greenway, by making urban agriculture and urban ecology central themes. Extensive plantings of wildflowers and native grasses create a colourful, seasonally varied, pastoral experience and enhance the zone's biodiversity. A small community gathering area has been added at West 54th Avenue, as well as numerous seating areas, insect hotels and edible landscaping along the length of the zone.



Design Highlights

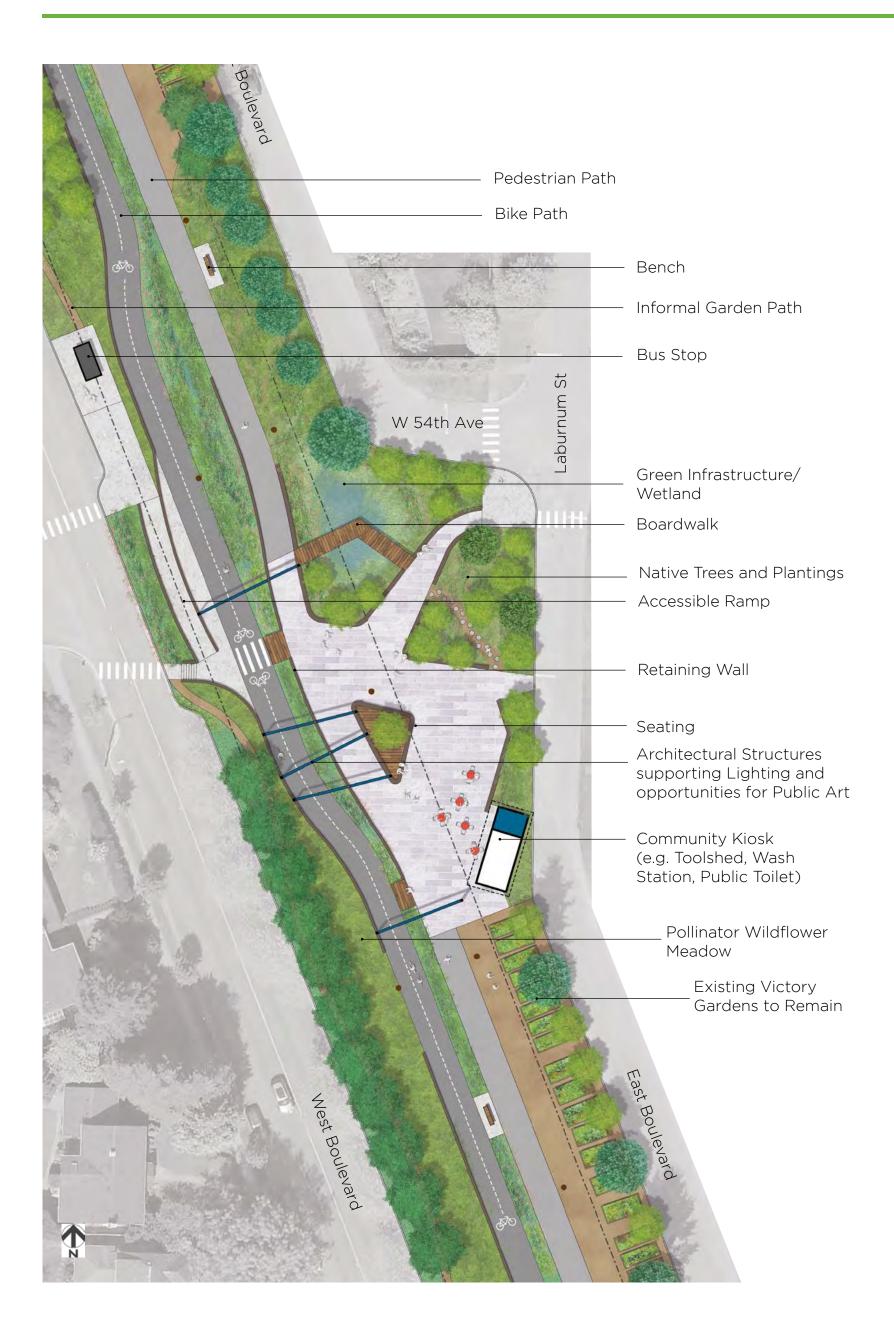
Public realm improvements:

- Community gathering area at West 54th Ave including tables and chairs
- Constructed wetland at West 54th Ave
- Dark Sky compliant lighting, benches, and other landscape amenities
- Extensive plantings of wildflowers and native grasses

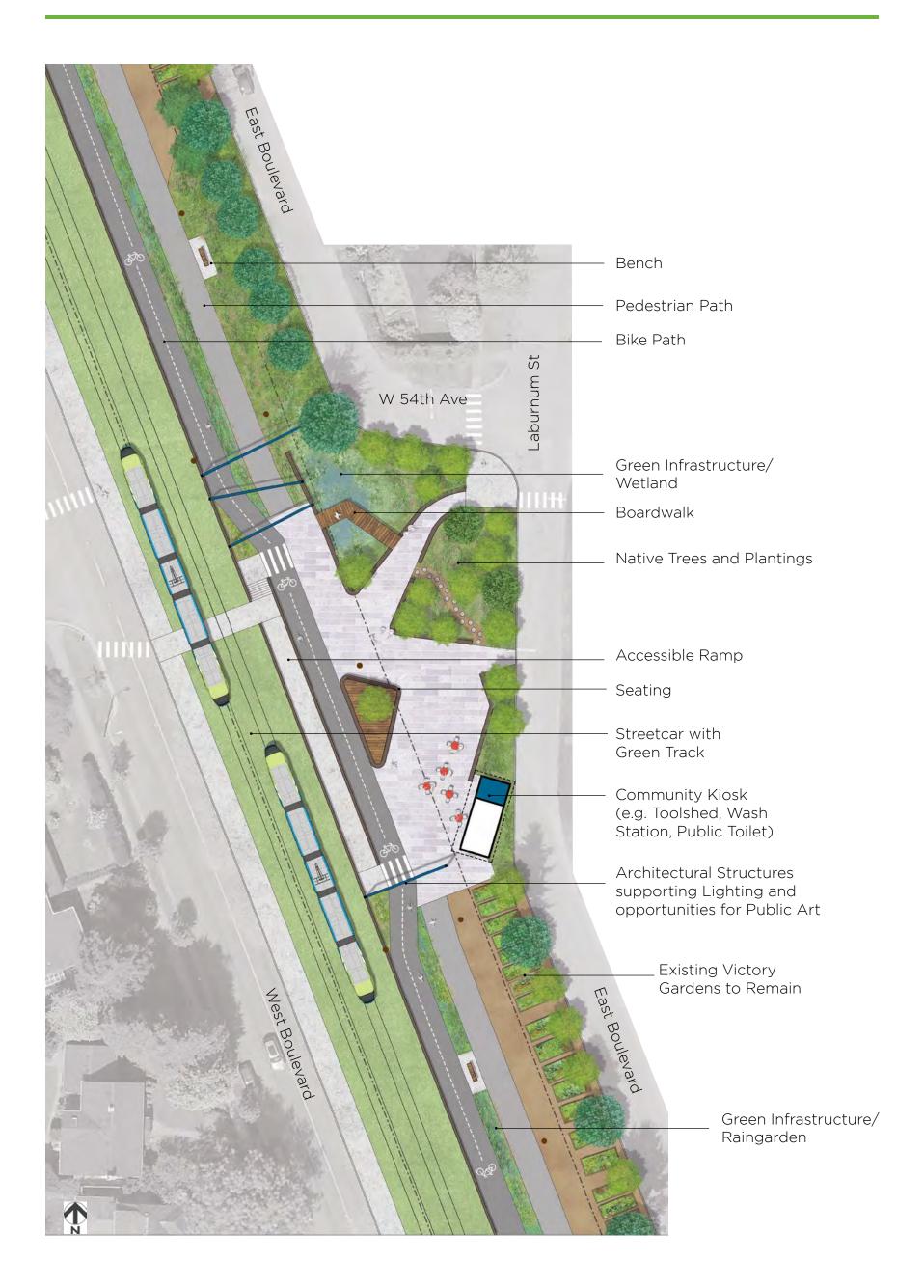
Transportation Improvements

- 3.5 metre walking and cycling paths
- Physical separation between pedestrians and cyclists
- Informal garden paths
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences
- Enhanced connections from adjacent neighbourhoods

- Support biodiversity: "Scented plantings, butterfly bush, different trees, bird nesting boxes"
- Incorporate urban agriculture: "Find a way to add more gardening spaces" where possible.
- Design for all ages and abilities: "Zone 6 from W Boulevard at 54th the path is steep, would like a ramp or curved path"



PRE-STREETCAR PLAN VIEW





PRE-STREETCAR 3D MODEL



Post-Streetcar 3D Model



DESIGN THEME: MARPOLE MEANDER

The Marpole Meander is one of the longest sections of the greenway and offers a variety of recreational opportunities (E.G. pickleball and bocce courts, ping pong tables, a large chess board, a parkour course and a kids bike skills course). A small community gathering area at West 60th Ave includes movable tables and chairs, a public washroom and a sharing shed housing recreation equipment. The zone also includes the southern portion of the Victory Gardens. The Marpole Meander passes by Riverview Park at W 64th Ave, the second largest park along the greenway.



Design Highlights

Public realm improvements:

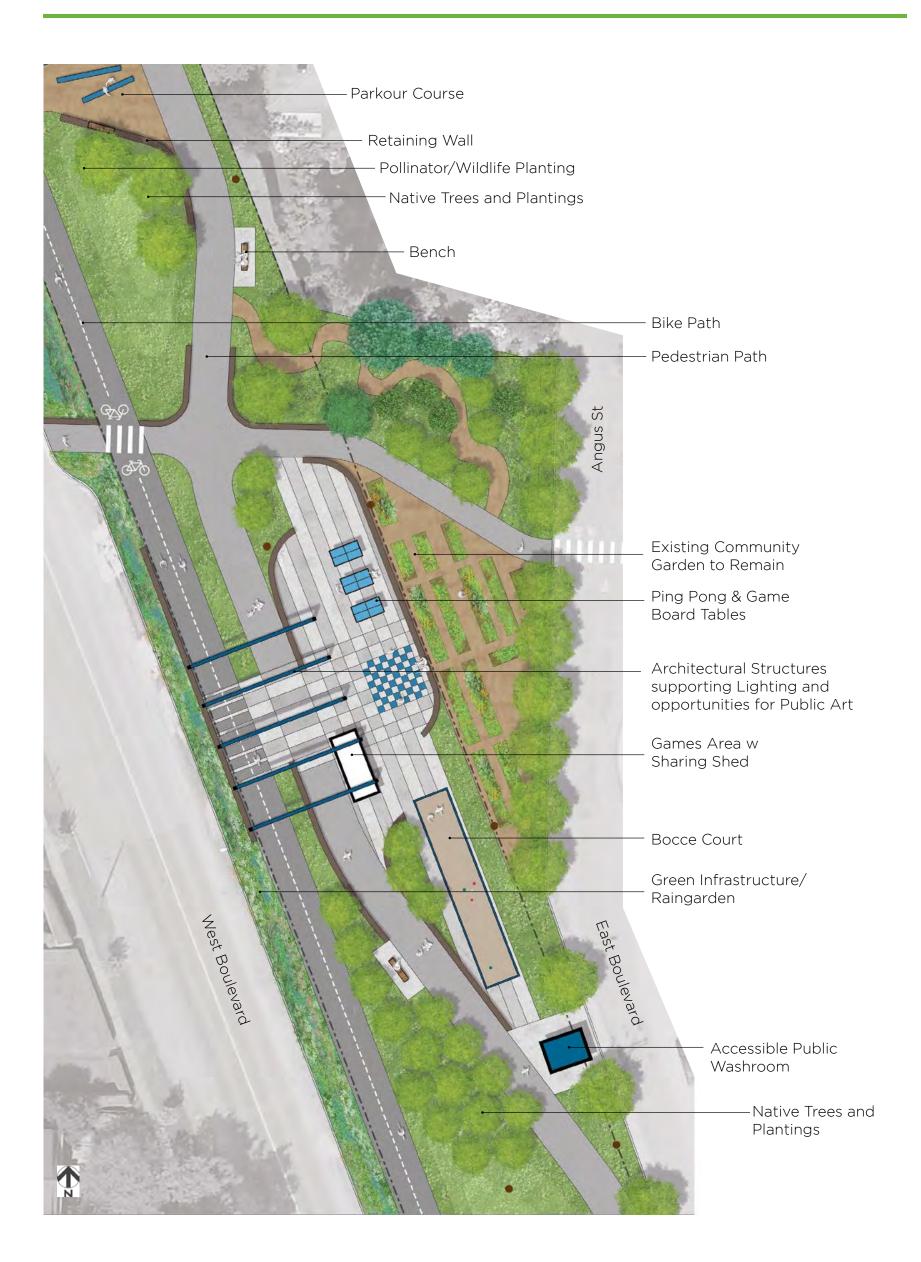
- Community gathering area at West 60th including a community "sharing" shed
- Small sport courts for pickleball, badminton, bocce etc
- Parkour course and 'kids' bike skills course
- Moveable tables and chairs
- Board game tables and ping pong tables
- Dark Sky compliant lighting, benches, other amenities
- Wildlife habitat and raingardens

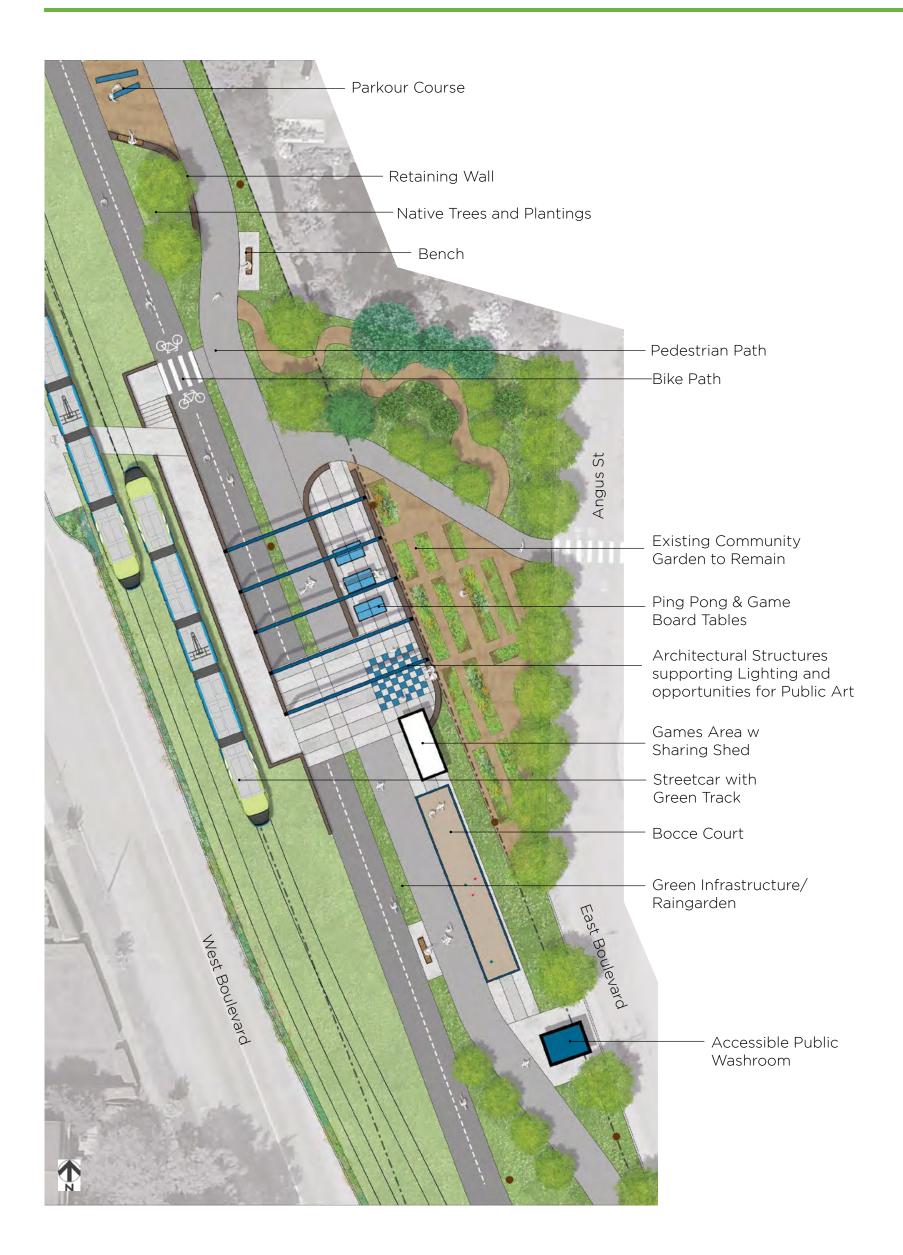
Transportation Improvements

- 3.5 metre walking and cycling paths
- Physical separation between pedestrians and cyclists
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences
- Enhanced connections from adjacent neighbourhoods

Public Feedback

- Make the greenway "easy to use by providing amenities, wash rooms, and garbage bins"
- Provide play spaces for "bocce, petanque court, and horseshoe, ping pong"
- Connect to adjacent neighborhoods: "I would like to see improved public access in Zone 7 including paved paths"







PRE-STREETCAR 3D MODEL



Post-Streetcar 3D Model



DESIGN THEME: THE LOOKOUT

The Lookout is a place of connection: south to the Fraser River and Richmond, and east to the Canada Line Bridge. It is marked by an iconic, fully accessible lookout tower that provides views across the Fraser River Delta to YVR and the distant Gulf and San Juan Islands. This zone sits adjacent to cesna? The Musqueam Nation's sacred site. The City will continue to collaborate with the Musqueam Nation on determing an accessible connection to the Fraser River, and on the integration of the greenway into Musqueam's vision for cesna? The City will continue to collaborate with the Musqueam Nation on determing an accessible connection to the Fraser River, and on the integration of the greenway into Musqueam's vision for cesna?



DESIGN HIGHLIGHTS

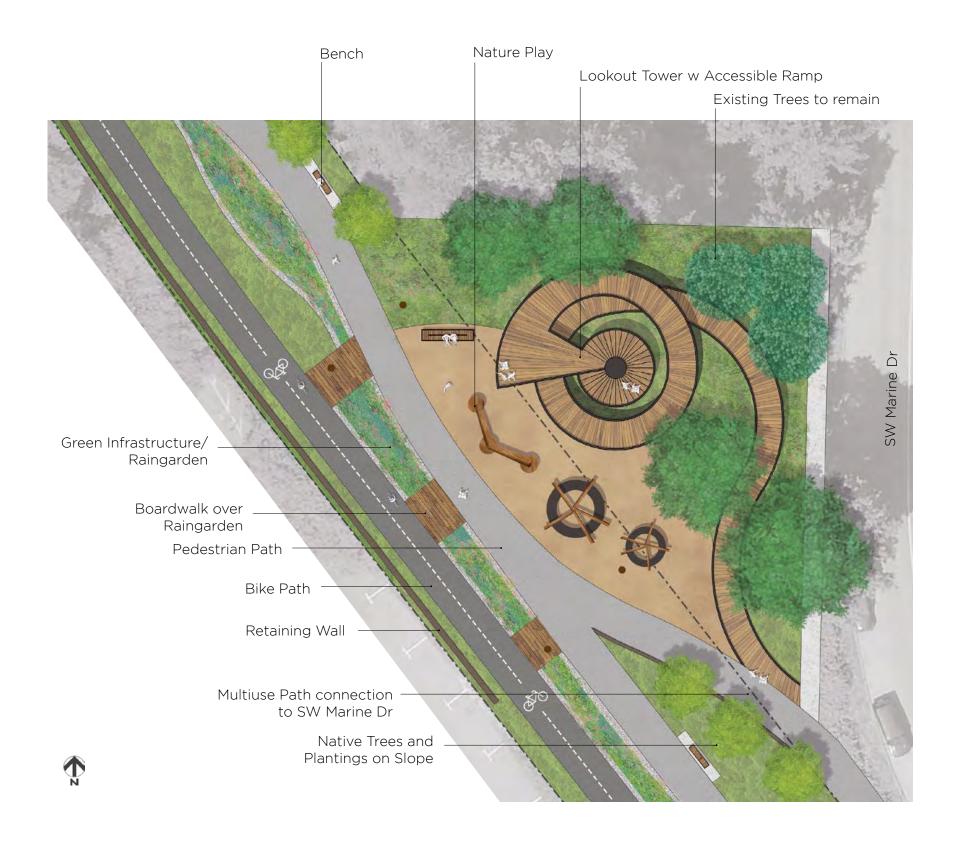
Public realm improvements:

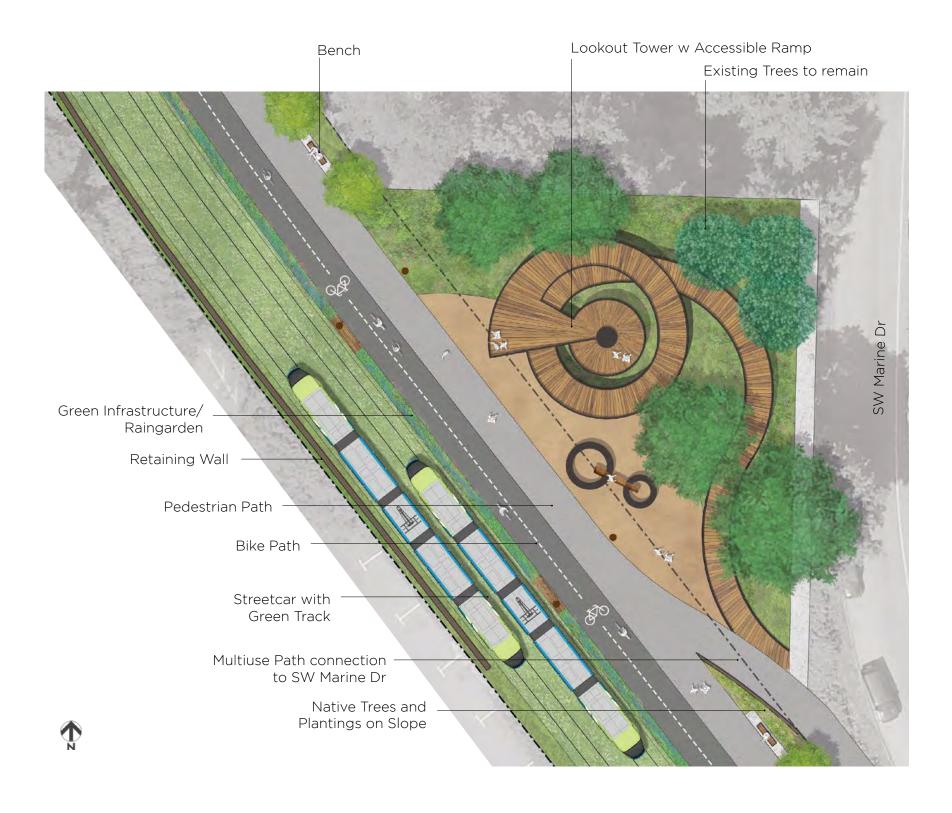
- Fully accessible lookout tower
- Dark Sky compliant lighting, benches, other amenities
- Wildlife habitat and raingardens
- New community gardens
- Nature play

Transportation Improvements

- 3.5 metre walking and cycling paths
- Physical separation between pedestrians and cyclists
- Dark Sky compliant pathway lighting to ensure there is no lighting pollution into adjacent residences
- Enhanced connections from adjacent neighbourhoods

- "I love the lookout. Its my favorite feature and I love that it appears to be wheelchair accessible."
- Create "features that capture rainwater or disseminate rainwater"
- "This area would definitely benefit from connections to the Fraser River so I hope that is a medium (not long) term priority"





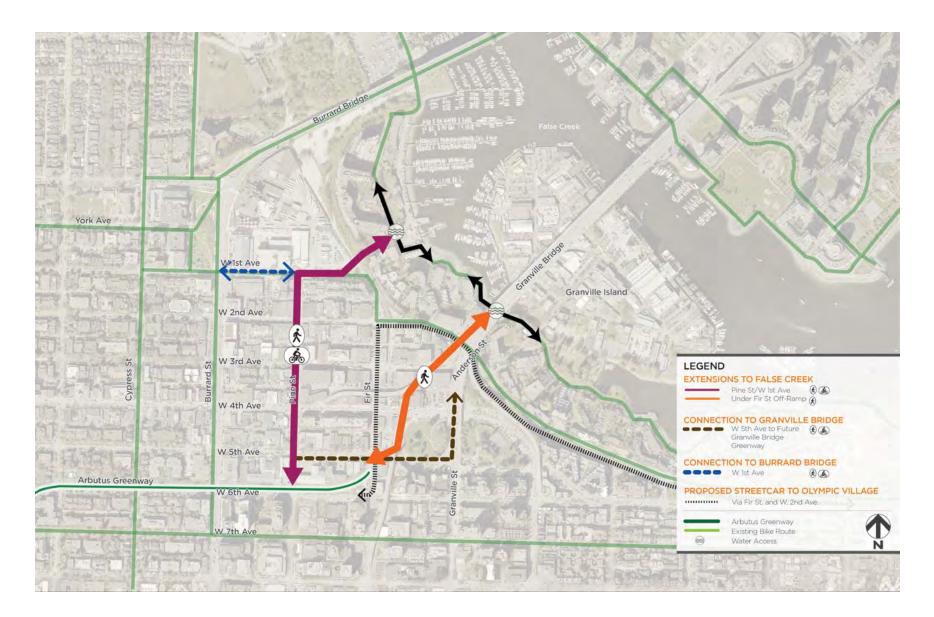


PRE-STREETCAR 3D MODEL



Post-Streetcar 3D Model

Northern Extensions



Ensuring safe and comfortable travel between False Creek and the Fraser River for all ages and abilities is one of the City's core objectives. To determine the best route for northern and southern extensions, a broad range of criteria were considered including: route directness, connections to other bike routes, and road/intersection characteristics.

The northern extensions include:

- A proposed Triple A cycling route to False Creek via Pine St and W 1st Ave
- A walking route to False Creek under the Fir St offramp, subject to further investigation.
- Future walking/cycling route to Granville Bridge along W 5th Ave, subject to further transportation and park design

Southern Extensions



The southern end of the Arbutus Greenway offers multiple, albeit somewhat complicated opportunities for extending the greenway to the Fraser River and existing transportation infrastructure. Investigation is currently in progress to assess possible extensions with an emphasis on the following links:

- Hudson St Park
- Fraser River Park
- Arthur Laing Bridge / Richmond

Additional desired connections that require considerably more investigation include:

- Marine Dr Station via W 67th Ave and W 68th Ave
- Canada Line Bridge and Kent Ave bike route (to be determined)

The City will continue to work with Musqueam, Squamish, and Tsleil-Waututh Nations to explore connections to the Fraser River.

Collaboration with Musqueam, Squamish and Tsleil-Waututh Nations

Overview

The City of Vancouver is situated on the shared, unceded traditional territories of Musqueam, Squamish, and Tsleil-Waututh (MST) Nations. The Arbutus Greenway Team is collaborating with MST Nations on the design and development of the Arbutus Greenway, with a particular emphasis on the following topics: Naming and Visibility, Wayfinding, Ethnobotany and Public Art.

Naming and Visibility:

There is an opportunity to leverage the Arbutus Greenway as a pilot project for MST Nations naming and for increasing the visibility of MST Nations' culture. There also exists a possibility to rename the overall greenway or specific sections of the greenway with traditional place names.

Wayfinding:

Develop a comprehensive signage package for the greenway, in English, Hənqəminəm (Halkomelem), and Skwxwu7mesh (Squamish). The package will have the following goals:

- Help people navigate to destinations on and off the greenway
- Recognise sites with significant cultural and historic importance to MST Nations
- Increase the visibility of MST Nations language and culture on their territories
- Interpret events and tell stories of the corridor's past

Ethnobotany:

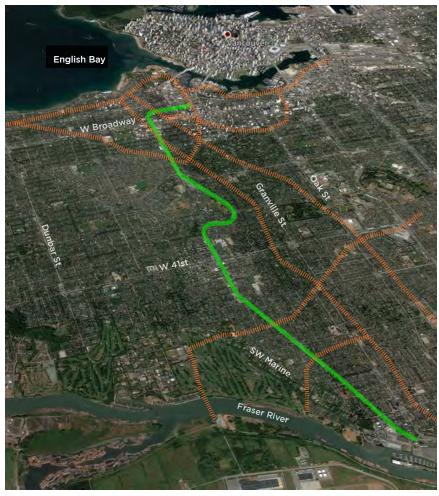
Reintroduce native plants along the greenway and add interpretative signage that highlights the cultural value of the plants for MST Nations.

Public Art:

MST Nations will be invited to help the City commission and select Indigenous public art for installations along the Arbutus Greenway.



Native Plants



Traditional MST Nations Travel Routes



Musqueam Nation Street Signs @ UBC



Fusion by Susan Point @ Cornish and SW Marine Dr

Design Elements

Overview

Design elements are a suite of features that provide the greenway with an overarching look and feel, and that link together each character zone. This could include features such as the re-use of remnant railway infrastructure, and consistent wayfinding elements such as signage and coloured paint. Design elements will capture the spirit of the Arbutus Greenway as a journey between river and ocean, punctuated by places for social gathering and connection with nature. Design elements will also serve to establish a cohesive character along the greenway while respecting the neigbourhoods through which the greenway traverses.

Furnishing Principles:

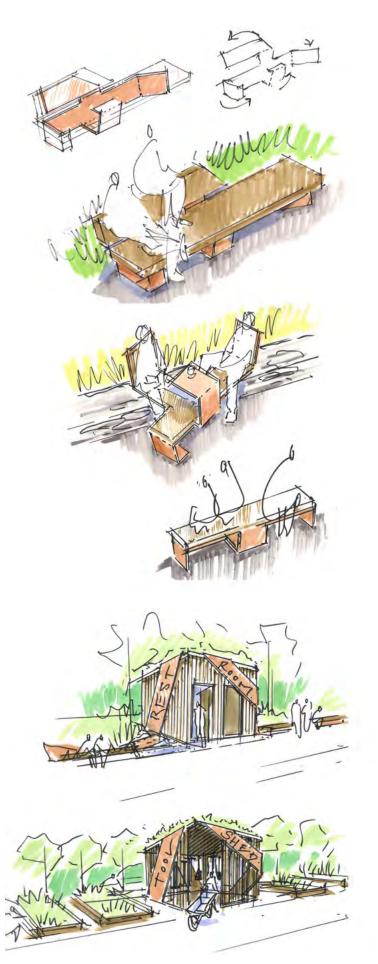
- A suite of consistent furniture will be positioned along the Arbutus Greenway, complemented by unique, iconic features that relate to the distinct character zones.
- Durable, sustainable and locally sourced materials will be used whenever possible.
- Furnishings will be adaptable, providing an armature to support the way in which people use the greenway throughout the seasons.
- Opportunities for community participation in the design of unique furnishings is encouraged through ongoing public engagement and design competitions.

Amenities and Structures Principles:

- Amenities and structures will be located along the Arbutus Greenway at key locations to encourage social interaction, community gathering, special events and recreation.
- Durable, sustainable and locally sourced materials will be used whenever possible.
- Kiosks and covered areas will be unique design elements that relate to the distinct character of the neighbourhood in which it is located.
- Architectural structures will be a consistent design element that repeats along the greenway but will be designed to allow for transformation throughout the seasons with temporary public art, banners, lighting installations, etc.
- Accessible washrooms will ideally be located approximately every kilometre. Washrooms that are co-located with parks will be multi-stall and will be designed in collaboration with the Vancouver Park Board. All other washrooms will be single stall units.

Paths and Paving Principles:

- Walking and cycling surfaces will be built to universal design and accessibility standards.
- Pedestrian and bike paths will be designed to enable all user groups to access and comfortably enjoy the greenway.
- Pathway markings will clearly designate pedestrian pathways, bike pathways and points where these paths intersect.
- Pedestrian paths and bike paths will be constructed primarily of asphalt. In high traffic, urban areas concrete will be considered for pedestrian paths.



Examples of possible furnishings and structures

Wayfinding

Overview

A well-designed wayfinding system enables people to orient themselves and navigate from one area to another with ease and confidence. It helps residents and visitors find their way around a city through the consistent application of information such as landmarks, neighbourhoods, destinations and connections. Wayfinding increases the likelihood that people will make trips on foot, and presents an opportunity to tell the story of the Arbutus Greenway through the use of iconic features.

The City is exploring opportunities to collaborate with the Musqueam, Squamish and Tsleil-Waututh Nations to recognize sites with significant cultural and historic importance to MST Nations through wayfinding.

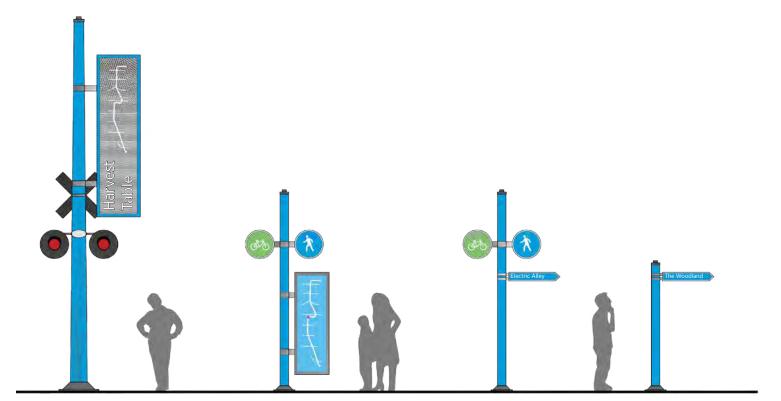
Strategy

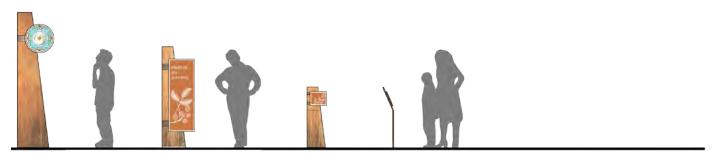
A wayfinding strategy for the Arbutus Greenway Project will be developed in the context of the City's overall wayfinding system, and will include overarching principles and best practices that can be applied to the greenway throughout its construction and operation. It is anticipated that locational signage ("you are here") will be used at all major intersections, decision points and gateways into the greenway. Directional signage will provide additional information at minor decision points and in the vicinity of key destinations. Further design development and influence from First Nations intergovernmental partners will inform the detail of the wayfinding strategy and its components.

Features

Wayfinding on the greenway will include a combination of the following features:

- Maps: Help users to orient themselves and plan their preferred route.
- Fingerposts: At key locations, fingerposts or other directional signage should be utilized to highlight specific, nearby locations.
- Landmarks: Landmark wayfinding utilizes coloured bollards or similar infrastructure in a repetitive pattern to allow users to follow a pathway. Markers may include distances to key locations to help users understand their location in the context of their surroundings.





Examples of wayfinding directional and interpretive elements

Lighting

Overview

Lighting along the Arbutus Greenway will be designed to ensure safe and efficient movement along pedestrian walkways, cycling paths, in addition to celebrating public art, gathering spaces, and supporting wayfinding. The lighting will be integrated into the overall corridor programmatic themes. While there will be corridor-wide consistency in aspects of the design, special considerations will be included for specific neighborhoods, where the lighting will follow the unique nature of the character zones. The lighting design of the Arbutus Greenway will be based on relevant standards, guidelines and technological innovations. It will be structured around four key design principles.



- 1. Lighting should meet its intended purpose of allowing safe and efficient mobility: particularly where public safety considerations are prevalent and standards are applicable. One of the main goals of the lighting within the Arbutus Greenway is to provide active transportation users with the appropriate lighting to safely and comfortably travel through the corridor, while enjoying its diverse features.
- 2. The lighting for public gathering spaces, such as plazas and nodes, shall be inviting, inspirational and exciting. Lighting will be used to highlight public art and create easily identifiable landmarks to assist people in establishing their location and establish a strong sense of place.
- 3. In response to the greenway's urban surroundings, the lighting design will respect the privacy of those living along the greenway. The design will include the use of appropriate light levels, Dark-Sky compliant fixtures, cut-off technologies, and physical light shields in order to minimize light spill.
- 4. On zones of the greenway that are not part of the main pedestrian and cycling corridors, the lighting will provide a warm and comfortable atmosphere while maintaining safety and Crime Prevention Through Environmental Design (CPTED) Principles. These areas will achieve a delicate balance in providing safe spaces for reflection and relaxation, giving the users an opportunity to recharge their bodies both physically and mentally while enjoying free time within the centre of the city.



Overhead/Catenary Lighting (Ronstan Tensile Architecture)



Bollard Lighting (Lumteam)



Dark Sky



Quiet Night

Transportation Design

Overview

The Arbutus Greenway will enable people of all ages and abilities to safely and comfortably travel between False Creek and the Fraser River using a variety of non-motorized means. It will also provide connections to neighbouring areas.

Accessibility

Accessible design refers to the application of universal design principles that improve the safety, convenience, and usability levels for all users. This includes people experiencing a range of physical and cognitive conditions. This is particularly important with increased use of the greenway by older adults, and people with disabilities. Accessibility is a fundamental design principle and will be a significant component of the detailed design of the greenway.

Separation between users

The various transportation modes benefit from spatial separation -horizontal and/or vertical- to ensure each mode can function as intended, and is safe, comfortable and enjoyable to use. For example, the cycling path has been placed next to the streetcar tracks along much of the length of the greenway, so that faster users are separated from people moving at a slower pace.

Similarly, slower paced modes are placed adjacent to passive spaces along the greenway where possible. This can be thought of as a speed gradient.

Crossings

In order to enhance mobility through the corridor, the Arbutus Greenway considers opportunities to create a seamless, continuous experience for people walking, wheeling and cycling that minimizes conflicts with other users.

For minor intersections, pathway users will be prioritized using a range of treatments, such as high visibility pavement markings or unique textures to improve visibility, and using traffic calming measures to reduce traffic speed and volumes.

For major intersections, measures can be used to restrict vehicle access while enabling full movements for people walking and cycling. Alternatively, signals can be designed to reduce or eliminate interactions between motor vehicle traffic and vulnerable road users.



Streetcar

Modern-day streetcar is part of the plan for the future Arbutus Greenway, and will be a comfortable and convenient addition to our city and region's multi-modal transportation system. Streetcars are powered by electricity and controlled by an onboard transit operator. They can run in a dedicated right-of-way or in mixed traffic.

One of the key Arbutus Greenway Project objectives states, "Ensure the Arbutus Greenway is resilient and adaptable to allow for changing circumstances." Equipping the pre-streetcar design with features that facilitate the relatively simple implementation of streetcar in future is critical to ensuring the resiliency of the greenway.

With the implementation of streetcar, cycling and walking pathways will be retained in their prestreetcar locations wherever possible. In most locations along the greenway, the streetcar track is envisioned to be green track (i.e. tracks surrounded by planting material).





Footnote: Although the Arbutus Greenway has been designed to accommodate a future streetcar, a subsequent design process, based on streetcar design parameters, will be undertaken when streetcar is implemented. Please note that the current designs are subject to change.

Urban Ecology

Overview

An important indicator of a healthy, resilient city is the strength of its ecological network. Ecological networks are considered to be the "nervous system" of cities, providing an abundance of life through water, air, earth, plants and animals that we depend on.

While Vancouver is home to a diversity of habitats and naturalized areas, many of them are fragmented and isolated, diminishing their ability to function to their full potential to support natural systems, the hydrologic cycle, climate regulation and to provide abundant habitat and increased biodiversity.

The Arbutus Greenway has the opportunity to be an ecological "artery" of the city, connecting critical and sensitive ecosystems of False Creek with the north arm of the Fraser River. This spine connects 6 parks that already exist with their own ecological functions, but are currently isolated. The greenway could act as an ecological corridor that would contribute to city-wide strategies including the Greenest City 2020 Action Plan, Biodiversity Strategy (2016) and Urban Forestry Strategy (2014).

Throughout the recent public consultation process, the public and stakeholders have identified the importance for the greenway to significantly contribute to the ecology of the city. This includes providing food, water and flower sources for birds, bees, amphibians, and providing places to relax and experience the natural environment characteristic of the West Coast, and opportunities for ecological learning and stewardship.

Green Infrastructure

A key component of enhancing urban ecology is managing stormwater sustainably. The Arbutus Greenway will play a key role in supporting the City's recently adopted Integrated Rainwater Management Plan that seeks to use green infrastructure to manage and reduce rainwater run-off.

Using techniques such as rain gardens, biofiltration trenches, swales and constructed wetlands within the greenway will significantly reduce the flow of rainwater runoff from paved surfaces to existing stormwater infrastructure. Green infrastructure can also filter and improve the water quality of rainwater run-off from paved surfaces.

Integrating systems for sustainable rainwater conveyance and management through these organic environments will provide healthy water downstream, while limiting impacts to an already overwhelmed and aging city infrastructure.

Vegetation

The Arbutus corridor exists within the Coastal Douglas Fir and Coastal Western Hemlock biogeoclimactic zones. However, approximately 90% of the corridor's existing vegetation is comprised of non-native plants species, many of which are considered invasive. Reasserting native trees and shrubs that reflect the historic biogeoclimatic zone as the dominant plant communities along the corridor, as well as anticipating landscape changes due to climatic changes, will play an instrumental role in reestablishing the corridor's ecological function. Native species selection will be planned in collaboration with the Musqueam, Squamish and Tsleil-Waututh Nations.

A key implementation strategy will be the removal of invasive species, followed immediately by the replacement with native species. This protocol will help to establish a native plant community while reducing the likelihood that invasive plants will return. An invasive species management plan will be prepared for the project and will specify the treatment, removal sequencing and management as well as on-going operations and maintenance to observe for, and prevent the presence of invasive species. This will include establishment of a rigorous maintenance regime to support the initial and vital growth stages of new native planting.

Wildlife

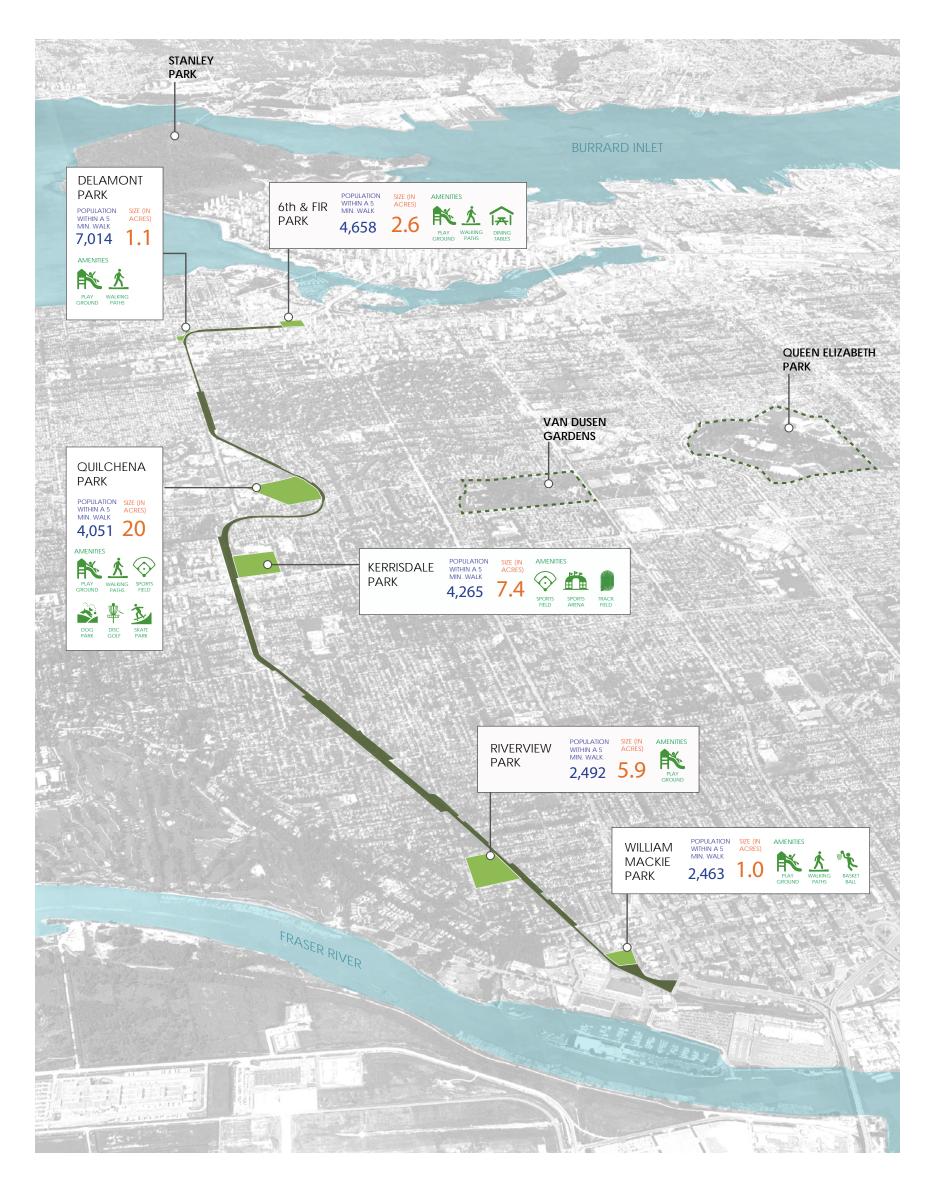
With the increase in native vegetation, the overall greenway's wildlife strategy will aim to increase the presence of native birds and pollinators. The goal will also be to create a key source of food, habitat and respite for over 20 species of terrestrial and aquatic based species. Trees and understory planting will be selected with a composition and spacing that supports migratory species patterns and provides food sources.

The greenway will also be designed to maintain natural corridors for pollinators by connecting larger habitat patches associated found within the neighbouring parks with ecologically diverse treatments of the greenway. This can be achieved through planting meadows of pollinator friendly species and a mix of native plants along the greenway.

Existing Park Context

The Arbutus Greenway passes beside six existing parks. Historically, the former CPR rail line discouraged any spatial relationship between the six parks and the rail line. In some cases fences were constructed to separate the uses. With the City owning the rail corridor, there are opportunities to spatially link the greenway and each park through the evolving design of the Arbutus Greenway, as well as through future park enhancements.

To that end, the City and Park Board will work collectively to ensure the greenway-park interface is successful. The City will be responsible for the design of the greenway and Park Board will lead the design upgrades to parks as required. The graphic below provides the context and location for existing parks immediately adjacent to the greenway.



Greenway-Park Interface Design Principles

The interface between the Arbutus Greenway and adjacent parks will require thoughtful design solutions to ensure both the greenway and the adjacent parks benefit from their new found spatial relationship. As the greenway design evolves, and as adjacent park development and/or improvements are undertaken by Park Board, the following principles will provide clear direction as to how the interface is conceptualised.

Draft Greenway-Park Interface Design Principles:

- 1. Strategically connect to and from parks
- 2. Maintain & enhance functionality of parks
- 3. Anticipate increased visibility & use
- 4. Create cohesion of character & experience
- 5. Manage safety risks & reduce conflicts

6th & FIR PARK



KERRISDALE PARK



DELAMONT PARK



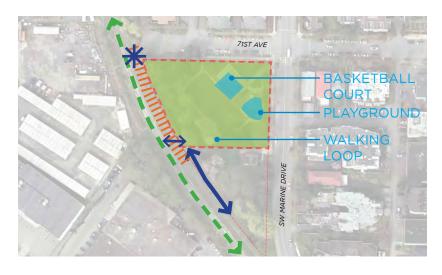
RIVERVIEW PARK



QUILCHENA PARK



WILLIAM MACKIE PARK









Potential node/gateway



Connections to park (internal pathways to be considered and carried out by Park Board engagement and design process)

IIIIIIIII Enhance edges of parks and manage conflicts (between bike/ped, arbutus greenway, and park uses)

Public Art

Overview

The Arbutus Greenway Public Art Master Plan will provide opportunities to bring artists and their work into communication with the greenway's communities, ecologies, histories, and trajectories. Working from independent perspectives, artists will engage the greenway through a variety of artistic approaches and media, deepening the experiences and engagement with the site of visitors and surrounding communities. The art plan will document the cultural context of the greenway and identify potential public art opportunities along its full length.

Public Art Strategy

Public art offers the opportunity to bring artists' eyes to the complex social, cultural, economic and urban conditions of a site. The City of Vancouver's "artist-initiated" approach to commissioning is built on an understanding that the most powerful public expressions come from an artist-directed process of engagement with a site, rather than a pre-determined design brief setting parameters for a commission. Art produced through this approach can support a serious engagement with the site, but with results that could not have been predicted in advance. Done well, a civic public art program will bring art and the city together in all their complexities while maintaining the integrity of each.

Vancouver artists have long operated between the international contemporary art context and a deep engagement with the particularities of this city and region. The city is well furnished with artists who can work responsively to a particularly place. The deep connections between the city's artists and the world also allows for them to work harmoniously in a context mixing local artists with artists from elsewhere in the world.

Public Art Vision & Objectives

Public Art Vision

To provide public art that will enrich the experience of the Arbutus Greenway for the greenway users and the various audiences living and working in the surrounding neighbourhoods.

Public Art Objectives

- To develop public artworks that have interest across time through repeated visits for a broad range of public audiences
- To offer artists the opportunity to expand their art practices through the consideration of the public realm generally and the Arbutus Greenway specifically as a sphere within which to engage new audiences and address new issues
- To bring artists and their varied approaches to the context of the Arbutus Greenway, deepening understanding of the site, its histories, cultures, ecology, and pathways through a powerful engagement between art and site.

Public Art Typologies

Four distinct physical typologies will allow a range of artwork to be showcased along the Arbutus Greenway:

- 1. Nodal artworks at plazas, parks, corners and particular sites of interest
- **2.** Linear artworks that extend along a portion of the greenway length
- **3.** Artworks that are in series distributed along a length of the greenway
- **4. Mobile artworks -** that can be relocated along the greenway

Public art along the greenway may engage with the community and greenway users, relate to the greenway, active transportation, the body and physical fitness, and mix permanent artworks with a program of temporary and changing artwork.

MST Nations Heritage

The Arbutus Greenway's nine kilometre route travels through the traditional territories of the Musqueam, Squamish, and Tsleil-Waututh Nations. Contemporary MST Nations artwork has experienced a resurgence, with its own specific formal vocabulary that distinguishes it from the formline-based artwork of the northern coastal First Nations of the Haida, Kwakwaka'wakw and Tsimshian. Most recently, the rich art-making of the local First Nations has been emerging into public spaces throughout the Vancouver region—initially and largely through the celebrated work of Musqueam artist Susan Point.

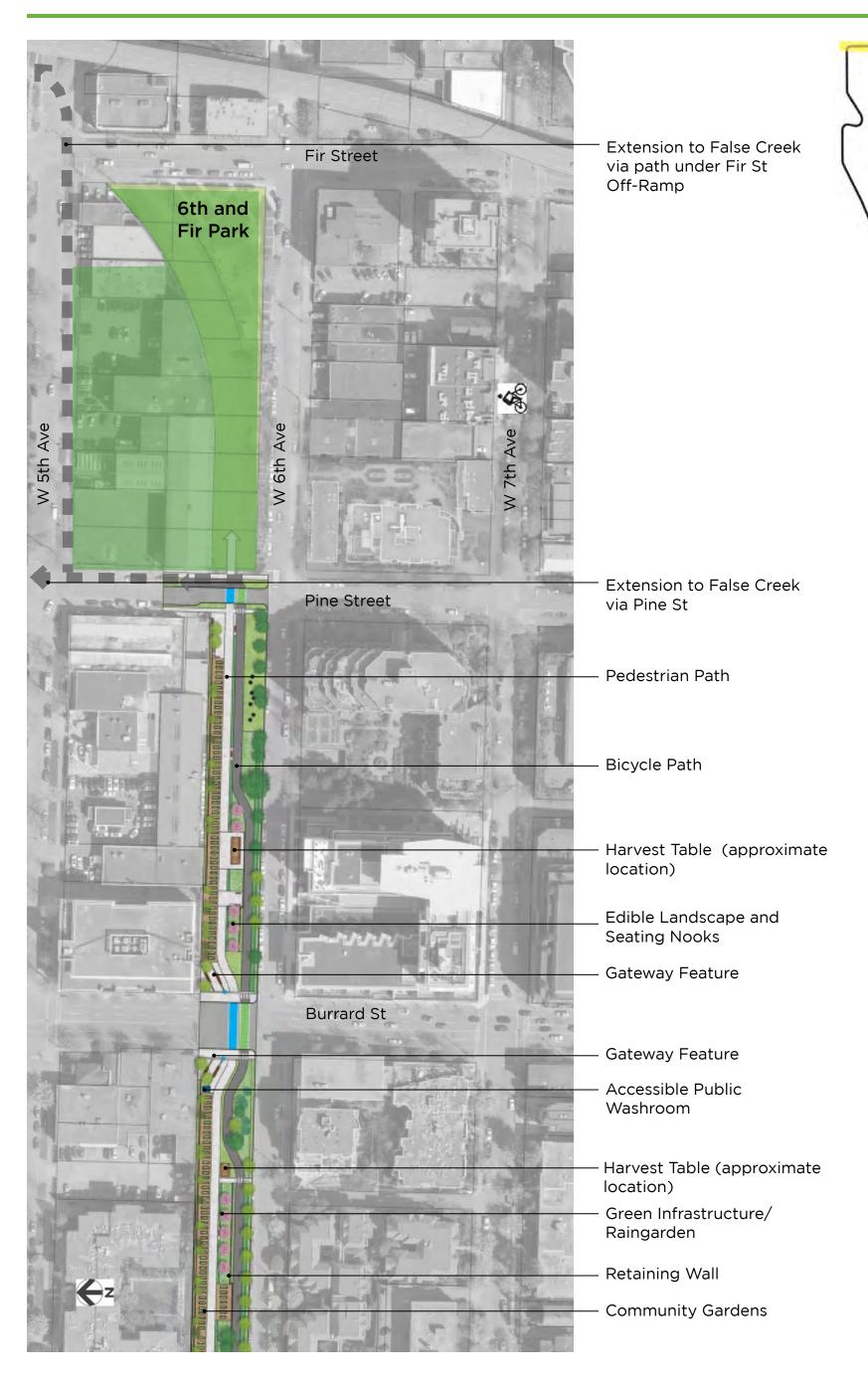
Particular sites of interest along the greenway length are the documented MST Nations travel routes throughout the Burrard Peninsula crossing the Arbutus Greenway route. Among other sites and opportunities, these historical and formal intersections with the greenway will be considered as potential sites for artworks to be developed by local MST First artists.

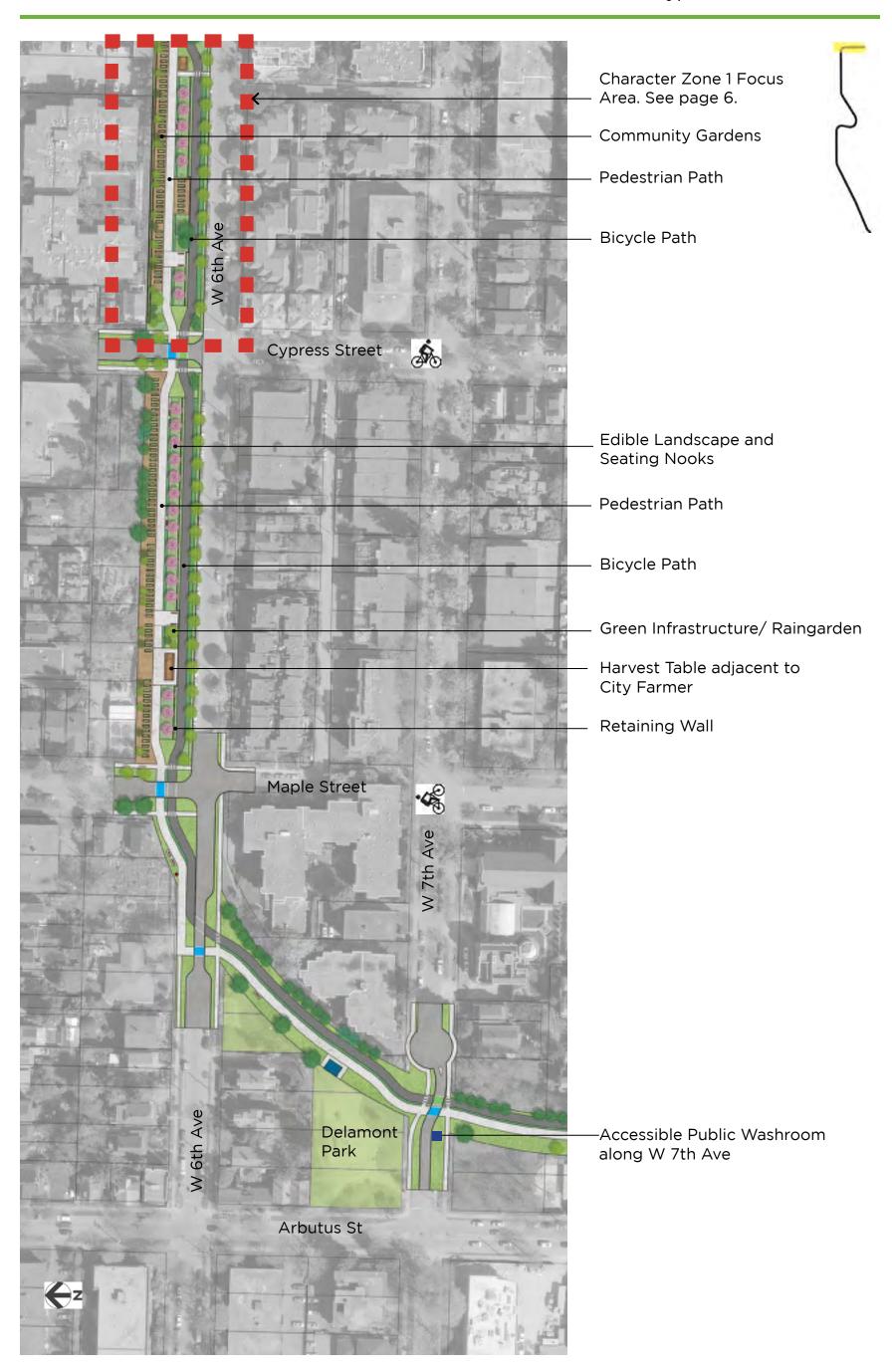
Overall Greenway Plans

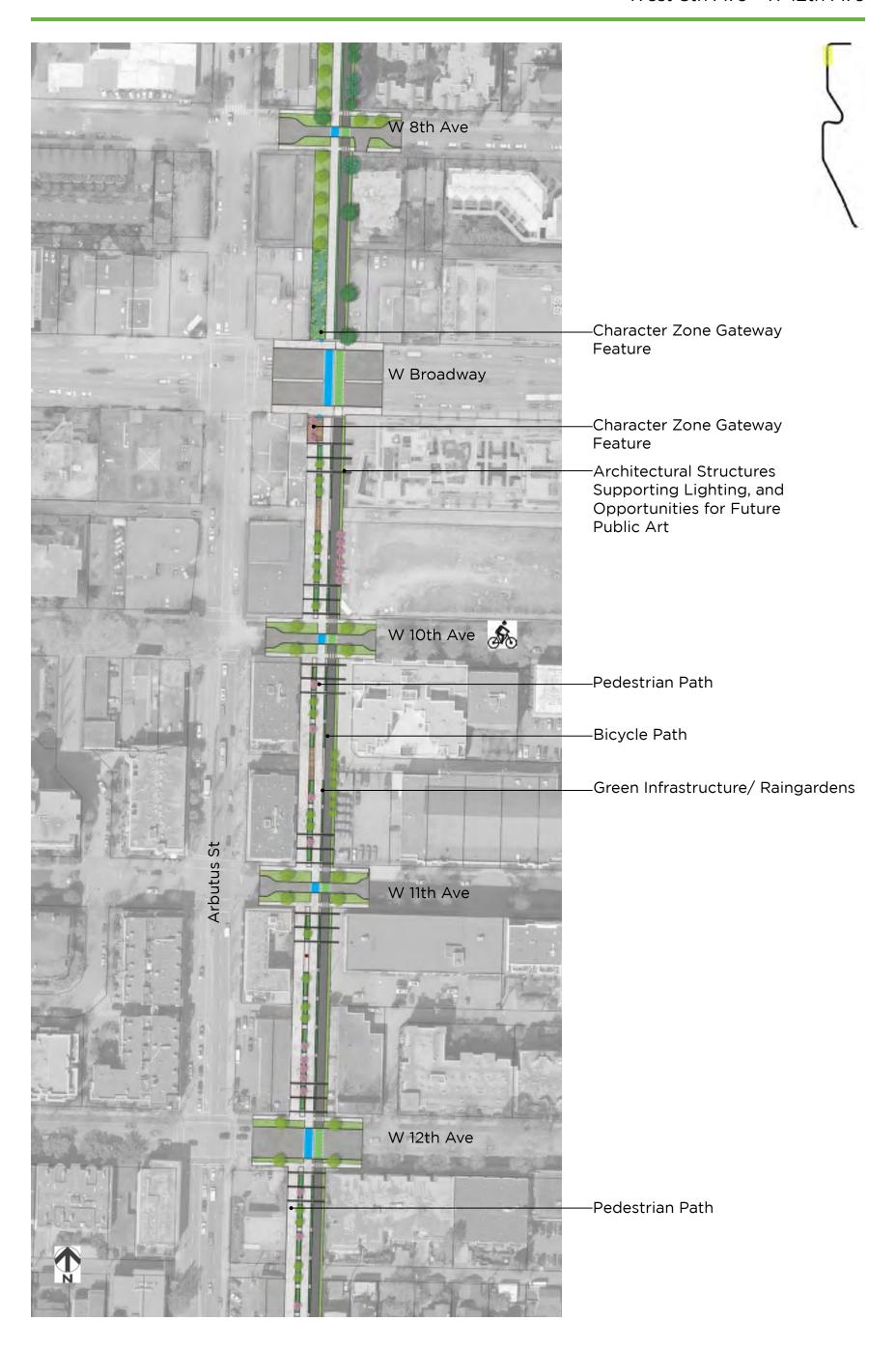
Overview

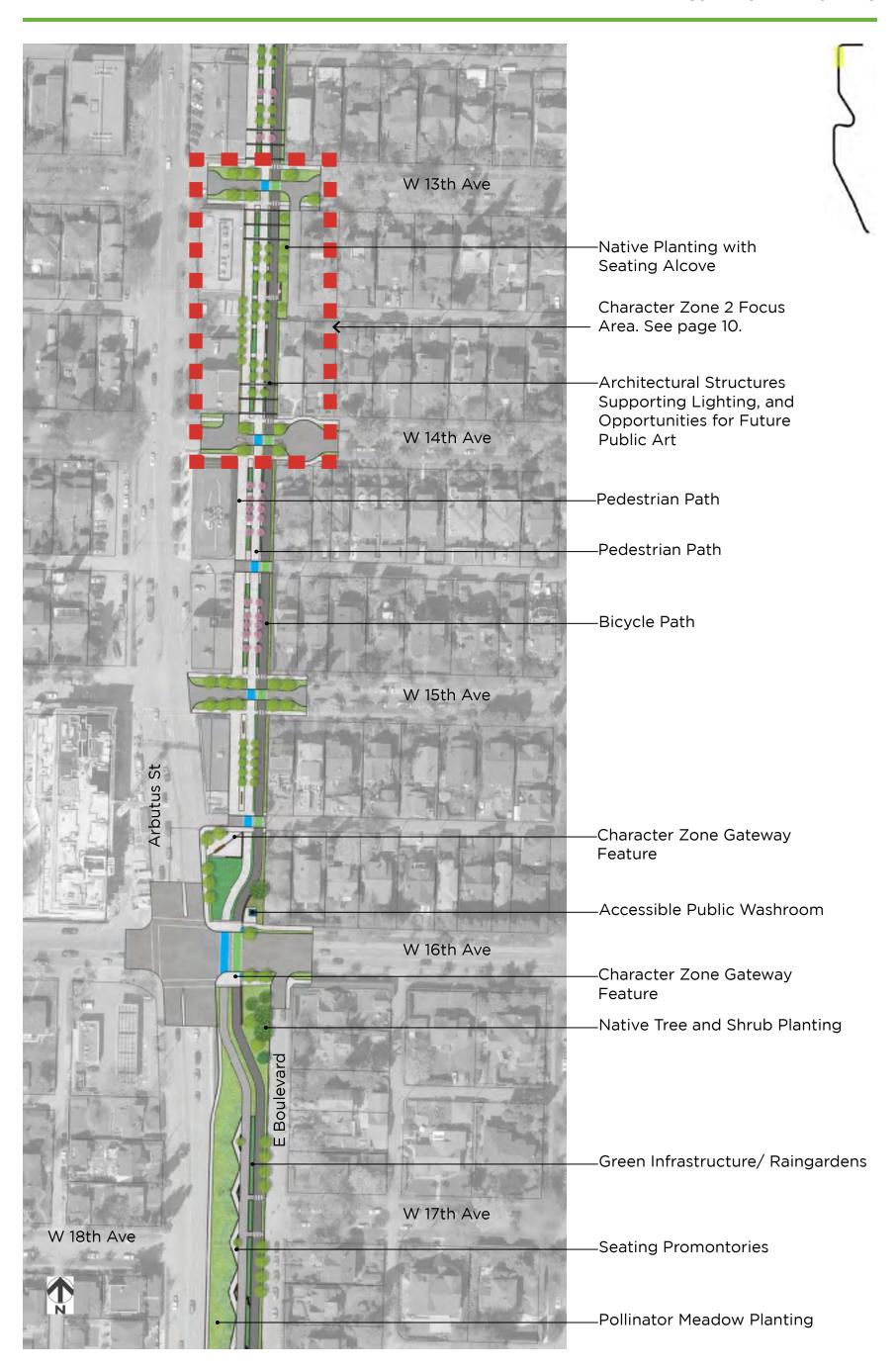
The following section provides a high level view of the proposed pre-streetcar design for the entire greenway. Due to the length of the corridor (approximately 9km), the scale (1:1500) at which much of the design investigation has, to date, been conducted, and the necessity for ongoing public input into the future detailed design of each character zone, the following pages illustrate general design direction rather specific designs.

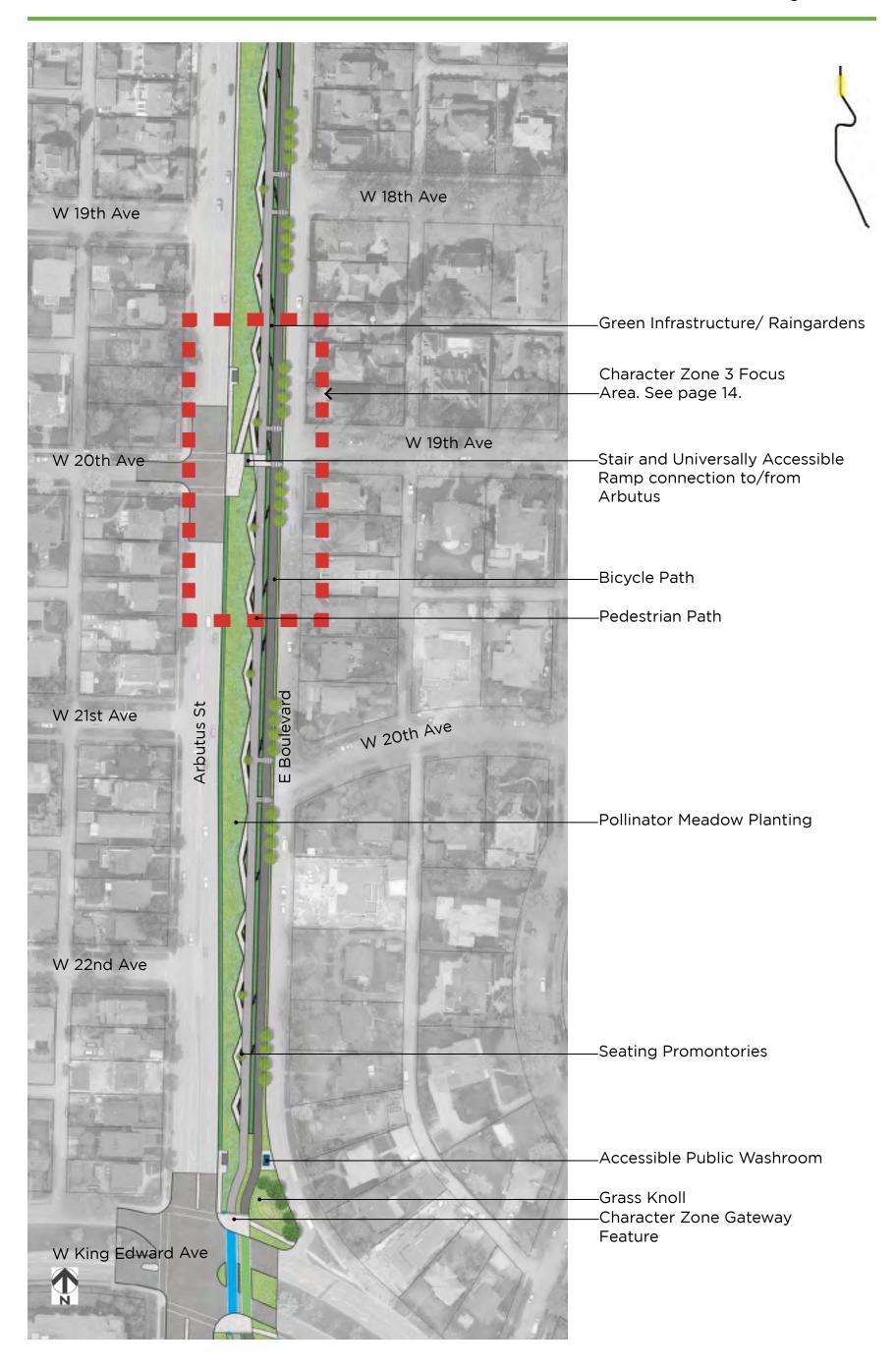
The detailed design for each character zone will emerge as directed by Council and in association with MST Nations involvement, and public and stakeholder engagement.

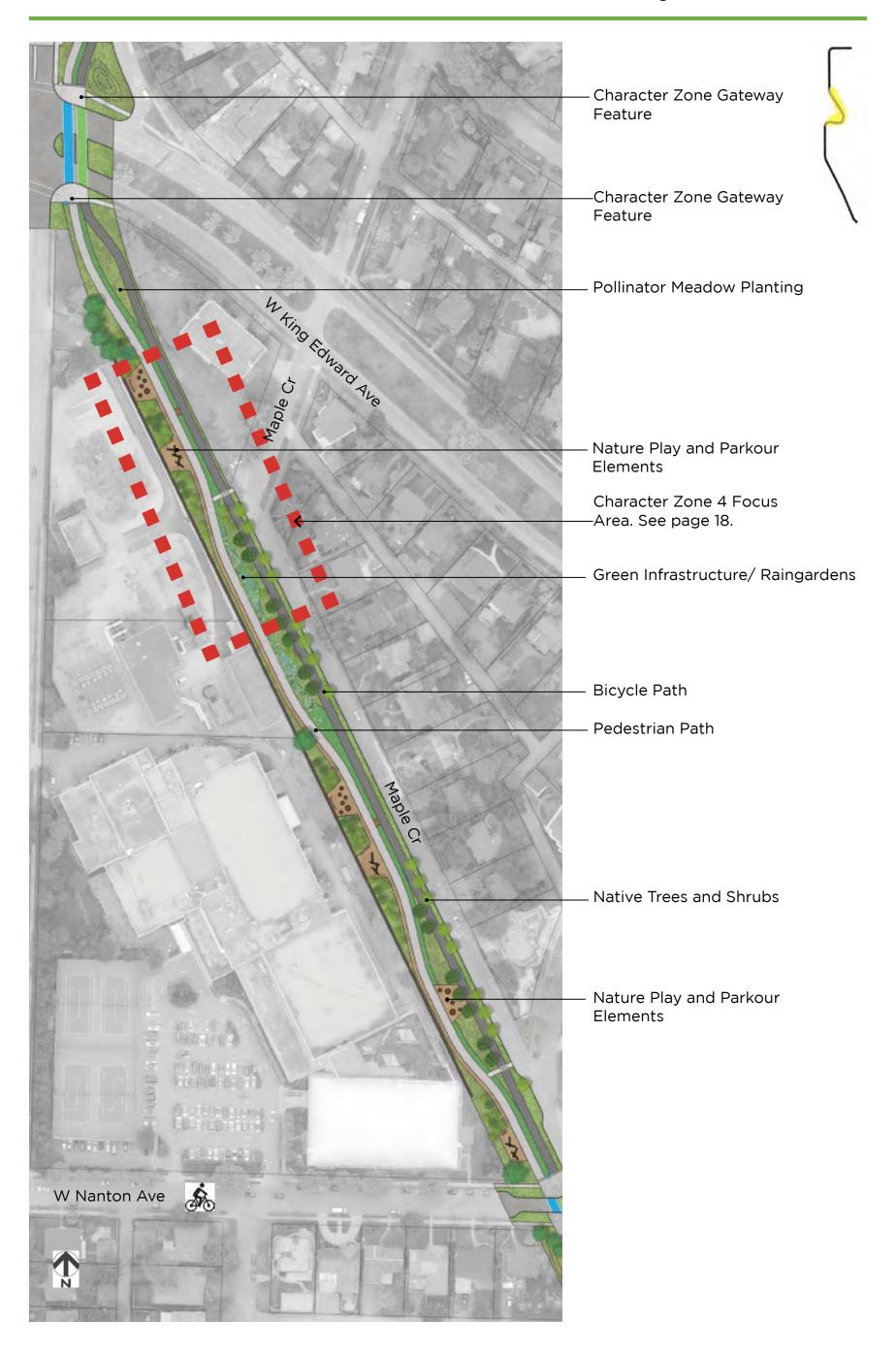




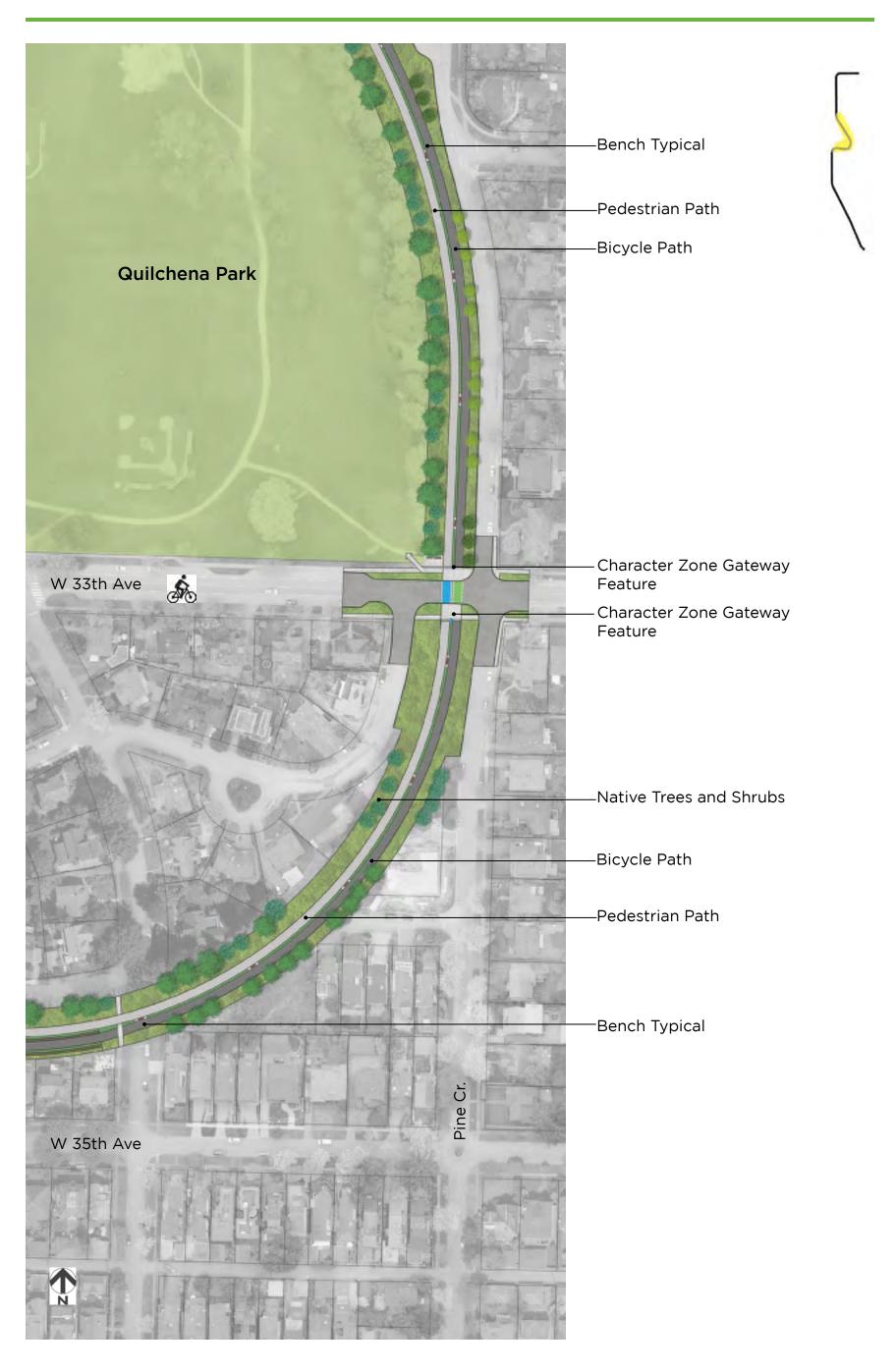


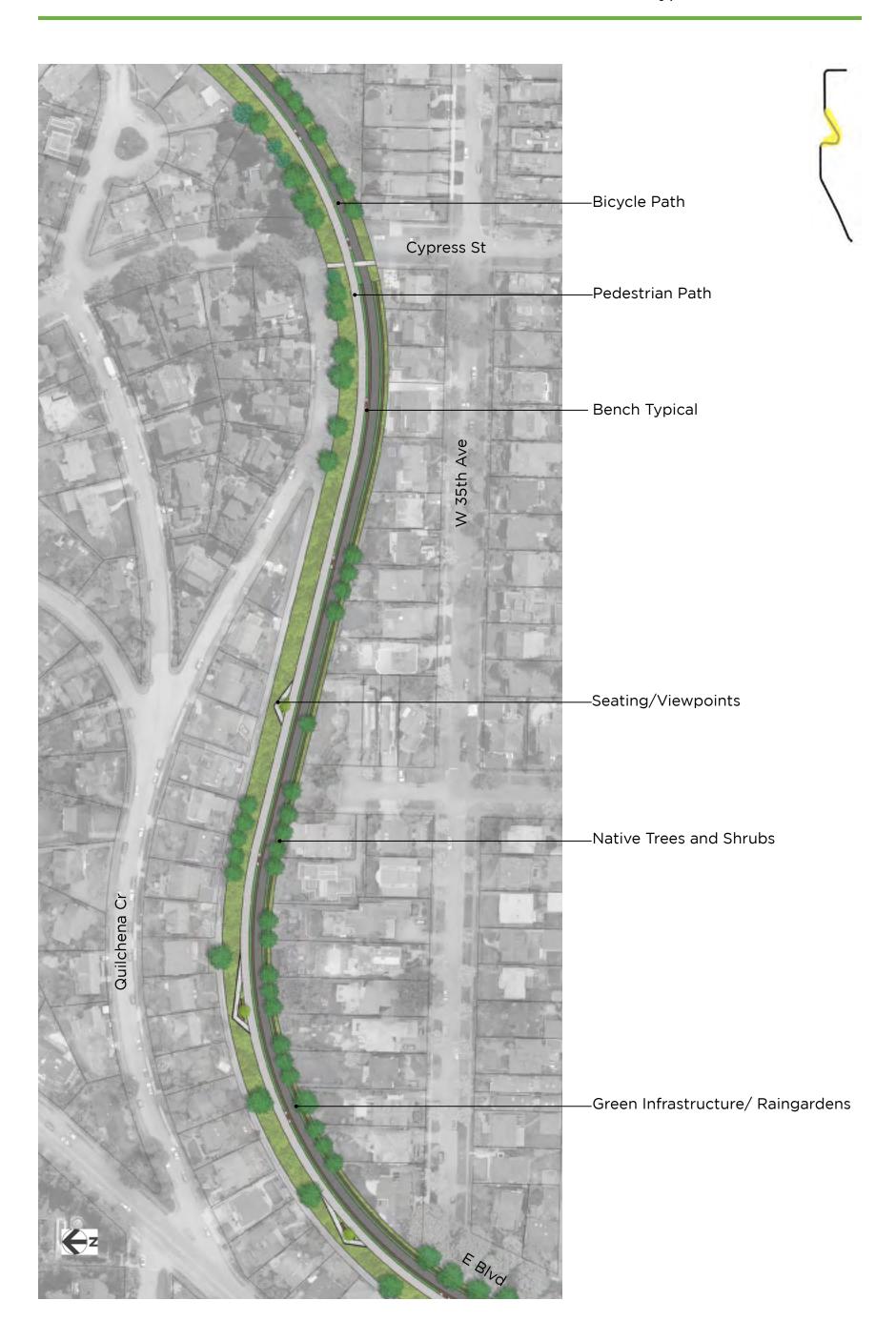


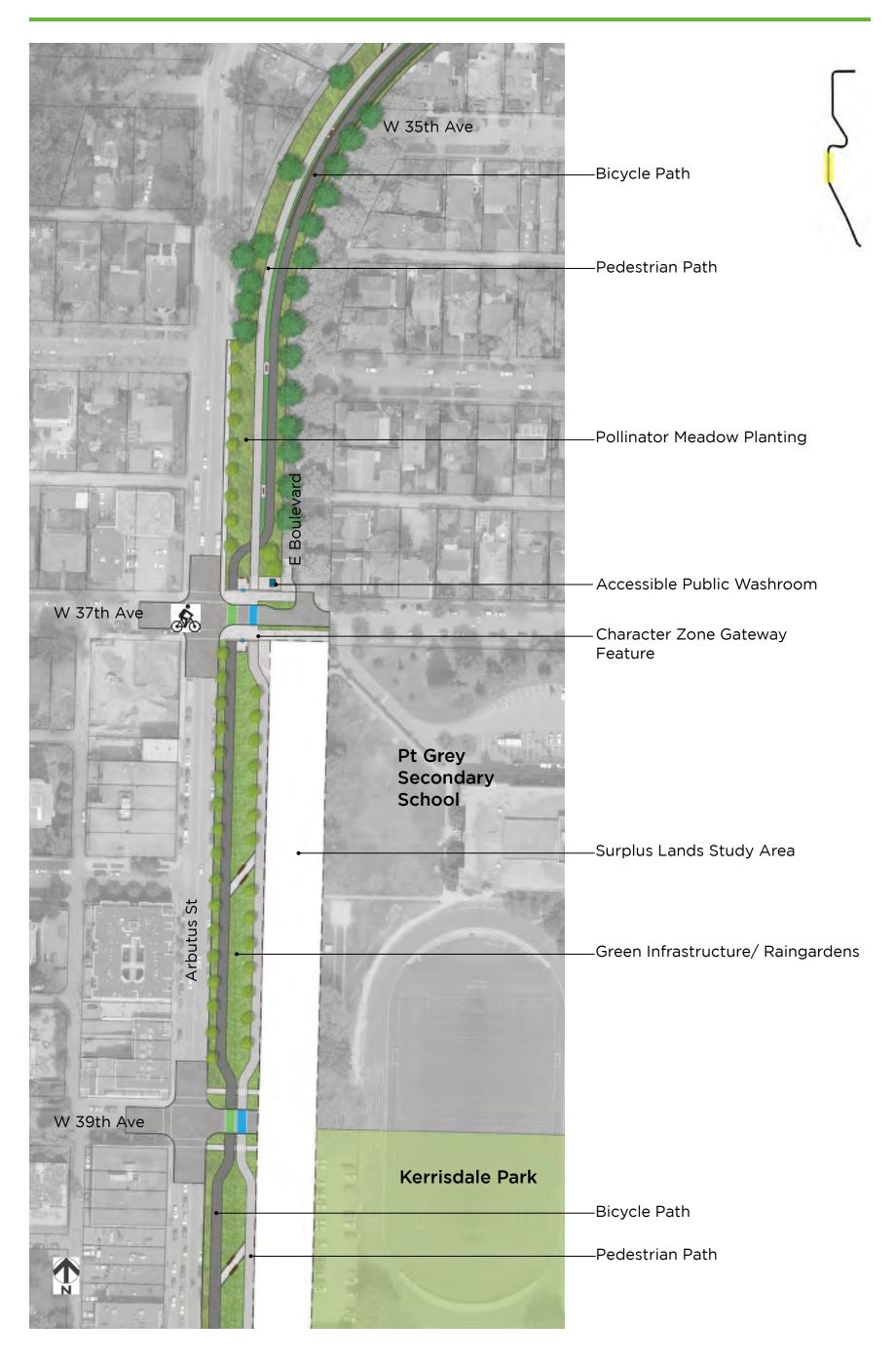


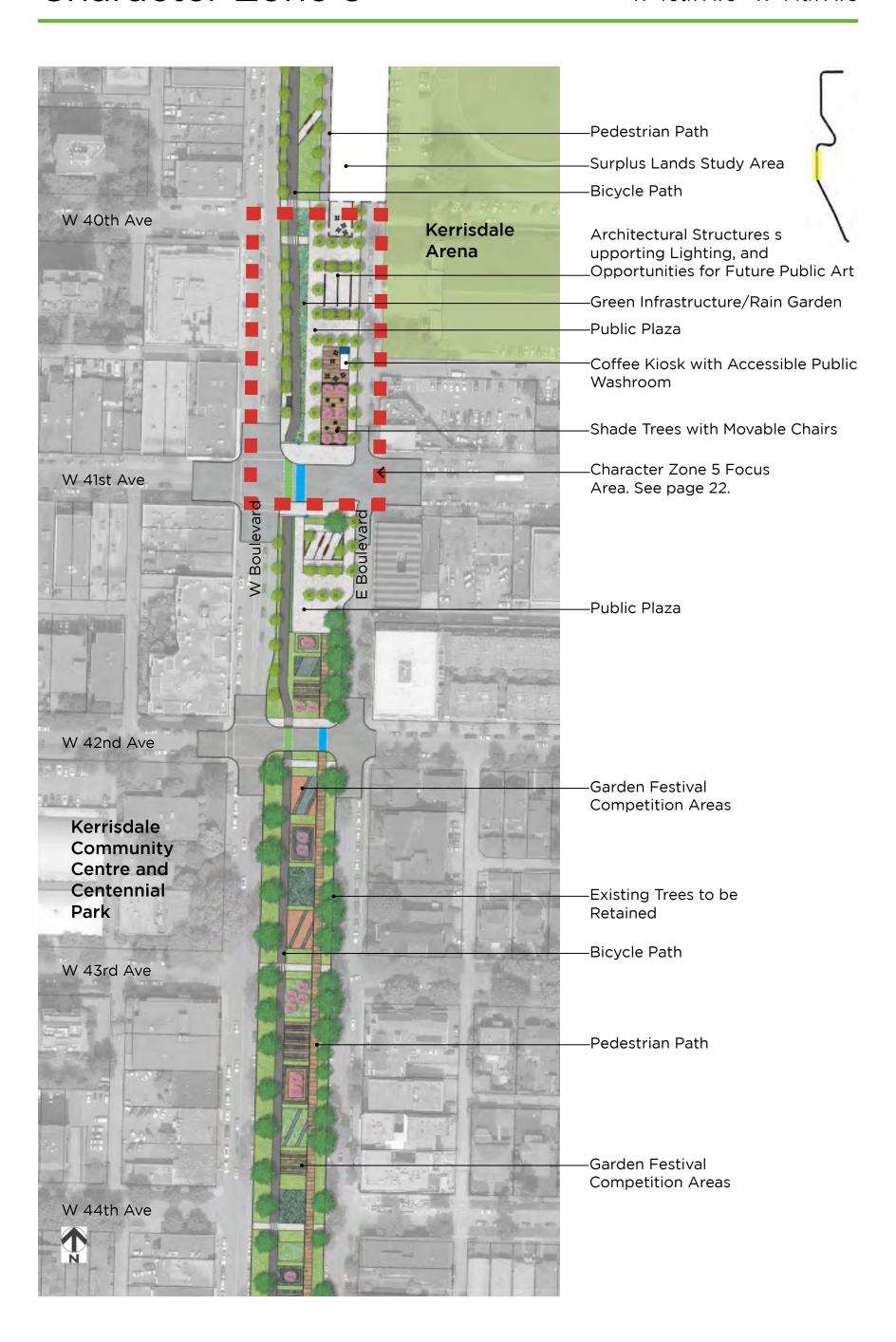




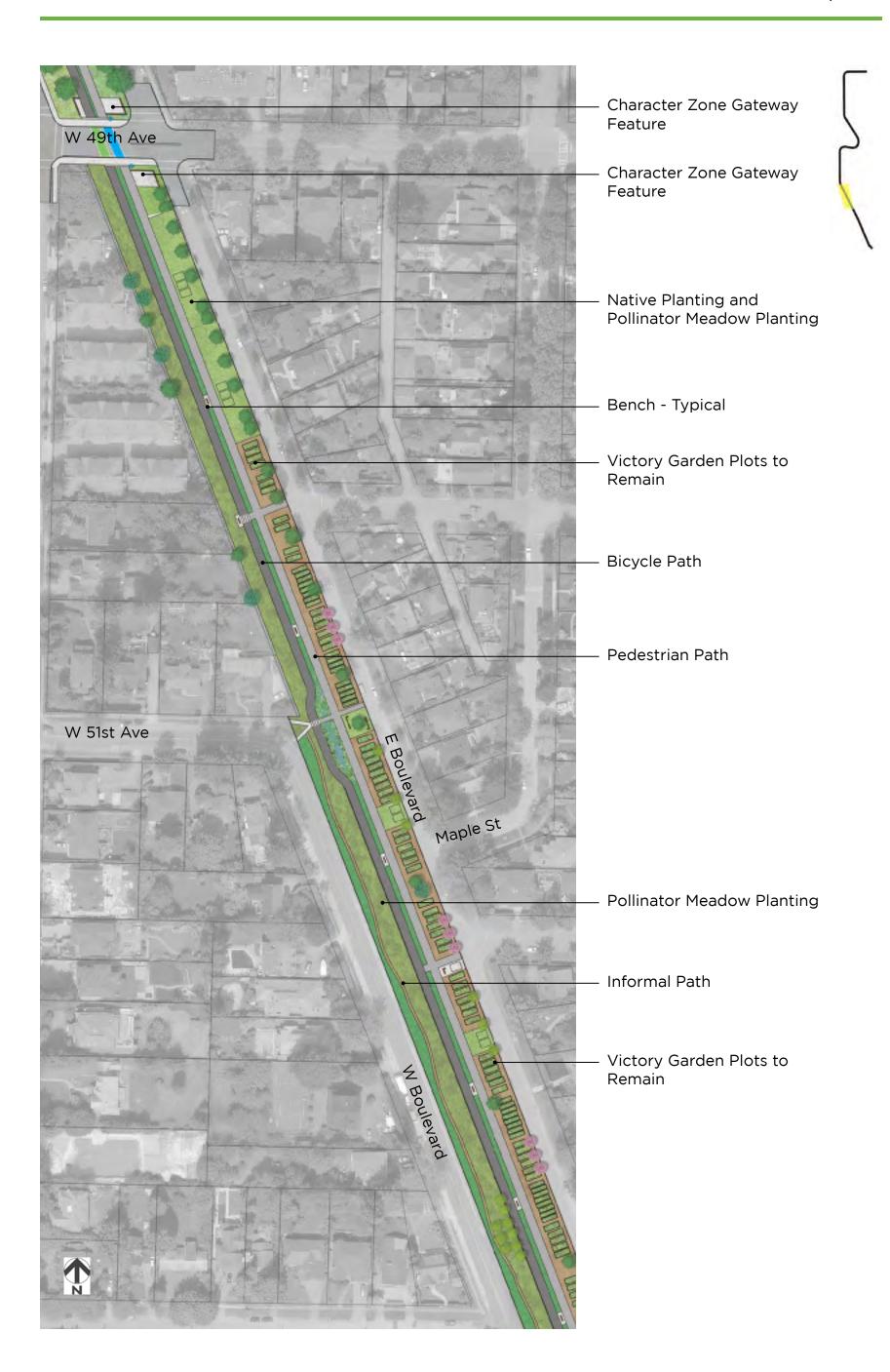


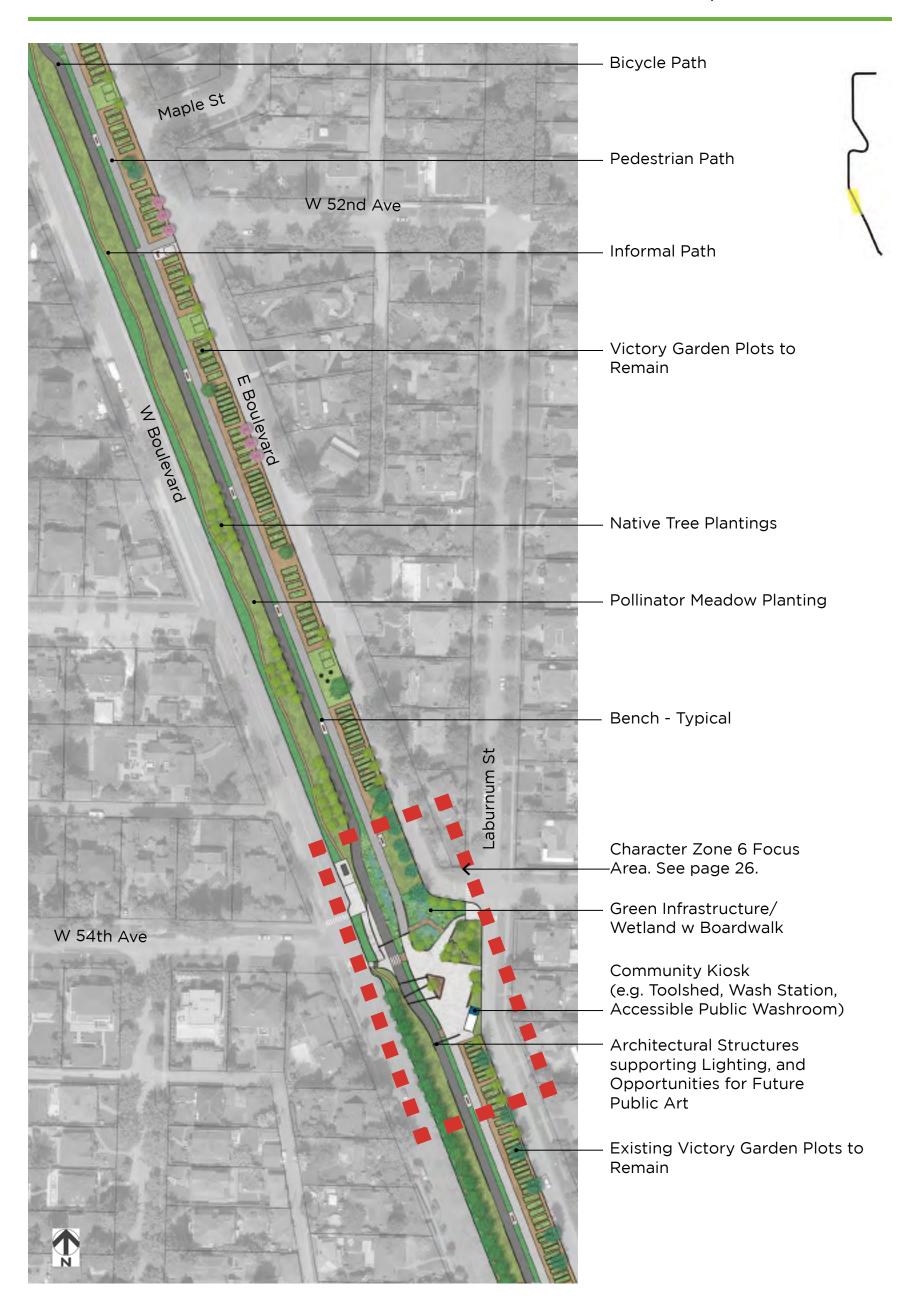


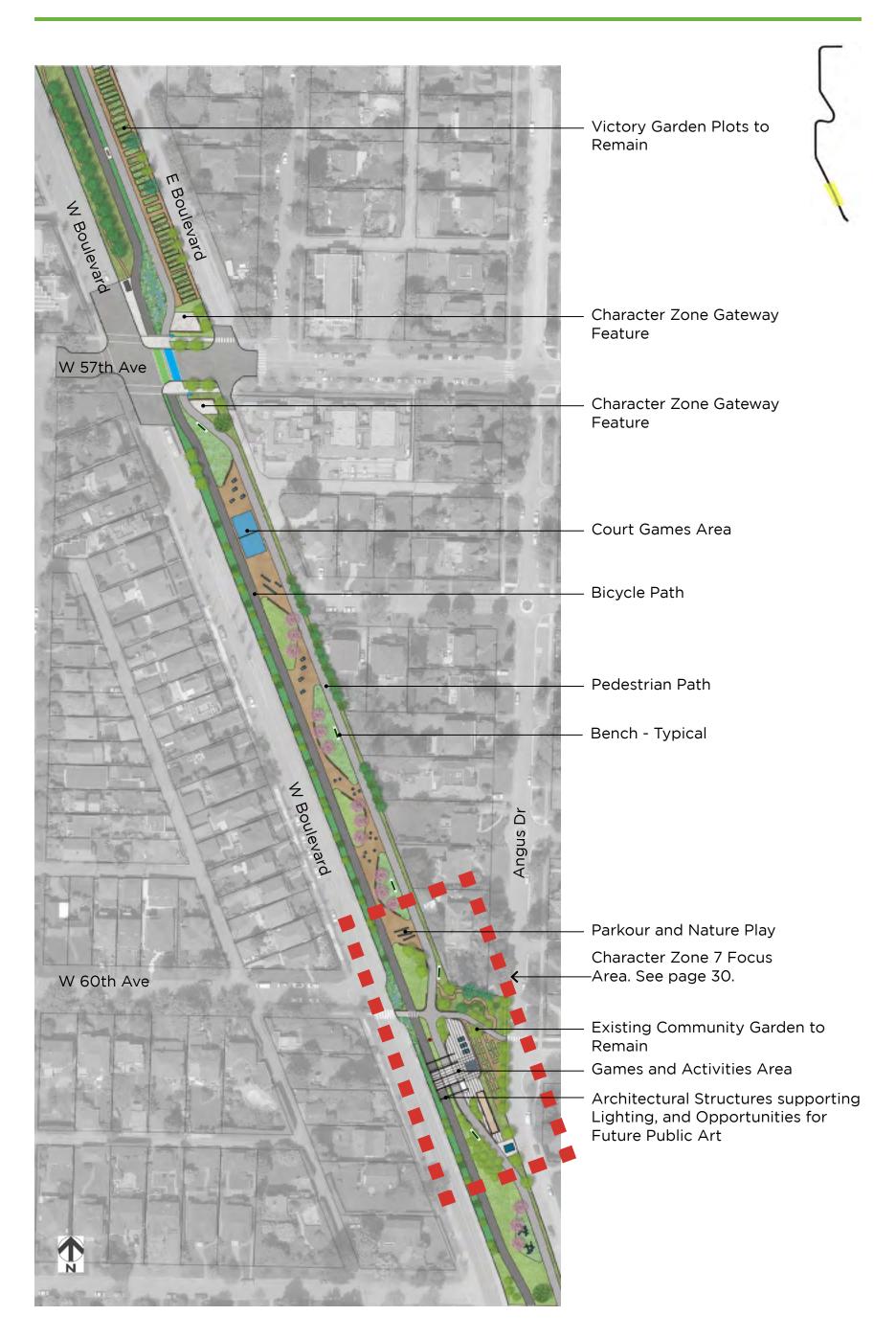




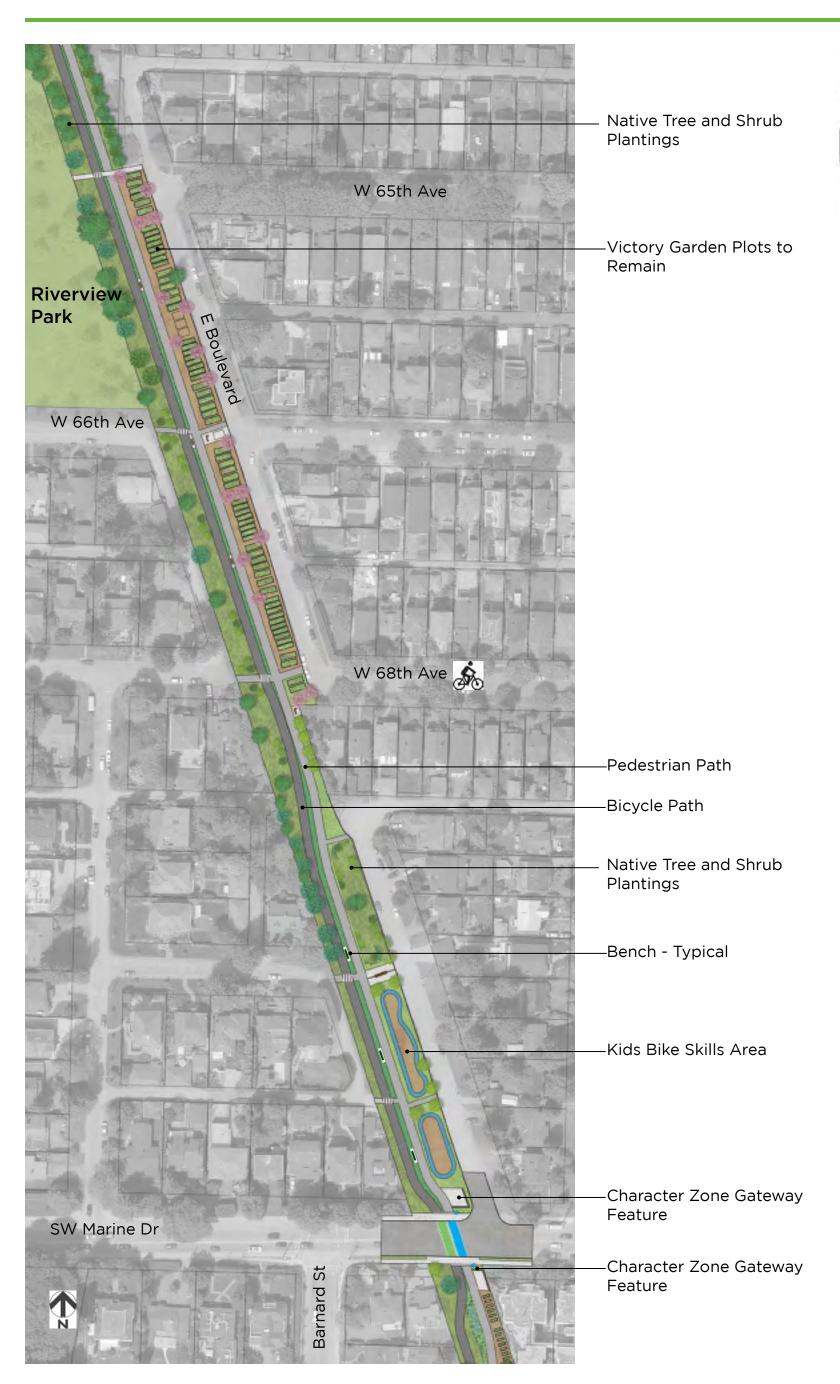


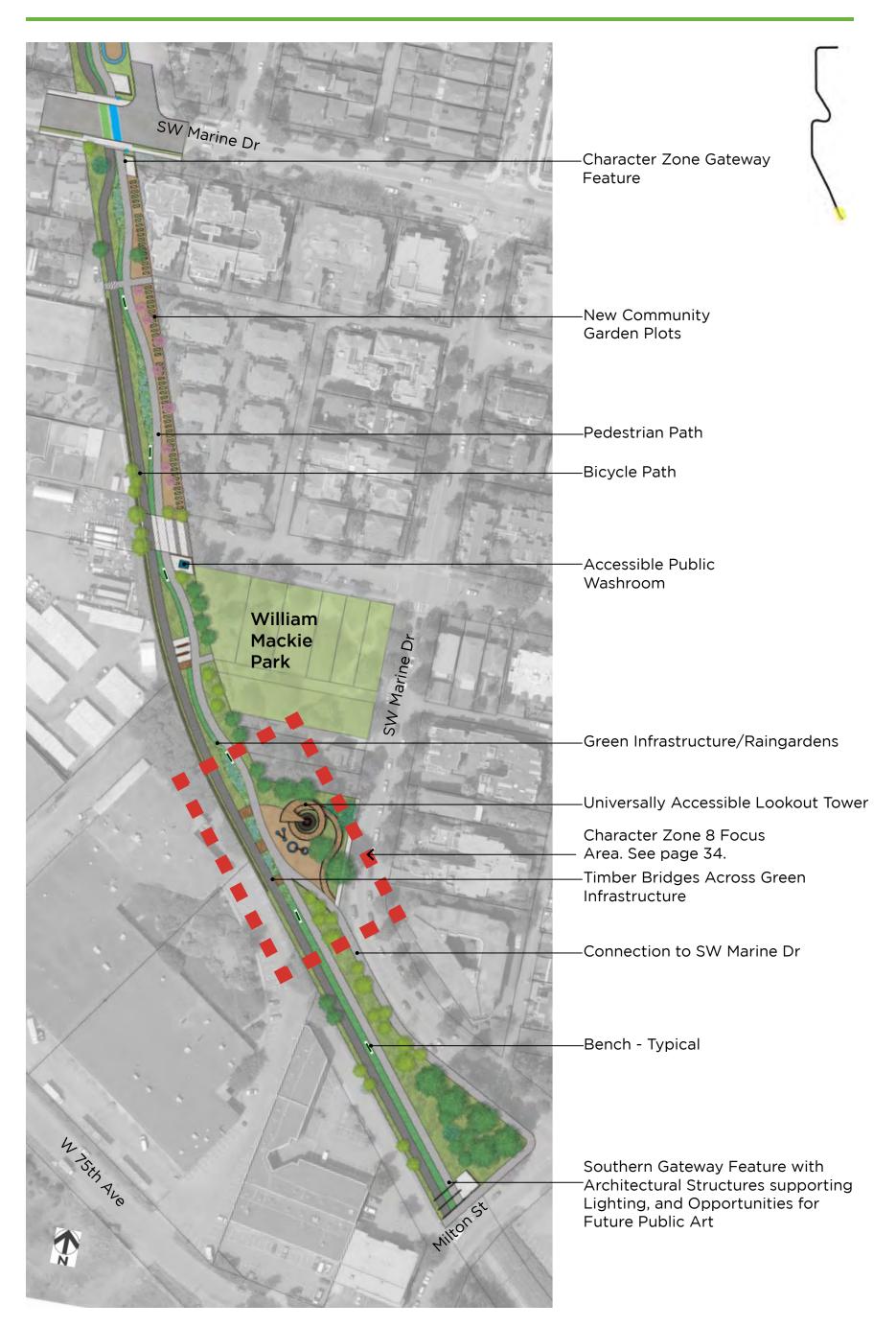












Next Steps

The Arbutus Greenway has the potential to become a defining element of Vancouver's urban landscape as a public space for walking, wheeling, cycling and streetcar. This report has illustrated a design vision for the Arbutus Greenway, based upon the planning, design and engagement process undertaken to date.

While these pages provide a high-level masterplan for the future Arbutus Greenway, there will be many steps required to create a destination which fosters both movement and rich social interaction. Foremost among these steps are: detailed design, further public engagement, and continued collaboration with MST Nations on the overall design of the future greenway.

Subject to Council's endorsement of design vision, detailed design will progress for the extension of the greenway to the Fraser River and False Creek, as well as select character zones. Construction of these select sections is anticipated to occur within the 2019-2022 Capital Plan.